FULLY EXECUTED - CHANGE 9

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 08/04/2024

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: Trevenen Peggy
Phone: 717-703-2943
Fax: 717-214-9505

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED - CHANGE 9

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 08/04/2024

Supplier Name:

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION DBA PHILIPS HEALTHCARE

Header Text

Extended contract until 10/04/2023 to coincide with the NASPO contract - cw 01.24.2023

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

Extended NASPO contract through Feb 4, 2024. Peg 081723

Extended NASPO contract through August 4, 2024 Peg 011924

No further information for this Contract

Information:

FULLY EXECUTED - CHANGE 8

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 10/04/2023

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: Trevenen Peggy
Phone: 717-703-2943
Fax: 717-214-9505

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Extended contract until 10/04/2023 to coincide with the NASPO contract - cw 01.24.2023

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED - CHANGE 7

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 10/04/2023

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: Walters Corinna
Phone: 717-346-7097
Fax: 717-346-3820

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Extended contract until 10/04/2023 to coincide with the NASPO contract - cw 01.24.2023

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED - CHANGE 6

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 04/04/2023

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: Walters Corinna
Phone: 717-346-7097
Fax: 717-346-3820

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Renewed contract until 04/04/2023 to coincide with the NASPO contract - cw 09.22.2022

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED - CHANGE 5

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 10/04/2022

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: Zelinski Crystal
Phone: 717-346-8112
Fax: 717-783-6241

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Renewed contract until 10.4.2022. CZ 9.16.2021

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED - CHANGE 4

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 10/04/2021

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: Zelinski Crystal
Phone: 717-346-8112
Fax: 717-783-6241

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED - CHANGE 3

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 10/04/2020

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: Zelinski Crystal
Phone: 717-346-8112
Fax: 717-783-6241

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED - CHANGE 2

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 10/04/2019

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: Zelinski Crystal
Phone: 717-346-8112
Fax: 717-783-6241

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED - CHANGE #1

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 10/04/2019

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: BarthTaylor Cheryl
Phone: 717-703-2934
Fax: 717-783-6241

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

FULLY EXECUTED

Contract Number: 4400019898

Original Contract Effective Date: 07/31/2018

Valid From: 09/01/2018 To: 10/04/2018

All using Agencies of the Commonwealth, Participating Political Subdivision, Authorities, Private Colleges and Universities

Your SAP Vendor Number with us: 102941

Supplier Name/Address:
PHILIPS ELECTRONICS NORTH AMERICA
CORPORATION DBA PHILIPS HEALTHCARE
PHILIPS ELECTRONICS NORTH AMERICA
200 FRANKLIN SQUARE DR
SOMERSET NJ 08873-4148 US

Supplier Phone Number: 732-563-3320

Purchasing Agent
Name: BarthTaylor Cheryl
Phone: 717-703-2934
Fax: 717-783-6241

Please Deliver To:

To be determined at
the time of the Purchase Order
unless specified below.

Contract Name:
AED Contract - Phillips

Payment Terms
NET 30

Solicitation No.: Issuance Date:

Supplier Bid or Proposal No. (if applicable): Solicitation Submission Date:

This contract is comprised of: The above referenced Solicitation, the Supplier's Bid or Proposal, and any documents attached to this Contract or incorporated by reference.

Item	Material/Service Desc	Qty	UOM	Price	Per Unit	Total
2	AED	0.000	Each	0.00	1	0.00

General Requirements for all Items:

Header Text

Philips Healthcare website: www.usa.philips.com/healthcare

Orders should be sent to: Healthcare.orders@philips.com

Customer service phone number: 1-800-722-9377

No further information for this Contract

Information:

Supplier's Signature _____ Title _____

Printed Name _____ Date _____

Commonwealth of Pennsylvania Terms and Conditions
For NASPO ValuePoint Master Agreement OK-SW-300
AED Units and Accessories
EXHIBIT B

Table of Contents

CONTRACT - STANDARD TERMS and CONDITIONS

I.1 IFB-027.1 COSTARS Program Clause (01/17/2017)

COSTARS Purchasers. Section 1902 of the Commonwealth Procurement Code, 62 Pa.C.S. § 1902 ("Section 1902"), authorizes local public procurement units and state-affiliated entities (together, "COSTARS Members") to participate in Commonwealth procurement contracts that the Department of General Services ("DGS") may choose to make available to COSTARS Members. DGS has identified this Contract as one which will be made available for COSTARS Members' participation.

A. Only those entities registered with DGS are authorized to participate as COSTARS Members in this Contract.
A COSTARS Member may be either a local public procurement unit or a state-affiliated entity.

1. A "local public procurement unit" is:

- Any political subdivision (local government unit), such as a municipality, school district, or commission;
- Any public authority (including authorities formed under the Municipality Authorities Act of 1955 or other authorizing legislation, such as the Public Transportation Law or the Aviation Code);
- Any tax-exempt, nonprofit educational institution or organization;
- Any tax-exempt, nonprofit public health institution or organization;
- Any nonprofit fire, rescue, or ambulance company; and
- Any other entity that spends public funds for the procurement of supplies, services, and construction (such as a council of governments, an area government, or an organization that receives public grant funds).

The Department reserves the right to review and determine eligible applicants as local public procurement units on a case-by-case basis.

2. A state-affiliated entity is a Commonwealth authority or other Commonwealth entity that is not a Commonwealth agency. The term includes:

- The Pennsylvania Turnpike Commission;
- The Pennsylvania Housing Finance Agency;
- The Pennsylvania Municipal Retirement System;

- The Pennsylvania Infrastructure Investment Authority;
- The State Public School Building Authority;
- The Pennsylvania Higher Education Facilities Authority, and
- The State System of Higher Education.

The COSTARS Program is not available for use by Executive Agencies and Independent Agencies as defined by the Commonwealth Procurement Code, or any agency or entity using funds appropriated to the Department of General Services through Capital Budget Project Itemization legislation for the procurement of furniture, fixtures, and equipment.

3. A complete list of local public procurement units and state-affiliated entities that have registered with DGS and that are authorized to procure items from the Contract can be found at http://www.costars.state.pa.us/SearchCOMember.aspx.

B. COSTARS Members have the option to purchase from this Contract, from any DGS contract established exclusively for COSTARS Members in accordance with the requirements of Section 1902, from any other cooperative procurement contracts, or from their own procurement contracts established in accordance with
the applicable laws governing such procurements. The Contractor understands and acknowledges that there is no guarantee that a COSTARS Member will place an order under this Contract, and that the decision to procure from this Contract is within the sole discretion of each COSTARS Member.

C. DGS is acting as a facilitator for COSTARS Members who may wish to purchase under this Contract. COSTARS Members that participate in this Contract and issue purchase orders ("POs") to Contractors are third party beneficiaries who have the right to sue and be sued for breach of this Contract without joining the Commonwealth or DGS as a party. The Commonwealth will not intervene in any action between a Contractor and a COSTARS Member unless substantial interests of the Commonwealth are involved.

D. COSTARS Members electing to participate in this Contract will order items directly from the Contractor and be responsible for payment directly to the Contractor.

E. Those Contractors electing to permit COSTARS Members to procure from this Contract shall pay the Required Administrative Fee applicable to the Contractor's classification:

Contractor Classification	Required Administrative Fee
DGS-verified Small Diverse Business Bidder $166	
DGS Self-Certified Small Business Bidder	$500
All Other Bidders	$1,500

1. Each bidder electing to permit COSTARS Members to participate in the Contract must submit the
COSTARS Program Election to Participate form with its bid submittal and pay the applicable

Administrative Fee upon Contract award in order to sell the awarded items/services to COSTARS

Members. If the bidder is a Department of General Services Self-Certified Small Business or Department of General Services-verified Small Diverse Business, a copy of its active Small Business Contracting Program certificate must be included with the bid submittal.

2. At the beginning of each Contract year and upon any Contract renewal, the Contractor shall submit a check for the required amount, payable to "Commonwealth of PA". The Contractor must pay the Administrative Fee at each contract renewal date to continue to sell the awarded items/services to COSTARS Members.

F. DGS has registered the COSTARS name and logo (together, the "COSTARS Brand") as a trademark with the Pennsylvania Department of State. Therefore, the Contractor may use the COSTARS Brand only as permitted under in this Subsection.

1. The Contractor shall pay the Administrative Fee covering its participation in the program, including without limitation any use of the COSTARS Brand, for each year of the Contract period. The fee is payable upon Contract award and prior to the renewal date for each succeeding Contract period.

2. DGS grants the Contractor a nonexclusive license to use the COSTARS Brand, subject to the following conditions:

a. The Contractor agrees not to transfer to any third party, including without limitation any of its subcontractors or suppliers, any privileges it may have to use the COSTARS Brand under this Contract.

b. The Contractor agrees not to use the COSTARS Brand to represent or imply any Commonwealth endorsement or approval of its products or services.

c. The Contractor is permitted to use the COSTARS Brand in broadcast, or Internet media solely in connection with this Contract and any other Contract with the Commonwealth under which it has agreed to make sales to COSTARS Purchasers. The Contractor may use the COSTARS Brand on business cards, brochures, and other print publications so long as the purpose is to identify the Contractor as a COSTARS vendor, and only so long as the required Contract fee is kept current.

d. Should this Contract terminate for any reason, the Contractor agrees promptly to remove the COSTARS Brand from any and all print and electronic media and to refrain from using the COSTARS Brand for any purpose whatsoever from the date of Contract termination forward.

e. The Contractor agrees to defend, indemnify, and hold harmless the Commonwealth of Pennsylvania and DGS from and against all claims, demands, liabilities, obligations, costs, and expenses of any nature whatsoever arising out of or based upon the Contractor's use of the COSTARS Brand.

f. The Contractor agrees it has no property rights in the use of the COSTARS Brand by virtue of this nonexclusive license. The Contractor expressly waives any claims, including without limitation due process claims that may otherwise be available under the law in the event of any dispute involving these terms of use.

G. The Contractor shall furnish to the DGS COSTARS Program Office a quarterly electronic Contract sales report detailing the previous quarter's Contract purchasing activity, using the form and in the format prescribed by DGS. The Contractor shall submit its completed quarterly report no later than the fifteenth calendar day of the succeeding Contract quarter.

1. The Contractor shall submit the reports through the web-based COSTARS Suppliers' Gateway of the PA Supplier Portal at https://pasupplierportal.state.pa.us/irj/portal/anonymous, Enterprise Applications. If a Contractor does not have access to the Internet, the Contractor shall send the reports, using the form and in the format prescribed by DGS, on compact disc via US Postal Service to the DGS COSTARS Program Office, Bureau of Procurement, 6th Floor Forum Place, 555 Walnut Street, Harrisburg, PA 17101-1914.

2. For each PO received, the Contractor shall include on the report the name and address of each COSTARS-Registered Purchaser that has used the Contract along with the sales date, and dollar volume of sales to the specific Purchaser for the reporting period.

3. DGS may suspend the Contractor's participation in the COSTARS Program for failure to provide the Quarterly Sales Report within the specified time.

H. Additional information regarding the COSTARS Program is available on the DGS COSTARS Website at www.costars.state.pa.us.

1. If the Contractor is aware of any qualified entity not currently registered and wishing to participate in the COSTARS Program, please refer the potential purchaser to the DGS COSTARS Website at www.costars.state.pa.us, where it may register by completing the online registration form and receiving DGS confirmation of its registration. To view a list of currently-registered COSTARS member entities, please visit the COSTARS website.

2. Direct all questions concerning the COSTARS Program to:

Department of General Services
COSTARS Program

555 Walnut Street, 6th Floor
Harrisburg, PA 17101

Telephone: 1-866-768-7827

E-mail GS-PACostars@pa.gov

II.1 IFB-006.1b COSTARS Program Election to Participate (July 2012)

If the bidder is willing to sell the awarded items/services at the same prices and/or discounts, and in accordance with the contractual terms and conditions, to COSTARS members, the bidder should complete and return the COSTARS

Program Election to Participate form which is an attachment to this IFB. If the bidder is asserting that it is a Department of General Services Certified Small Business, the bidder must submit its active certification with the bid response.

II.2 II-IFB-008.1b Lobbying Certification and Disclosure – Electronic Submission. (Oct 2006).

With respect to an award of a federal contract, grant, or cooperative agreement exceeding $100,000 or an award of a federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding $150,000 all recipients must certify that they will not use federal funds for lobbying and must disclose the use of non-federal funds for lobbying by filing required documentation. Offerors must complete and return the Lobbying Certification Form and the Disclosure of Lobbying Activities Form, which are attached to and made a part of this IFB. The completed and signed Lobbying Certification Form and the Disclosure of Lobbying Activities Form should be submitted with the Bid Response. Commonwealth agencies will not contract with outside firms or individuals to perform lobbying services, regardless of the source of funds.

II.3 II-IFB-017.1b Reciprocal Limitations Act – Electronic Submittal (February 2007)

This procurement is subject to the Reciprocal Limitations Act. Bidders must complete and submit with the Bid Response the State of Manufacture Chart , which is contained in GSPUR-89 ("Reciprocal Limitations Act

Requirements") which is attached to and made part of this IFB. The completed State of Manufacture Chart should be submitted as part of the Bid Response.

1.2 CONTRACT-001.1c Contract Terms and Conditions – Stand-Alone (Jan 24 2007)

The Contractor and the Commonwealth agree that the following terms and conditions are part of the Contract:

1.3 CONTRACT-002.1d Term of Contract – Contract (March 2007)

a. The term of the Contract shall begin on the Commencement Date (as defined below) and shall end on the Expiration Date identified in the Contract, subject to the other provisions of the Contract.

b. The Commencement Date shall be the later of the "Valid from" date shown on the Contract output form or the Effective Date (as defined below).

c. The Effective Date shall be the Effective Date printed on the Contract output form after the Contract has been fully executed by the Contractor and the Commonwealth (fully executed by the Commonwealth means that it has been signed and approved as required by Commonwealth contracting procedures).

1.4 CONTRACT-002.2b Renewal of Contract Term – Mutual (Oct 2013)

The Contract may be mutually renewed for a maximum of 3 additional 1 year term(s), so long as the Commonwealth provides written notice to the Contractor of its intention to extend the Contract by letter dated not less than 090 days prior to the expiration of the term of the agreement, or any extension thereof, and the Contractor consents to the renewal not less than 060 days prior to the expiration of the term of the agreement or any extension thereof. The renewal may be exercised as individual or multiple year terms(s). Any renewal will be under the same terms, covenants and conditions. No further document is required to be executed to renew the term of the contract.

1.5 CONTRACT-002.3 Extension of Contract Term (Nov 30 2006)

The Commonwealth reserves the right, upon notice to the Contractor, to extend any single term of the Contract for up to three (3) months upon the same terms and conditions.

1.6 CONTRACT-003.1B Signatures – Contract - Stand Alone (July 2015)

The Contract shall not be a legally binding contract until the fully-executed Contract has been sent to the Contractor. No Commonwealth employee has the authority to verbally direct the commencement of any work or delivery of any supply under this Contract prior to the Effective Date. The Contractor hereby waives any claim or cause of action for any service or work performed prior to the Effective Date.

The Contract may be signed in counterparts. The Contractor shall sign the Contract and return it to the Commonwealth. After the Contract is signed by the Contractor and returned to the Commonwealth, it will be processed for Commonwealth signatures and approvals. When the Contract has been signed and approved by the Commonwealth as required by Commonwealth contracting procedures, the Commonwealth shall create a Contract output form which shall: 1) clearly indicate "Fully executed" at the top of the form; 2) include a printed Effective Date and 3) include the printed name of the Purchasing Agent indicating that the document has been electronically signed and approved by the Commonwealth. Until the Contractor receives the Contract output form with this information on the Contract output form, there is no legally binding contract between the parties.

The fully-executed Contract may be sent to the Contractor electronically or through facsimile equipment. The electronic transmission of the Contract shall require acknowledgement of receipt of the transmission by the Contractor. Receipt of the electronic or facsimile transmission of the Contract shall constitute receipt of the fully-executed Contract.

The Commonwealth and the Contractor specifically agree as follows:

a. No handwritten signature shall be required in order for the Contract to be legally enforceable.

b. The parties agree that no writing shall be required in order to make the Contract legally binding, notwithstandingcontrary requirements in any law. The parties hereby agree not to contest the validity or enforceability of a genuine Contract or acknowledgement issued electronically under the provisions of a statute of frauds or any other applicable law relating to whether certain agreements be in writing and signed by the party bound thereby. Any genuine Contract or acknowledgement issued electronically, if introduced as evidence on paper in any judicial, arbitration, mediation, or administrative proceedings, will be admissible as between the parties to the same extent and under the same conditions as other business records originated and maintained in documentary form. Neither party shall contest the admissibility of copies of a genuine Contract or acknowledgements under either the business records exception to the hearsay rule or the best evidence rule on the basis that the Contract or acknowledgement were not in writing or signed by the parties. A Contract or acknowledgment shall be deemed to be genuine for all purposes if it is transmitted to the location designated for such documents.

c. Each party will immediately take steps to verify any document that appears to be obviously garbled intransmission or improperly formatted to include re-transmission of any such document if necessary.

1.7 CONTRACT-004.1a Definitions (Oct 2013)

As used in this Contract, these words shall have the following meanings:

a. Agency: The department, board, commission or other agency of the Commonwealth of Pennsylvania listed as the Purchasing Agency. If a COSTARS entity or external procurement activity has issued an order against this contract, that entity shall also be identified as "Agency".

b. Contracting Officer: The person authorized to administer this Contract for the Commonwealth and to make written determinations with respect to the Contract.

c. Days: Unless specifically indicated otherwise, days mean calendar days.

d. Developed Works or Developed Materials: All documents, sketches, drawings, designs, works, papers, files, reports, computer programs, computer documentation, data, records, software, samples or any other tangible material without limitation authored or prepared by Contractor as the work product covered in the scope of work for the Project.

e. Documentation: All materials required to support and convey information about the services required by this Contract. It includes, but is not necessarily restricted to, written reports and analyses, diagrams, maps, logical and physical designs, system designs, computer programs, flow charts, disks, and/or other machine-readable storage media.

f. Services: All Contractor activity necessary to satisfy the Contract.

1.8 CONTRACT-005.1a Purchase Orders (Oct 2013)

Commonwealth agencies may issue Purchase Orders against the Contract. These orders constitute the Contractor's authority to make delivery. All Purchase Orders received by the Contractor up to and including the expiration date of the Contract are acceptable and must be performed in accordance with the Contract. Each Purchase Order will be deemed to incorporate the terms and conditions set forth in the Contract.

Purchase Orders will not include an "ink" signature by the Agency. The electronically-printed name of the purchaser represents the signature of that individual who has the authority, on behalf of the Commonwealth, to authorize the Contractor to proceed.

Purchase Orders may be issued electronically or through facsimile equipment. The electronic transmission of a purchase order shall require acknowledgement of receipt of the transmission by the Contractor. Receipt of the electronic or facsimile transmission of the Purchase Order shall constitute receipt of an order. Orders received by the Contractor after 4:00 p.m. will be considered received the following business day.

a. No handwritten signature shall be required in order for the Contract or Purchase Order to be legally enforceable.

b. The parties agree that no writing shall be required in order to make the Purchase Order legally binding. The parties hereby agree not to contest the validity or enforceability of a Purchase Order or acknowledgement issued electronically under the provisions of a statute of frauds or any other applicable law relating to whether certain agreements be in writing and signed by the party bound thereby. Any Purchase Order or acknowledgement issued electronically, if introduced as evidence on paper in any judicial, arbitration, mediation, or administrative proceedings, will be admissible as between the parties to the same extent and under the same conditions as other business records originated and maintained in documentary form. Neither party shall contest the admissibility of copies of Purchase Orders or acknowledgements under either the business records exception to the hearsay rule or the best evidence rule on the basis that the Purchase Order or acknowledgement were not in writing or signed by the parties. A Purchase Order or acknowledgment shall be deemed to be genuine for all purposes if it is transmitted to the location designated for such documents.

c. Each party will immediately take steps to verify any document that appears to be obviously garbled in transmission or improperly formatted to include re-transmission of any such document if necessary.

Purchase Orders under ten thousand dollars ($10,000) in total amount may also be made in person or by telephone using a Commonwealth Purchasing Card. When an order is placed by telephone, the Commonwealth agency shall provide the agency name, employee name, credit card number, and expiration date of the card. Contractors agree to accept payment through the use of the Commonwealth Purchasing Card.

1.9 CONTRACT-006.1 Independent Prime Contractor (Oct 2006)

In performing its obligations under the Contract, the Contractor will act as an independent contractor and not as an employee or agent of the Commonwealth. The Contractor will be responsible for all services in this Contract whether or not Contractor provides them directly. Further, the Contractor is the sole point of contact with regard to all contractual matters, including payment of any and all charges resulting from the Contract.

1.10 CONTRACT-007.01a Supplies Delivery (Nov 30 2006)

All item(s) shall be delivered F.O.B. Destination. The Contractor agrees to bear the risk of loss, injury, or destruction of the item(s) ordered prior to receipt of the items by the Commonwealth. Such loss, injury, or destruction shall not release the Contractor from any contractual obligations. Except as otherwise provided in this contract, all item(s) must be delivered within the time period specified. Time is of the essence and, in addition to any other remedies, the Contract is subject to termination for failure to deliver as specified. Unless otherwise stated in this Contract, delivery must be made within thirty (30) days after the Effective Date.

1.11 CONTRACT-007.02 Estimated Quantities (Nov 30 2006)

It shall be understood and agreed that any quantities listed in the Contract are estimated only and may be increased or decreased in accordance with the actual requirements of the Commonwealth and that the Commonwealth in accepting any bid or portion thereof, contracts only and agrees to purchase only the materials and services in such quantities as represent the actual requirements of the Commonwealth. The Commonwealth reserves the right to purchase materials and services covered under the Contract through a separate competitive procurement procedure, whenever Commonwealth deems it to be in its best interest.

1.12 CONTRACT-008.1a Warranty (Oct 2006)

The Contractor warrants that all items furnished and all services performed by the Contractor, its agents and subcontractors shall be free and clear of any defects in workmanship or materials. Unless otherwise stated in the Contract, all items are warranted for a period of one year following delivery by the Contractor and acceptance by the Commonwealth. The Contractor shall repair, replace or otherwise correct any problem with the delivered item. When an item is replaced, it shall be replaced with an item of equivalent or superior quality without any additional cost to the Commonwealth.

1.13 CONTRACT-009.1c Patent, Copyright, and Trademark Indemnity (Oct 2013)

The Contractor warrants that it is the sole owner or author of, or has entered into a suitable legal agreement concerning either: a) the design of any product or process provided or used in the performance of the Contract which is covered by a patent, copyright, or trademark registration or other right duly authorized by state or federal law or

b) any copyrighted matter in any report, document or other material provided to the Commonwealth under the contract.

The Contractor shall defend any suit or proceeding brought against the Commonwealth on account of any alleged patent, copyright or trademark infringement in the United States of any of the products provided or used in the performance of the Contract.

This is upon condition that the Commonwealth shall provide prompt notification in writing of such suit or proceeding; full right, authorization and opportunity to conduct the defense thereof; and full information and all reasonable cooperation for the defense of same.

As principles of governmental or public law are involved, the Commonwealth may participate in or choose to conduct, in its sole discretion, the defense of any such action.

If information and assistance are furnished by the Commonwealth at the Contractor's written request, it shall be at the Contractor's expense, but the responsibility for such expense shall be only that within the Contractor's written authorization.

The Contractor shall indemnify and hold the Commonwealth harmless from all damages, costs, and expenses, including attorney's fees that the Contractor or the Commonwealth may pay or incur by reason of any infringement or violation of the rights occurring to any holder of copyright, trademark, or patent interests and rights in any products provided or used in the performance of the Contract.

If any of the products provided by the Contractor in such suit or proceeding are held to constitute infringement and the use is enjoined, the Contractor shall, at its own expense and at its option, either procure the right to continue use of such infringement products, replace them with non-infringement equal performance products or modify them so that they are no longer infringing.

If the Contractor is unable to do any of the preceding, the Contractor agrees to remove all the equipment or software which are obtained contemporaneously with the infringing product, or, at the option of the Commonwealth, only those items of equipment or software which are held to be infringing, and to pay the Commonwealth: 1) any amounts paid by the Commonwealth towards the purchase of the product, less straight line depreciation; 2) any license fee paid by the Commonwealth for the use of any software, less an amount for the period of usage; and 3) the pro rata portion of any maintenance fee representing the time remaining in any period of maintenance paid for. The obligations of the Contractor under this paragraph continue without time limit. No costs or expenses shall be incurred for the account of the Contractor without its written consent.

1.14 CONTRACT-009.1d Ownership Rights (Oct 2006)

The Commonwealth shall have unrestricted authority to reproduce, distribute, and use any submitted report, data, or material, and any software or modifications and any associated documentation that is designed or developed and delivered to the Commonwealth as part of the performance of the Contract.

1.15 CONTRACT-010.1a Acceptance (Oct 2006)

No item(s) received by the Commonwealth shall be deemed accepted until the Commonwealth has had a reasonable opportunity to inspect the item(s). Any item(s) which is discovered to be defective or fails to conform to the specifications may be rejected upon initial inspection or at any later time if the defects contained in the item(s) or the noncompliance with the specifications were not reasonably ascertainable upon the initial inspection. It shall thereupon become the duty of the Contractor to remove rejected item(s) from the premises without expense to the Commonwealth within fifteen (15) days after notification. Rejected item(s) left longer than fifteen (15) days

will be regarded as abandoned, and the Commonwealth shall have the right to dispose of them as its own property and shall retain that portion of the proceeds of any sale which represents the Commonwealth's costs and expenses in regard to the storage and sale of the item(s). Upon notice of rejection, the Contractor shall immediately replace all such rejected item(s) with others conforming to the specifications and which are not defective. If the Contractor fails, neglects or refuses to do so, the Commonwealth shall then have the right to procure a corresponding quantity of such item(s), and deduct from any monies due or that may thereafter become due to the Contractor, the difference between the price stated in the Contract and the cost thereof to the Commonwealth.

1.16 CONTRACT-010.2 Product Conformance (March 2012)

The Commonwealth reserves the right to require any and all Contractors to:

1. Provide certified data from laboratory testing performed by the Contractor, or performed by an independentlaboratory, as specified by the Commonwealth.
2. Supply published manufacturer product documentation.
3. Permit a Commonwealth representative to witness testing at the Contractor's location or at an independentlaboratory.
4. Complete a survey/questionnaire relating to the bid requirements and specifications.
5. Provide customer references.
6. Provide a product demonstration at a location near Harrisburg or the using agency location.

1.17 CONTRACT-010.3 Rejected Material Not Considered Abandoned (Oct 2013)

The Commonwealth shall have the right to not regard any rejected material as abandoned and to demand that the Contractor remove the rejected material from the premises within thirty (30) days of notification. The Contractor shall be responsible for removal of the rejected material as well as proper clean-up. If the Contractor fails or refuses to remove the rejected material as demanded by the Commonwealth, the Commonwealth may seek payment from, or set-off from any payments due to the Contractor under this or any other Contract with the Commonwealth, the costs of removal and clean-up. This is in addition to all other rights to recover costs incurred by the Commonwealth.

1.18 CONTRACT-011.1a Compliance With Law (Oct 2006)

The Contractor shall comply with all applicable federal and state laws and regulations and local ordinances in the performance of the Contract.

1.19 CONTRACT-013.1 Environmental Provisions (Oct 2006)

In the performance of the Contract, the Contractor shall minimize pollution and shall strictly comply with all applicable environmental laws and regulations, including, but not limited to: the Clean Streams Law Act of June 22, 1937 (P.L. 1987, No. 394), as amended 35 P.S. Section 691.601 et seq.; the Pennsylvania Solid Waste

Management Act, Act of July 7, 1980 (P.L. 380, No. 97), as amended, 35 P.S. Section 6018.101 et seq.; and the Dam Safety and Encroachment Act, Act of November 26, 1978 (P.L. 1375, No. 325), as amended, 32 P.S. Section 693.1.

1.20 CONTRACT-014.1 Post-Consumer Recycled Content (June 2016)

Except as specifically waived by the Department of General Services in writing, any products which are provided to the Commonwealth as a part of the performance of the Contract must meet the minimum percentage levels for total recycled content as specified by the Environmental Protection Agency in its Comprehensive Procurement Guidelines, which can be found at https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

1.21 CONTRACT-014.3 Recycled Content Enforcement (Feb 2009)

The Contractor may be required, after delivery of the Contract item(s), to provide the Commonwealth with documentary evidence that the item(s) was in fact produced with the required minimum percentage of post-consumer and recovered material content.

1.22 CONTRACT-015.1 Compensation (Oct 2006)

The Contractor shall be required to furnish the awarded item(s) at the price(s) quoted in the Purchase Order. All item(s) shall be delivered within the time period(s) specified in the Purchase Order. The Contractor shall be compensated only for item(s) that are delivered and accepted by the Commonwealth.

1.23 CONTRACT-015.2 Billing Requirements (February 2012)

Unless the Contractor has been authorized by the Commonwealth for Evaluated Receipt Settlement or Vendor Self-Invoicing , the Contractor shall include in all of its invoices the following minimum information:

- Vendor name and "Remit to" address, including SAP Vendor number;
- Bank routing information, if ACH;
- SAP Purchase Order number;
- Delivery Address, including name of Commonwealth agency;
- Description of the supplies/services delivered in accordance with SAP Purchase Order (include purchase order line number if possible);
- Quantity provided;
- Unit price;
- Price extension;
- Total price; and
- Delivery date of supplies or services.

If an invoice does not contain the minimum information set forth in this paragraph, the Commonwealth may return the invoice as improper. If the Commonwealth returns an invoice as improper, the time for processing a payment will be suspended until the Commonwealth receives a correct invoice. The Contractor may not receive payment until the Commonwealth has received a correct invoice.

Contractors are required to establish separate billing accounts with each using agency and invoice them directly. Each invoice shall be itemized with adequate detail and match the line item on the Purchase Order. In no instance

shall any payment be made for services to the Contractor that are not in accordance with the prices on the Purchase Order, the Contract, updated price lists or any discounts negotiated by the purchasing agency.

1.24 CONTRACT-016.1 Payment (Oct 2006)

a. The Commonwealth shall put forth reasonable efforts to make payment by the required payment date. The required payment date is: (a) the date on which payment is due under the terms of the Contract; (b) thirty (30) days after a proper invoice actually is received at the "Bill To" address if a date on which payment is due is not specified in the Contract (a "proper" invoice is not received until the Commonwealth accepts the service as satisfactorily performed); or (c) the payment date specified on the invoice if later than the dates established by (a) and (b) above. Payment may be delayed if the payment amount on an invoice is not based upon the price(s) as stated in the Contract. If any payment is not made within fifteen (15) days after the required payment date, the Commonwealth may pay interest as determined by the Secretary of Budget in accordance with Act No. 266 of 1982 and regulations promulgated pursuant thereto. Payment should not be construed by the Contractor as acceptance of the service performed by the Contractor. The Commonwealth reserves the right to conduct further testing and inspection after payment, but within a reasonable time after performance, and to reject the service if such post payment testing or inspection discloses a defect or a failure to meet specifications. The Contractor agrees that the Commonwealth may set off the amount of any state tax liability or other obligation of the Contractor or its subsidiaries to the Commonwealth against any payments due the Contractor under any contract with the Commonwealth.

b. The Commonwealth shall have the option of using the Commonwealth purchasing card to make purchases underthe Contract or Purchase Order. The Commonwealth's purchasing card is similar to a credit card in that there will be a small fee which the Contractor will be required to pay and the Contractor will receive payment directly from the card issuer rather than the Commonwealth. Any and all fees related to this type of payment are the responsibility of the Contractor. In no case will the Commonwealth allow increases in prices to offset credit card fees paid by the Contractor or any other charges incurred by the Contractor, unless specifically stated in the terms of the Contract or Purchase Order.

1.25 CONTRACT-016.2 ACH Payments (Aug 2007)

a. The Commonwealth will make contract payments through the Automated Clearing House (ACH). Within 10days of award of the contract or purchase order, the contractor must submit or must have already submitted their ACH information within their user profile in the Commonwealth's procurement system (SRM).

b. The contractor must submit a unique invoice number with each invoice submitted. The unique invoice numberwill be listed on the Commonwealth of Pennsylvania's ACH remittance advice to enable the contractor to properly apply the state agency's payment to the invoice submitted.

c. It is the responsibility of the contractor to ensure that the ACH information contained in SRM is accurate andcomplete. Failure to maintain accurate and complete information may result in delays in payments.

1.26 CONTRACT-017.1 Taxes (Dec 5 2006)

The Commonwealth is exempt from all excise taxes imposed by the Internal Revenue Service and has accordingly registered with the Internal Revenue Service to make tax free purchases under Registration No. 23-23740001-K. With the exception of purchases of the following items, no exemption certificates are required and none will be issued: undyed diesel fuel, tires, trucks, gas guzzler emergency vehicles, and sports fishing equipment. The Commonwealth is also exempt from Pennsylvania state sales tax, local sales tax, public transportation assistance taxes and fees and vehicle rental tax. The Department of Revenue regulations provide that exemption certificates are not required for sales made to governmental entities and none will be issued. Nothing in this paragraph is meant to exempt a construction contractor from the payment of any of these taxes or fees which are required to be paid with

respect to the purchase, use, rental, or lease of tangible personal property or taxable services used or transferred in connection with the performance of a construction contract.

1.27 CONTRACT-018.1 Assignment of Antitrust Claims (Oct 2006)

The Contractor and the Commonwealth recognize that in actual economic practice, overcharges by the Contractor's suppliers resulting from violations of state or federal antitrust laws are in fact borne by the Commonwealth. As part of the consideration for the award of the Contract, and intending to be legally bound, the Contractor assigns to the Commonwealth all right, title and interest in and to any claims the Contractor now has, or may acquire, under state or federal antitrust laws relating to the products and services which are the subject of this Contract.

1.28 CONTRACT-019.1 Hold Harmless Provision (Nov 30 2006)

a. The Contractor shall hold the Commonwealth harmless from and indemnify the Commonwealth against any and all third party claims, demands and actions based upon or arising out of any activities performed by the Contractor and its employees and agents under this Contract, provided the Commonwealth gives Contractor prompt notice of any such claim of which it learns. Pursuant to the Commonwealth Attorneys Act (71 P.S. Section 732-101, et seq.), the Office of Attorney General (OAG) has the sole authority to represent the Commonwealth in actions brought against the Commonwealth. The OAG may, however, in its sole discretion and under such terms as it deems appropriate, delegate its right of defense. If OAG delegates the defense to the Contractor, the Commonwealth will cooperate with all reasonable requests of Contractor made in the defense of such suits.

b. Notwithstanding the above, neither party shall enter into any settlement without the other party's written consent, which shall not be unreasonably withheld. The Commonwealth may, in its sole discretion, allow the Contractor to control the defense and any related settlement negotiations.

1.29 CONTRACT-020.1 Audit Provisions (Oct 2006)

The Commonwealth shall have the right, at reasonable times and at a site designated by the Commonwealth, to audit the books, documents and records of the Contractor to the extent that the books, documents and records relate to costs or pricing data for the Contract. The Contractor agrees to maintain records which will support the prices charged and costs incurred for the Contract. The Contract shall preserve books, documents and records that relate to costs or pricing data for the Contract for a period of three (3) years from the date of final payment. The Contractor shall give full and free access to all records to the Commonwealth and/or their authorized representatives.

1.30 CONTRACT-021.1 Default (Oct 2013)

a. The Commonwealth may, subject to the Force Majeure provisions of this Contract, and in addition to its other rights under the Contract, declare the Contractor in default by written notice thereof to the Contractor, and terminate (as provided in the Termination Provisions of this Contract) the whole or any part of this Contract or any Purchase Order for any of the following reasons:

1) Failure to begin work within the time specified in the Contract or Purchase Order or as otherwise specified;

2) Failure to perform the work with sufficient labor, equipment, or material to ensure the completion of the specified work in accordance with the Contract or Purchase Order terms;

3) Unsatisfactory performance of the work;

4) Failure to deliver the awarded item(s) within the time specified in the Contract or Purchase Order or as otherwise specified;

5) Improper delivery;

6) Failure to provide an item(s) which is in conformance with the specifications referenced in the Contract or Purchase Order;

7) Delivery of a defective item;

8) Failure or refusal to remove material, or remove and replace any work rejected as defective or unsatisfactory;

9) Discontinuance of work without approval;

10) Failure to resume work, which has been discontinued, within a reasonable time after notice to do so;

11) Insolvency or bankruptcy;

12) Assignment made for the benefit of creditors;

13) Failure or refusal within 10 days after written notice by the Contracting Officer, to make payment or show cause why payment should not be made, of any amounts due for materials furnished, labor supplied or performed, for equipment rentals, or for utility services rendered;

14) Failure to protect, to repair, or to make good any damage or injury to property;

15) Breach of any provision of the Contract;

16) Failure to comply with representations made in the Contractor's bid/proposal; or

17) Failure to comply with applicable industry standards, customs, and practice.

b. In the event that the Commonwealth terminates this Contract or any Purchase Order in whole or in part as provided in Subparagraph a. above, the Commonwealth may procure, upon such terms and in such manner as it determines, items similar or identical to those so terminated, and the Contractor shall be liable to the Commonwealth for any reasonable excess costs for such similar or identical items included within the terminated part of the Contract or Purchase Order.

c. If the Contract or a Purchase Order is terminated as provided in Subparagraph a. above, the Commonwealth, in addition to any other rights provided in this paragraph, may require the Contractor to transfer title and deliver immediately to the Commonwealth in the manner and to the extent directed by the Contracting Officer, such partially completed items, including, where applicable, reports, working papers and other documentation, as the Contractor has specifically produced or specifically acquired for the performance of such part of the Contract or
Purchase Order as has been terminated. Except as provided below, payment for completed work accepted by the Commonwealth shall be at the Contract price. Except as provided below, payment for partially completed items including, where applicable, reports and working papers, delivered to and accepted by the Commonwealth shall be in an amount agreed upon by the Contractor and Contracting Officer. The Commonwealth may withhold from amounts otherwise due the Contractor for such completed or partially completed works, such sum as the Contracting Officer determines to be necessary to protect the Commonwealth against loss.

d. The rights and remedies of the Commonwealth provided in this paragraph shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

e. The Commonwealth's failure to exercise any rights or remedies provided in this paragraph shall not be construed to be a waiver by the Commonwealth of its rights and remedies in regard to the event of default or any succeeding event of default.

f. Following exhaustion of the Contractor's administrative remedies as set forth in the Contract Controversies Provision of the Contract, the Contractor's exclusive remedy shall be to seek damages in the Board of Claims.

1.31 CONTRACT-022.1 Force Majeure (Oct 2006)

The Contractor shall notify the Commonwealth orally within five (5) days and in writing within ten (10) days of the date on which the Contractor becomes aware, or should have reasonably become aware, that such cause would prevent or delay its performance. Such notification shall (i) describe fully such cause(s) and its effect on performance, (ii) state whether performance under the contract is prevented or delayed and (iii) if performance is delayed, state a reasonable estimate of the duration of the delay. The Contractor shall have the burden of proving that such cause(s) delayed or prevented its performance despite its diligent efforts to perform and shall produce such supporting documentation as the Commonwealth may reasonably request. After receipt of such notification, the Commonwealth may elect to cancel the Contract, cancel the Purchase Order, or to extend the time for performance as reasonably necessary to compensate for the Contractor's delay.

In the event of a declared emergency by competent governmental authorities, the Commonwealth by notice to the Contractor, may suspend all or a portion of the Contract or Purchase Order.

1.32 CONTRACT-023.1a Termination Provisions (Oct 2013)

The Commonwealth has the right to terminate this Contract or any Purchase Order for any of the following reasons. Termination shall be effective upon written notice to the Contractor.

a. **TERMINATION FOR CONVENIENCE**: The Commonwealth shall have the right to terminate the Contract or a Purchase Order for its convenience if the Commonwealth determines termination to be in its best interest. The Contractor shall be paid for work satisfactorily completed prior to the effective date of the termination, but in no event shall the Contractor be entitled to recover loss of profits.

b. **NON-APPROPRIATION**: The Commonwealth's obligation to make payments during any Commonwealth fiscal year succeeding the current fiscal year shall be subject to availability and appropriation of funds. When funds (state and/or federal) are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal year period, the Commonwealth shall have the right to terminate the Contract or a Purchase Order. The Contractor shall be reimbursed for the reasonable value of any nonrecurring costs incurred but not amortized in the price of the supplies or services delivered under the Contract. Such reimbursement shall not include loss of profit, loss of use of money, or administrative or overhead costs. The reimbursement amount may be paid from any appropriations available for that purpose.

c. **TERMINATION FOR CAUSE**: The Commonwealth shall have the right to terminate the Contract or a Purchase Order for Contractor default under the Default Clause upon written notice to the Contractor. The Commonwealth shall also have the right, upon written notice to the Contractor, to terminate the Contract or a

Purchase Order for other cause as specified in the Contract or by law. If it is later determined that the Commonwealth erred in terminating the Contract or a Purchase Order for cause, then, at the Commonwealth's discretion, the Contract or Purchase Order shall be deemed to have been terminated for convenience under the Subparagraph a.

1.33 CONTRACT-024.1 Contract Controversies (Oct 2011)

a. In the event of a controversy or claim arising from the Contract, the Contractor must, within six months afterthe cause of action accrues, file a written claim with the contracting officer for a determination. The claim shall state all grounds upon which the Contractor asserts a controversy exists. If the Contractor fails to file a claim or files an untimely claim, the Contractor is deemed to have waived its right to assert a claim in any forum. At the time the claim is filed, or within sixty (60) days thereafter, either party may request mediation through the Commonwealth Office of General Counsel Dispute Resolution Program.

b. If the Contractor or the contracting officer requests mediation and the other party agrees, the contracting officer shall promptly make arrangements for mediation. Mediation shall be scheduled so as to not delay the issuance of the final determination beyond the required 120 days after receipt of the claim if mediation is unsuccessful. If mediation is not agreed to or if resolution is not reached through mediation, the contracting officer shall review timely-filed claims and issue a final determination, in writing, regarding the claim. The final determination shall be issued within 120 days of the receipt of the claim, unless extended by consent of the contracting officer and the Contractor. The contracting officer shall send his/her written determination to the Contractor. If the contracting officer fails to issue a final determination within the 120 days (unless extended by consent of the parties), the claim shall be deemed denied. The contracting officer's determination shall be the final order of the purchasing agency.

c. Within fifteen (15) days of the mailing date of the determination denying a claim or within 135 days of filinga claim if, no extension is agreed to by the parties, whichever occurs first, the Contractor may file a statement of claim with the Commonwealth Board of Claims. Pending a final judicial resolution of a controversy or claim, the Contractor shall proceed diligently with the performance of the Contract in a manner consistent with the determination of the contracting officer and the Commonwealth shall compensate the Contractor pursuant to the terms of the Contract.

1.34 CONTRACT-025.1 Assignability and Subcontracting (Oct 2013)

a. Subject to the terms and conditions of this paragraph, this Contract shall be binding upon the parties and their respective successors and assigns.

b. The Contractor shall not subcontract with any person or entity to perform all or any part of the work to be performed under this Contract without the prior written consent of the Contracting Officer, which consent may be withheld at the sole and absolute discretion of the Contracting Officer.

c. The Contractor may not assign, in whole or in part, this Contract or its rights, duties, obligations, or responsibilities hereunder without the prior written consent of the Contracting Officer, which consent may be withheld at the sole and absolute discretion of the Contracting Officer.

d. Notwithstanding the foregoing, the Contractor may, without the consent of the Contracting Officer, assign its rights to payment to be received under the Contract, provided that the Contractor provides written notice of such assignment to the Contracting Officer together with a written acknowledgement from the assignee that any such payments are subject to all of the terms and conditions of this Contract.

e. For the purposes of this Contract, the term "assign" shall include, but shall not be limited to, the sale, gift, assignment, pledge, or other transfer of any ownership interest in the Contractor provided, however, that the term shall not apply to the sale or other transfer of stock of a publicly traded company.

f . Any assignment consented to by the Contracting Officer shall be evidenced by a written assignment agreement executed by the Contractor and its assignee in which the assignee agrees to be legally bound by all of the terms and conditions of the Contract and to assume the duties, obligations, and responsibilities being assigned.

g. A change of name by the Contractor, following which the Contractor's federal identification number remains unchanged, shall not be considered to be an assignment hereunder. The Contractor shall give the Contracting Officer written notice of any such change of name.

1.35 CONTRACT-026.1 Other Contractors (Oct 2006)

The Commonwealth may undertake or award other contracts for additional or related work, and the Contractor shall fully cooperate with other contractors and Commonwealth employees, and coordinate its work with such additional work as may be required. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Commonwealth employees. This paragraph shall be included in the Contracts of all contractors with which this Contractor will be required to cooperate. The Commonwealth shall equitably enforce this paragraph as to all contractors to prevent the imposition of unreasonable burdens on any contractor.

1.36 CONTRACT-027.1 Nondiscrimination/Sexual Harassment Clause (August 2017)

The Contractor agrees:

1. In the hiring of any employee(s) for the manufacture of supplies, performance of work, or any other activity required under the contract or any subcontract, the Contractor, each subcontractor, or any person acting on behalf of the Contractor or subcontractor shall not discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the *Pennsylvania Human Relations Act* (PHRA) and applicable federal laws, against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.

2. Neither the Contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any employee involved in the manufacture of supplies, the performance of work, or any other activity required under the contract.

3. The Contractor and each subcontractor shall establish and maintain a written nondiscrimination and sexual harassment policy and shall inform their employees in writing of the policy. The policy must contain a provision that sexual harassment will not be tolerated and employees who practice it will be disciplined. Posting this Nondiscrimination/Sexual Harassment Clause conspicuously in easily-accessible and well-lighted places customarily frequented by employees and at or near where the contracted services are performed shall satisfy this requirement for employees with an established work site.

4. The Contractor and each subcontractor shall not discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of PHRA and applicable federal laws, against any subcontractor or supplier who is qualified to perform the work to which the contract relates.

5. The Contractor and each subcontractor represents that it is presently in compliance with and will maintain compliance with all applicable federal, state, and local laws, regulations and policies relating to nondiscrimination and

sexual harassment. The Contractor and each subcontractor further represents that it has filed a Standard Form 100 Employer Information Report ("EEO-1") with the U.S. Equal Employment Opportunity Commission ("EEOC") and shall file an annual EEO-1 report with the EEOC as required for employers' subject to *Title VII* of the *Civil Rights Act of 1964*, as amended, that have 100 or more employees and employers that have federal government contracts or first-tier subcontracts and have 50 or more employees. The Contractor and each subcontractor shall, upon request and within the time periods requested by the Commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to their books, records, and accounts by the contracting agency and the Bureau of Diversity, Inclusion and Small Business Opportunities for purpose of ascertaining compliance with provisions of this Nondiscrimination/Sexual Harassment Clause.

6. The Contractor shall include the provisions of this Nondiscrimination/Sexual Harassment Clause in every subcontract so that those provisions applicable to subcontractors will be binding upon each subcontractor.

7. The Contractor's and each subcontractor's obligations pursuant to these provisions are ongoing from and after the effective date of the contract through the termination date thereof. Accordingly, the Contractor and each subcontractor shall have an obligation to inform the Commonwealth if, at any time during the term of the contract, it becomes aware of any actions or occurrences that would result in violation of these provisions.

8. The Commonwealth may cancel or terminate the contract and all money due or to become due under the contract may be forfeited for a violation of the terms and conditions of this Nondiscrimination/Sexual Harassment Clause. In addition, the agency may proceed with debarment or suspension and may place the Contractor in the Contractor Responsibility File.

1.37 CONTRACT-028.1 Contractor Integrity Provisions (Jan 2015)

It is essential that those who seek to contract with the Commonwealth of Pennsylvania ("Commonwealth") observe high standards of honesty and integrity. They must conduct themselves in a manner that fosters public confidence in the integrity of the Commonwealth contracting and procurement process.

1. DEFINITIONS. For purposes of these Contractor Integrity Provisions, the following terms shall have the meanings found in this Section:

a. "Affiliate" means two or more entities where (a) a parent entity owns more than fifty percent of the voting stock of each of the entities; or (b) a common shareholder or group of shareholders owns more than fifty percent of the voting stock of each of the entities; or (c) the entities have a common proprietor or general partner.

b. "Consent" means written permission signed by a duly authorized officer or employee of the Commonwealth, provided that where the material facts have been disclosed, in writing, by prequalification, bid, proposal, or contractual terms, the Commonwealth shall be deemed to have consented by virtue of the execution of this contract.

c. "Contractor" means the individual or entity, that has entered into this contract with the Commonwealth.

d. "Contractor Related Parties" means any affliates of the Contractor and the Contractor's executive officers, Pennsylvania officers and directors, or owners of 5 percent or more interest in the Contractor.

e. "Financial Interest" means either:

(1) Ownership of more than a five percent interest in any business; or

(2) Holding a position as an officer, director, trustee, partner, employee, or holding any position of management.

f. **"Gratuity"** means tendering, giving, or providing anything of more than nominal monetary value including, but not limited to, cash, travel, entertainment, gifts, meals, lodging, loans, subscriptions, advances, deposits of money, services, employment, or contracts of any kind. The exceptions set forth in the *Governor's Code of Conduct, Executive Order 1980-18*, the *4 Pa. Code §7.153(b)*, shall apply.

g. **"Non-bid Basis"** means a contract awarded or executed by the Commonwealth with Contractor without seeking bids or proposals from any other potential bidder or offeror.

2. In furtherance of this policy, Contractor agrees to the following:

a. Contractor shall maintain the highest standards of honesty and integrity during the performance of this contract and shall take no action in violation of state or federal laws or regulations or any other applicable laws or regulations, or other requirements applicable to Contractor or that govern contracting or procurement with the Commonwealth.

b. Contractor shall establish and implement a written business integrity policy, which includes, at a minimum, the requirements of these provisions as they relate to the Contractor activity with the Commonwealth and Commonwealth employees and which is made known to all Contractor employees. Posting these Contractor Integrity Provisions conspicuously in easily-accessible and well-lighted places customarily frequented by employees and at or near where the contract services are performed shall satisfy this requirement.

c. Contractor, its affiliates, agents, employees and anyone in privity with Contractor shall not accept, agree to give, offer, confer or agree to confer or promise to confer, directly or indirectly, any gratuity or pecuniary benefit to any person, or to influence or attempt to influence any person in violation of any federal or state law, regulation, executive order of the Governor of Pennsylvania, statement of policy, management directive or any other published standard of the Commonwealth in connection with performance of work under this contract, except as provided in this contract.

d. Contractor shall not have a financial interest in any other contractor, subcontractor, or supplier providing services, labor or material under this contract, unless the financial interest is disclosed to the Commonwealth in writing and the Commonwealth consents to Contractor's financial interest prior to Commonwealth execution of the contract. Contractor shall disclose the financial interest to the Commonwealth at the time of bid or proposal submission, or if no bids or proposals are solicited, no later than the Contractor's submission of the contract signed by Contractor.

e. Contractor certifies to the best of its knowledge and belief that within the last five (5) years Contractor or Contractor Related Parties have not:

(1) been indicted or convicted of a crime involving moral turpitude or business honesty or integrity in any jurisdiction;

(2) been suspended, debarred or otherwise disqualified from entering into any contract with any governmental agency;

(3) had any business license or professional license suspended or revoked;

(4) had any sanction or finding of fact imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, embezzlement, misrepresentation or anti-trust; and

(5) been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or civil anti-trust investigation by any federal, state or local prosecuting or investigative agency.

If Contractor cannot so certify to the above, then it must submit along with its bid, proposal or contract a written explanation of why such certification cannot be made and the Commonwealth will determine whether a contract may be entered into with the Contractor. The Contractor's obligation pursuant to this certification is ongoing from and after the effective date of the contract through the termination date thereof. Accordingly, the Contractor shall have an obligation to immediately notify the Commonwealth in writing if at any time during the term of the contract it becomes aware of any event which would cause the Contractor's certification or explanation to change. Contractor acknowledges that the Commonwealth may, in its sole discretion, terminate the contract for cause if it learns that any of the certifications made herein are currently false due to intervening factual circumstances or were false or should have been known to be false when entering into the contract.

f. Contractor shall comply with the requirements of the *Lobbying Disclosure Act (65 Pa.C.S. §13A01 et seq.)* regardless of the method of award. If this contract was awarded on a Non-bid Basis, Contractor must also comply with the requirements of the *Section 1641 of the Pennsylvania Election Code (25 P.S. §3260a).*

g. When contractor has reason to believe that any breach of ethical standards as set forth in law, the Governor's Code of Conduct, or these Contractor Integrity Provisions has occurred or may occur, including but not limited to contact by a Commonwealth officer or employee which, if acted upon, would violate such ethical standards, Contractor shall immediately notify the Commonwealth contracting officer or the Office of the State Inspector General in writing.

h. Contractor, by submission of its bid or proposal and/or execution of this contract and by the submission of any bills, invoices or requests for payment pursuant to the contract, certifies and represents that is has not violated any of these Contractor Integrity Provisions in connection with the submission of the bid or proposal, during any contract negotiations or during the term of the contract, to include any extensions thereof. Contractor shall immediately notify the Commonwealth in writing of any actions for occurrences that would result in a violation of these Contractor Integrity Provisions. Contractor agrees to reimburse the Commonwealth for the reasonable costs of investigation incurred by the Office of the State Inspector General for investigations of the Contractor's compliance with the terms of this or any other agreement between the Contractor and the Commonwealth that results in the suspension or debarment of the Contractor. Contractor shall not be responsible for investigative costs for investigations that do not result in the Contractor's suspension or debarment.

i. Contractor shall cooperate with the Office of the State Inspector General in its investigation of any alleged Commonwealth agency or employee breach of ethical standards and any alleged Contractor non-compliance with these Contractor Integrity Provisions. Contractor agrees to make identified Contractor employees available for interviews at reasonable times and places. Contractor, upon the inquiry or request of an Inspector General, shall provide, or if appropriate, make promptly available for inspection or copying, any information of any type or form deemed relevant by the Office of the State Inspector General to Contractor's integrity and compliance with these provisions. Such information may include, but shall not be limited to, Contractor's business or financial records, documents or files of any type or form that refer to or concern this contract. Contractor shall incorporate this paragraph in any agreement, contract or subcontract it enters into in the course of the performance of this contract/agreement solely for the purpose of obtaining subcontractor compliance with this provision. The incorporation of this provision in a subcontract shall not create privity of contract between the Commonwealth and any such subcontractor, and no third party beneficiaries shall be created thereby.

j. For violation of any of these Contractor Integrity Provisions, the Commonwealth may terminate this and any other contract with Contractor, claim liquidated damages in an amount equal to the value of anything received in breach of these Provisions, claim damages for all additional costs and expenses incurred in obtaining another contractor to complete performance under this contract, and debar and suspend Contractor from doing business with the Commonwealth. These rights and remedies are cumulative, and the use or non-use of any one shall not preclude the use of all or any other. These rights and remedies are in addition to those the Commonwealth may have under law, statute, regulation or otherwise.

1.38 CONTRACT-029.1 Contractor Responsibility Provisions (Nov 2010)

For the purpose of these provisions, the term contractor is defined as any person, including, but not limited to, a bidder, offeror, loan recipient, grantee or lessor, who has furnished or performed or seeks to furnish or perform, goods, supplies, services, leased space, construction or other activity, under a contract, grant, lease, purchase order or reimbursement agreement with the Commonwealth of Pennsylvania (Commonwealth). The term contractor includes a permittee, licensee, or any agency, political subdivision, instrumentality, public authority, or other public entity in the Commonwealth.

1. The Contractor certifies, in writing, for itself and its subcontractors required to be disclosed or approved by the Commonwealth, that as of the date of its execution of this Bid/Contract, that neither the Contractor, nor any such subcontractors, are under suspension or debarment by the Commonwealth or any governmental entity, instrumentality, or authority and, if the Contractor cannot so certify, then it agrees to submit, along with its Bid/Contract, a written explanation of why such certification cannot be made.

2. The Contractor also certifies, in writing, that as of the date of its execution of this Bid/Contract it has no tax liabilities or other Commonwealth obligations, or has filed a timely administrative or judicial appeal if such liabilities or obligations exist, or is subject to a duly approved deferred payment plan if such liabilities exist.

3. The Contractor's obligations pursuant to these provisions are ongoing from and after the effective date of the Contract through the termination date thereof. Accordingly, the Contractor shall have an obligation to inform the Commonwealth if, at any time during the term of the Contract, it becomes delinquent in the payment of taxes, or other Commonwealth obligations, or if it or, to the best knowledge of the Contractor, any of its subcontractors are suspended or debarred by the Commonwealth, the federal government, or any other state or governmental entity. Such notification shall be made within 15 days of the date of suspension or debarment.

4. The failure of the Contractor to notify the Commonwealth of its suspension or debarment by the Commonwealth, any other state, or the federal government shall constitute an event of default of the Contract with the Commonwealth.

5. The Contractor agrees to reimburse the Commonwealth for the reasonable costs of investigation incurred by the Office of State Inspector General for investigations of the Contractor's compliance with the terms of this or any other agreement between the Contractor and the Commonwealth that results in the suspension or debarment of the contractor. Such costs shall include, but shall not be limited to, salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees. The Contractor shall not be responsible for investigative costs for investigations that do not result in the Contractor's suspension or debarment.

6. The Contractor may obtain a current list of suspended and debarred Commonwealth contractors by either searching the Internet at **http://www.dgs.state.pa.us/** or contacting the:

Department of General Services
Office of Chief Counsel
603 North Office Building
Harrisburg, PA 17125
Telephone No: (717) 783-6472
FAX No: (717) 787-9138

1.39 CONTRACT-030.1

Americans with Disabilities Act (Oct 2006)

a. Pursuant to federal regulations promulgated under the authority of The Americans With Disabilities Act, 28 C.F.R. Section 35.101 et seq., the Contractor understands and agrees that it shall not cause any individual with a disability to be excluded from participation in this Contract or from activities provided for under this Contract on

the basis of the disability. As a condition of accepting this contract, the Contractor agrees to comply with the "General Prohibitions Against Discrimination," 28 C.F.R. Section 35.130, and all other regulations promulgated under Title II of The Americans With Disabilities Act which are applicable to all benefits, services, programs, and activities provided by the Commonwealth of Pennsylvania through contracts with outside contractors.

b. The Contractor shall be responsible for and agrees to indemnify and hold harmless the Commonwealth of Pennsylvania from all losses, damages, expenses, claims, demands, suits, and actions brought by any party against the Commonwealth of Pennsylvania as a result of the Contractor's failure to comply with the provisions of Subparagraph a. above.

1.40 CONTRACT-031.1 Hazardous Substances (April 2017)

The Contractor shall provide information to the Commonwealth about the identity and hazards of hazardous substances supplied or used by the Contractor in the performance of the Contract. The Contractor must comply with Act 159 of October 5, 1984, known as the "Worker and Community Right to Know Act" (the "Act") and the regulations promulgated pursuant thereto at 34 Pa. Code Section 301.1 - 323.6.

a. Labeling. The Contractor shall ensure that each individual product (as well as the carton, container or package in which the product is shipped) of any of the following substances (as defined by the Act and the regulations) supplied by the Contractor is clearly labeled, tagged or marked with the information listed in Subparagraphs (1) through (4):

1) Hazardous substances:

a) The chemical name or common name,

b) A hazard warning, and

c) The name, address, and telephone number of the manufacturer.

2) Hazardous mixtures:

a) The common name, but if none exists, then the trade name,

b) The chemical or common name of special hazardous substances comprising .01% or more of the mixture,

c) The chemical or common name of hazardous substances consisting 1.0% or more of the mixture,

d) A hazard warning, and

e) The name, address, and telephone number of the manufacturer.

3) Single chemicals:

a) The chemical name or the common name,

b) A hazard warning, if appropriate, and

c) The name, address, and telephone number of the manufacturer.

4) Chemical Mixtures:

a) The common name, but if none exists, then the trade name,

b) A hazard warning, if appropriate,

c) The name, address, and telephone number of the manufacturer, and

d) The chemical name or common name of either the top five substances by volume or those substances consisting of 5.0% or more of the mixture.

A common name or trade name may be used only if the use of the name more easily or readily identifies the true nature of the hazardous substance, hazardous mixture, single chemical, or mixture involved.

Container labels shall provide a warning as to the specific nature of the hazard arising from the substance in the container.

The hazard warning shall be given in conformity with one of the nationally recognized and accepted systems of providing warnings, and hazard warnings shall be consistent with one or more of the recognized systems throughout the workplace. Examples are:

· NFPA 704, Identification of the Fire Hazards of Materials.
· National Paint and Coatings Association: Hazardous Materials Identification System.
· American Society for Testing and Materials, Safety Alert Pictorial Chart.
· American National Standard Institute, Inc., for the Precautionary Labeling of Hazardous Industrial Chemicals.

Labels must be legible and prominently affixed to and displayed on the product and the carton, container, or package so that employees can easily identify the substance or mixture present therein.

b. Material Safety Data Sheet. The contractor shall provide Material Safety Data Sheets (MSDS) with the information required by the Act and the regulations for each hazardous substance or hazardous mixture. The Commonwealth must be provided an appropriate MSDS with the initial shipment and with the first shipment after an MSDS is updated or product changed. For any other chemical, the contractor shall provide an appropriate MSDS, if the manufacturer, importer, or supplier produces or possesses the MSDS. The contractor shall also notify the Commonwealth when a substance or mixture is subject to the provisions of the Act. Material Safety Data Sheets may be attached to the carton, container, or package mailed to the Commonwealth at the time of shipment.

1.41 CONTRACT-032.1 Covenant Against Contingent Fees (Oct 2006)

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure the Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the Commonwealth shall have the right to terminate the Contract without liability or in its discretion to deduct from the Contract price or consideration, or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

1.42 CONTRACT-033.1 Applicable Law (Oct 2006)

This Contract shall be governed by and interpreted and enforced in accordance with the laws of the Commonwealth of Pennsylvania (without regard to any conflict of laws provisions) and the decisions of the Pennsylvania courts. The Contractor consents to the jurisdiction of any court of the Commonwealth of Pennsylvania and any federal courts in Pennsylvania, waiving any claim or defense that such forum is not convenient or proper. The Contractor agrees that any such court shall have in personam jurisdiction over it, and consents to service of process in any manner authorized by Pennsylvania law.

1.43 CONTRACT-034.1c Integration – Contract (Nov 30 2006)

This Contract, including all referenced documents, and any Purchase Order constitutes the entire agreement between the parties. No agent, representative, employee or officer of either the Commonwealth or the Contractor has authority to make, or has made, any statement, agreement or representation, oral or written, in connection with the Contract, which in any way can be deemed to modify, add to or detract from, or otherwise change or alter its terms and conditions. No negotiations between the parties, nor any custom or usage, shall be permitted to modify or contradict any of the terms and conditions of the Contract. No modifications, alterations, changes, or waiver to the Contract or any of its terms shall be valid or binding unless accomplished by a written amendment signed by both parties.

1.44 CONTRACT-034.3 Controlling Terms and Conditions (Aug 2011)

The terms and conditions of this Contract shall be the exclusive terms of agreement between the Contractor and the Commonwealth. All quotations requested and received from the Contractor are for obtaining firm pricing only. Other terms and conditions or additional terms and conditions included or referenced in the Contractor's quotations, invoices, business forms, or other documentation shall not become part of the parties' agreement and shall be disregarded by the parties, unenforceable by the Contractor and not binding on the Commonwealth.

1.45 CONTRACT-035.1a Changes (Oct 2006)

The Commonwealth reserves the right to make changes at any time during the term of the Contract or any renewals or extensions thereof: 1) to increase or decrease the quantities resulting from variations between any estimated quantities in the Contract and actual quantities; 2) to make changes to the services within the scope of the Contract; 3) to notify the Contractor that the Commonwealth is exercising any Contract renewal or extension option; or 4) to modify the time of performance that does not alter the scope of the Contract to extend the completion date beyond the Expiration Date of the Contract or any renewals or extensions thereof. Any such change shall be made by the Contracting Officer by notifying the Contractor in writing. The change shall be effective as of the date of the change, unless the notification of change specifies a later effective date. Such increases, decreases, changes, or modifications will not invalidate the Contract, nor, if performance security is being furnished in conjunction with the Contract, release the security obligation. The Contractor agrees to provide the service in accordance with the change order. Any dispute by the Contractor in regard to the performance required by any notification of change shall be handled through Contract Controversies Provision.

1.46 CONTRACT-037.1a Confidentiality (Oct 2013)

a) The Contractor agrees to protect the confidentiality of the Commonwealth's confidential information. The Commonwealth agrees to protect the confidentiality of Contractor's confidential information. In order for information to be deemed confidential, the party claiming confidentiality must designate the information as "confidential" in such a way as to give notice to the other party (notice may be communicated by describing the information, and the specifications around its use or disclosure, in the SOW). Neither party may assert that information owned by the other party is such party's confidential information. The parties agree that such confidential information shall not be copied, in whole or in part, or used or disclosed except when essential for authorized activities under this Contract and, in the case of disclosure, where the recipient of the confidential information has agreed to be bound by confidentiality requirements no less restrictive than those set forth herein. Each copy of such confidential information shall be marked by the party making the copy with any notices appearing in the original. Upon termination or cancellation of this Contract or any license granted hereunder, the receiving party will return to the disclosing party all copies of the confidential information in the receiving party's possession, other than one copy, which may be maintained for archival purposes only, and which will remain subject to this Contract's security, privacy, data retention/destruction and confidentiality provisions (all of which shall survive the expiration of this Contract). Both parties agree that a material breach of these requirements may, after failure to cure within the time frame specified in this Contract, and at the discretion of the non-breaching party, result in termination for default pursuant to the DEFAULT provision of this Contract, in addition to other remedies available to the non-breaching party.

(b) Insofar as information is not otherwise protected by law or regulation, the obligations stated in this Section do not apply to information:

(1) already known to the recipient at the time of disclosure other than through the contractual relationship;

(2) independently generated by the recipient and not derived by the information supplied by the disclosing party.

(3) known or available to the public , except where such knowledge or availability is the result of unauthorized disclosure by the recipient of the proprietary information;

(4) disclosed to the recipient without a similar restriction by a third party who has the right to make such disclosure; or

(5) required to be disclosed by law , regulation, court order, or other legal process.

There shall be no restriction with respect to the use or disclosure of any ideas, concepts, know-how, or data processing techniques developed alone or jointly with the Commonwealth in connection with services provided to the Commonwealth under this Contract.

(c) The Contractor shall use the following process when submitting information to the Commonwealth it believes to be confidential and/or proprietary information or trade secrets:

(1) Prepare an un-redacted version of the appropriate document, and

(2) Prepare a redacted version of the document that redacts the information that is asserted to be confidential or proprietary information or a trade secret, and

(3) Prepare a signed written statement that states:

(i) the attached document contains confidential or proprietary information or trade secrets;

(ii) the Contractor is submitting the document in both redacted and un-redacted format in accordance with 65 P.S. § 67.707(b); and

(iii) the Contractor is requesting that the document be considered exempt under 65 P.S. § 67.708(b)(11) from public records requests.

(4)Submit the two documents along with the signed written statement to the Commonwealth.

1.47 CONTRACT-045.1 Insurance - General (Dec 12 2006)

The Contractor is required to have in place during the term of the Contract and any renewals or extensions thereof , the following types of insurance, issued by companies acceptable to the Commonwealth and authorized to conduct such business under the laws of the Commonwealth of Pennsylvania:

A. **Worker's Compensation Insurance** for all of the Contractor's employees and those of any subcontractor, engaged in work at the site of the project as required by law.

B. **Public Liability and Property Damage Insurance** to protect the Commonwealth, the Contractor, and any and all subcontractors from claims for damages for personal injury (including bodily injury), sickness or disease, accidental death and damage to property including the loss of use resulting from any property damage, which may arise from the activities performed under the Contract or the failure to perform under the Contract, whether such performance or non-performance be by the Contractor, by any subcontractor, or by anyone directly or indirectly employed by either. The minimum amounts of coverage shall be $250,000 per person and $1,000,000 per occurrence for bodily injury, including death, and $250,000 per person and $1,000,000 per occurrence for property damage. Such policies shall be occurrence rather than claims-made policies and shall not contain any endorsements or any other form designated to limit and restrict any action by the Commonwealth, as an additional insured, against the insurance coverage in regard to work performed for the Commonwealth.

Prior to commencement of the work under the Contract and at each insurance renewal date during the term of the Contract, the Contractor shall provide the Commonwealth with current certificates of insurance. These certificates or policies shall name the Commonwealth as an additional insured and shall contain a provision that the coverage's afforded under the policies will not be cancelled or changed until at least thirty (30) days written notice has been given to the Commonwealth.

The Commonwealth shall be under no obligation to obtain such certificates from the Contractor(s).Failure by the Commonwealth to obtain the certificates shall not be deemed a waiver of the Contractor's obligation to obtain and furnish certificates. The Commonwealth shall have the right to inspect the original insurance policies.

1.48 CONTRACT-046.1 Manufacturer’s Price Reduction (Oct 2006)

If, prior to the delivery of the awarded item(s) by the Contractor, a price reduction is announced by the original equipment manufacturer, a comparative price reduction will be given to the Commonwealth by the Contractor.

1.49 CONTRACT-050.01b Steel Products Procurement Act “B“ (Oct 2009)

Any items defined as “steel products” in the Steel Products Procurement Act, Act of March 3, 1978, P.L. 6, No. 3, 73 P.S. §§ 1881-1887 (“SPPA”), that the Contractor may provide under this Contract for use in the construction, reconstruction, alteration, repair, or maintenance of public works (“Public Works Project”) shall be made from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making

process. If a steel product contains both foreign and United States steel, such product shall be determined to be a United States steel product, only if at least 75% of the cost of the articles, materials and supplies have been mined, produced or manufactured, as the case may be, in the United States.

The SPPA provides that, when a Contractor supplies unidentified steel products for a public agency's use as part of any Public Works Project , before a public agency may authorize, provide for, or make payment, the Contractor must provide documentation including, but not limited to, invoices, bills of lading, and mill certification that the steel was melted and manufactured in the United States. If a steel product is identifiable on its face, the contractor must submit certification which satisfies the purchasing agency that the contractor has fully complied with this provision.

If a purchasing agency has made any payment to the Contractor and later finds that the Contractor did not comply with the SPPA's requirements, the purchasing agency may recover such payment directly from the Contractor. The Contractor shall not deny repayment unless it can demonstrate that it has complied with the SPPA's requirements.

The SPPA also provides that any person who willfully violates any of its provisions shall be prohibited from submitting any bids to any public agency for five years after the date of the determination that a violation has occurred. If the Contractor violates the SPPA, the public agency may debar the Contractor from performing any work or supplying any materials to a public agency for five years after the date of the determination that a violation has occurred.

The Contractor shall include these provisions regarding the SPPA's requirements in its subcontracts and supply contracts, so that the SPPA's provisions shall be binding upon each subcontractor and supplier.

1.50 CONTRACT-051.1 Notice (Dec 2006)

Any written notice to any party under this Contract shall be deemed sufficient if delivered personally, or by facsimile, telecopy, electronic or digital transmission (provided such delivery is confirmed), or by a recognized overnight courier service (e.g., DHL, Federal Express, etc.) with confirmed receipt, or by certified or registered United States mail, postage prepaid, return receipt requested, and sent to following:

a. If to the Contractor: the Contractor's address as recorded in the Commonwealth's Supplier Registration system.

b. If to the Commonwealth: the address of the Issuing Office as set forth on the Contract.

1.51 CONTRACT-052.1 Right to Know Law (Feb 2010)

a. The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, ("RTKL") applies to this Contract. For thepurpose of these provisions, the term "the Commonwealth" shall refer to the contracting Commonwealth agency.

b. If the Commonwealth needs the Contractor's assistance in any matter arising out of the RTKL related to thisContract, it shall notify the Contractor using the legal contact information provided in this Contract. The Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Commonwealth.

c. Upon written notification from the Commonwealth that it requires the Contractor's assistance in responding to arequest under the RTKL for information related to this Contract that may be in the Contractor's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Contractor shall:

1. Provide the Commonwealth, within ten (10) calendar days after receipt of written notification, access to, and copies of, any document or information in the Contractor's possession arising out of this Contract that the

Commonwealth reasonably believes is Requested Information and may be a public record under the RTKL; and 2. Provide such other assistance as the Commonwealth may reasonably request, in order to comply with the RTKL with respect to this Contract.

d. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, the Contractor must notify the Commonwealth and provide, within seven (7) calendar days of receiving the written notification, a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL.

e. The Commonwealth will rely upon the written statement from the Contractor in denying a RTKL request for the Requested Information unless the Commonwealth determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Commonwealth determine that the Requested Information is clearly not exempt from disclosure, the Contractor shall provide the Requested Information within five (5) business days of receipt of written notification of the Commonwealth's determination.

f. If the Contractor fails to provide the Requested Information within the time period required by these provisions, the Contractor shall indemnify and hold the Commonwealth harmless for any damages, penalties, costs, detriment or harm that the Commonwealth may incur as a result of the Contractor's failure, including any statutory damages assessed against the Commonwealth.

g. The Commonwealth will reimburse the Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

h. The Contractor may file a legal challenge to any Commonwealth decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, the Contractor shall indemnify the Commonwealth for any legal expenses incurred by the Commonwealth as a result of such a challenge and shall hold the Commonwealth harmless for any damages, penalties, costs, detriment or harm that the Commonwealth may incur as a result of the Contractor's failure, including any statutory damages assessed against the Commonwealth, regardless of the outcome of such legal challenge. As between the parties, the Contractor agrees to waive all rights or remedies that may be available to it as a result of the Commonwealth's disclosure of Requested Information pursuant to the RTKL.

i. The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and shall continue as long as the Contractor has Requested Information in its possession.

PARTICIPATING ADDENDUM TO THE NASPO VALUEPOINT COOPERATIVE PURCHASING ORGANIZATION AUTOMATIC EXTERNAL DEFIBRILLATOR (AED) & ACCESSORIES, CONTRACT NO. OK-SW-300

This Participating Addendum ("Addendum"), which has been assigned Contract No. 4400019898, between Philips Healthcare ("Contractor") and the Commonwealth of Pennsylvania ("Commonwealth"), acting through the Department of General Services ("DGS") is entered into pursuant to the Automatic External Defibrillator (AED) & Accessories Contract No. OK-SW-300 ("Master Agreement") between Philips Healthcare and **the State of Oklahoma** ("Oklahoma") on behalf of the **NASPO ValuePoint Cooperative Purchasing Organization** ("NASPO ValuePoint").

WHEREAS, Oklahoma, on behalf of NASPO ValuePoint, issued Request for Proposal No. SW17300 and subsequently entered into the Master Agreement with the Contractor, pursuant to which the Contractor provides automatic external defibrillators (AED) and accessories as described in the Master Agreement; and

WHEREAS, the Commonwealth desires to participate in the Master Agreement to procure external defibrillators (AED) and accessories from the Contractor under the Master Agreement; and

WHEREAS, DGS is authorized under Sections 1902 and 1908 of the Commonwealth Procurement Code, 62 Pa. C. S. §§ 1902 and 1908, to undertake and make this type of contractual arrangement on behalf of the Commonwealth.

NOW, THEREFORE, intending to be legally bound hereby, DGS and the Contractor agree as follows:

1. The Master Agreement is defined as Contract No. OK-SW-300 entered into by the State of Oklahoma and Contractor, and all other documents attached thereto or incorporated by reference in that Master Agreement as found at: http://www.naspovaluepoint.org/#/contract-details/94/contractor/592 . The Master Agreement is also attached as **Exhibit A** to this Participating Addendum. Except as set forth in this Addendum, DGS and Contractor agree to be bound by the terms and conditions as stated in the Master Agreement.

2. DGS and Contractor agree to be bound by the Commonwealth of Pennsylvania Standard Terms and Conditions, attached hereto as **Exhibit B** and made part of this Addendum.

3. To the extent language contained in **Exhibit A**, the Master Agreement, requires the Commonwealth to pay late payment fees or overdue account charges, such language is deleted from this Contract.

4. Prior to entering a contract worth at least $1,000,000 or more with a Commonwealth entity, a Contractor must: a) certify it is not on the current list of persons engaged in investment activities in Iran created by the Pennsylvania Department of General Services

("DGS") pursuant to Section 3503 of the Procurement Code and is eligible to contract with the Commonwealth under Sections 3501-3506 of the Procurement Code; or b) demonstrate it has received an exception from the certification requirement for that solicitation or contract pursuant to Section 3503(e). Contractor must complete and return the Iran Free Procurement Certification form, which is attached hereto as **Exhibit C** and made part of this Addendum.

5. Contractor and DGS agree that COSTARS Program members shall be eligible to utilize this Addendum under the same terms and conditions as the Commonwealth. By electing to allow for COSTARS participation in this contract, Contractor agrees to pay the applicable annual administrative fee and abide by the reporting requirements described Section I.1 IFB-027.1 of Exhibit B to this Addendum.

6. With respect to Section 1.10 CONTRACT- 007.01a of Exhibit B to this Contract (Supplies Delivery), the parties understand and agree that if Philips is unable to meet Customer's delivery requirements, alternative arrangements may be agreed. In the absence of such agreement, Customer's sole remedy is to cancel the order. If Customer requests a major delay in the date of delivery of the product, Philips may attempt to arrange re-delivery within a reasonable time or may terminate the order.

7. With respect to Section 1.12 CONTRACT- 008.1a of Exhibit B to this Contract (Warranty), the parties understand and agree to the Limited Warranty contained in the Master Agreement which is attached to this Contract as Exhibit A.

8. With respect to Section 1.13 CONTRACT- 009.1c of Exhibit B to this Contract (Patent, Copyright, and Trademark Indemnity), the parties understand and agree that:

    a. Philips shall indemnify, defend, and hold harmless Customer against any new claim that a Philips Product provided in the quotation infringes, misappropriates, or violates any third party intellectual property right, whether patent, copyright, trademark, or trade secret, provided that Customer: (i) provides Philips prompt written notice of the claim, (ii) grants Philips full and complete information and assistance necessary for Philips to defend, settle, or avoid the claim, and (iii) gives Philips sole control of the defense or settlement of the claim. The provisions of this section shall not apply in the event of any sale or other transfer of the product by Customer.

    b. In the event (a) a Philips' product is found or believed by Philips to infringe such a claim or (b) Customer has been enjoined from using the Philips' product pursuant to an injunction issued by a court of competent jurisdiction, Philips may, at its option, (i) procure the right for Customer to use the product, (ii) replace or modify the product to avoid infringement, or (iii) refund to Customer a portion of the product purchase price upon the return of the original product. Philips shall have no obligation for any claim of infringement arising from Philips' compliance with Customer's designs, specifications, or instructions; Philips' use of technical information or technology supplied by Customer; modifications to the product by Customer or its agents; use of the product other than in accordance with the

product specifications or applicable written product instructions; use of the product with any other product; if infringement would have been avoided by the use of a current unaltered release of the products; or use of the Philips Product after Philips has advised Customer, in writing, to stop use of the Philips Product in view of the claimed infringement. Philips will not be liable for any claim where the damages sought are based directly or indirectly upon the quantity or value of products manufactured by means of the products purchased under this quotation, or based upon the amount of use of the product regardless of whether such claim alleges the product or its use infringes or contributes to the infringement of such claim.. The terms in this section state Philips' entire obligation and liability for claims of infringement, and Customer's sole remedy in the event of a claim of infringement

9. With respect to Section 1.16 CONTRACT- 010.2 of Exhibit B to this Contract (Product Conformance), the parties understand and agree that:

    a. If the equipment fails to substantially achieve the Philips's published specifications using Philips testing methods, Philips will have full access to the equipment to restore it to the Philips' published specifications. Philips must be given a commercially reasonable amount of time to correct these deficiencies. Acceptance retesting by Philips is limited to initial discrepancy items.

    b. Philips does not provide for Customer observance of factory production or pre-staging activities. Philips manufactures its medical systems in compliance with the Quality System Regulation promulgated by the United States Food and Drug Administration, which mandates a quality system covering design and manufacturing, including testing and inspection where necessary. Medical devices released and marketed by Philips have been designed and manufactured in accordance with such a quality system.

10. With respect to Section 1.17 CONTRACT- 010.3 of Exhibit B to this Contract (Rejected Material Not Considered Abandoned), the parties understand and agree that a Returned Goods Authorization (RGA) number is required for all returns and must be obtained prior to returning product to Philips. To obtain an RGA number, call Philips Customer Service. The RGA number must appear on the outside of the box. All returns are subject to a restocking fee. For more details on Philips Return Policy, contact Philips Customer Service.

11. With respect to Section 1.22 CONTRACT- 015.1 of Exhibit B to this Contract (Compensation), the parties understand and agree that if Philips is unable to meet Customer's delivery requirements, alternative arrangements may be agreed. In the absence of such agreement, Customer's sole remedy is to cancel the order. Delivery occurs upon acceptance for all AEDs and medical supplies and consumables.

12. With respect to Section 1.46 CONTRACT- 073.1a of Exhibit B to this Contract (Confidentiality), the parties understand and agree that information is not confidential to the extent that it can be proven that the information:

a. is or becomes publicly available without violation of this Agreement or any other obligation of confidentiality;

b. is lawfully obtained by the Contractor from a third party without any breach of confidentiality or violation of law; or

c. is furnished to others by the Commonwealth without restrictions similar to those herein contained as to the use or disclosure hereof.

13. With respect to Section 1.37 CONTRACT- 028.1 of Exhibit B to this Contract (Contractor Integrity Provisions) and Section 1.38 CONTRACT 029.1 (Contractor Responsibility Provisions) the parties understand and agree that Philips represents and warrants to the best of its knowledge:

    a. Philips, its employees and subcontractors, are not debarred, excluded, suspended or otherwise ineligible to participate in a federal health care program, nor have they been convicted of any health care related crime for the products and services provided under this Agreement (an "Excluded Provider"). Philips shall promptly notify Customer when it becomes aware that Philips or any of its employees or subcontractors providing services hereunder have become an Excluded Provider, whereupon Customer may terminate this order by express written notice for products and services not yet shipped or rendered.

14. To the extent that there is a conflict between the contract documents, the order of precedence shall be:

    a. This Participating Addendum.
    b. The Commonwealth of Pennsylvania Terms and Conditions, which is attached hereto as **Exhibit B**.
    c. The Master Agreement which is attached as **Exhibit A**.

15. This Participating Addendum shall commence on the Effective Date as described in Section 1.3 CONTRACT-002.1d of Exhibit B and shall expire on October 4, 2018. This contract may be extended for an additional 36 months at the discretion of DGS provided that the extension is exercised by NASPO ValuePoint.

16. The fully-executed Participating Addendum shall not contain "ink" signatures by the Commonwealth. After signature by the Contractor on this document, the Participating Addendum will be submitted for required Commonwealth approvals through the Commonwealth's SRM system. The Participating Addendum will be effective following the final Commonwealth approval and it has been sent to the Contractor.

IN WITNESS WHEREOF, the parties have signed this Participating Addendum.

Witness:

By: _____ 7/26/18
Date

Laura Hays Contract manager
Printed Name and Title

Contractor:

By: _____ 7/26/18
Date

Margaret Meeselaar
Director
Commercial & Strategic Contracts
Printed Name and Title

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES

By: To be obtained electronically _____
Deputy Secretary for Procurement Date

PENNSYLVANIA DEPARTMENT OF TREASURY:

To be obtained electronically _____
Treasurer (or Designee) Date

APPROVED AS TO FORM AND LEGALITY:

To be obtained electronically _____
Office of Chief Counsel Date

To be obtained electronically _____
Office of General Counsel Date

OKLAHOMA NASPO VALUEPOINT MASTER AGREEMENT AWARD

AED UNITS AND ACCESSORIES

Office of Management and Enterprise Services

Central Purchasing Division

5005 North Lincoln Boulevard

Oklahoma City, OK 73105

And

Philips Healthcare,

A division of Philips North America, LLC

3000 Minuteman Road

Andover, MA 01810

Master Agreement Number: OK-SW-300

You are hereby notified that your response to Solicitation SW17300, which opened November 29, 2016, is accepted. The following documents are incorporated herein by reference and constitute the entire Contract between you and the State: 1) A Participating Entity's Participating Addendum ("PA"); 2) This NASPO ValuePoint Master Price Agreement which includes Exhibit A - Terms and Conditions, Exhibit B – Scope of Work, and Exhibit C - Price and Cost Proposal; 3) The Request for Proposal; and 4) The Contractor's response to the Request for Proposal.

NOW, THEREFORE, in consideration of the foregoing and mutual promises set forth herein, the receipt and sufficiency of which are hereby acknowledged the parties have caused this Contract to be duly executed intending to be bound thereby.

STATE OF OKLAHOMA **Ferris J. Barger, State Purchasing Director**	**CONTRACTOR** **Philips Healthcare,** **a division of Philips North America, LLC**
By:	By: Margaret Messelaar Digitally signed by Margaret Messelaar DN: cn=Margaret Messelaar, o=Philips Healthcare a division of Philips North America LLC, ou=Director Commercial Contracts, email=margaret.messelaar@philips.com, c=US Date: 2017.12.01 17:19:42 -05'00'
Date: 12/12/17	Date: Title:

Persons signing for Contractor hereby swear and affirm that they are authorized to act on Contractor's behalf and acknowledge that the Lead State is relying on their representations to that effect.

Contractor
Philips Healthcare
a division of Philips North America LLC
By: _____ Digitally signed by 310146501
DN: dc=com, dc=philips, dc=eml, dc=code1, ou=CODE, ou=USDANRMMD1, ou=Users, cn=310146501
Date: 2017.12.04 15:18:22 -05'00'
Mark Mattern
Title: Head of Finance, North America
Date: _12/4/2017_____

Table of Contents

OKLAHOMA NASPO VALUEPOINT MASTER AGREEMENT AWARD SUMMARY

1. Scope of Work Defined. The goal of this Master Agreement is provide a vehicle in which Participating States/Purchasing Entities can obtain Automated External Defibrillator (AED) units, accessories, and service and support options in furtherance of the NASPO ValuePoint Cooperative Purchasing Program. The purpose of this Master Agreement is to contract with qualified offerors to provide AED units, accessories, and service and support options for all Participating States. The objective is to obtain best value, and in some cases achieve more favorable pricing, than is obtainable by an individual state or local government entity because of the collective volume of potential purchases by numerous state and local government entities.

2. Categories of Products Offered. This Master Agreement will offer the following categories of products: Public Access and Infrequent User AEDs; First Responder AEDs; and Professional Defibrillators.

3. Master Agreement Order of Precedence. Any Order placed under this Master Agreement shall consist of the following documents:

   (1) Participating Entity's Participating Addendum ("PA");
   (2) Oklahoma NASPO ValuePoint Master Agreement Award;
      a. Summary;
      b. General Terms, Conditions, and Instructions;
      c. NASPO ValuePoint Terms and Conditiitions;
      d. Scope of Work; and
      e. Price and Cost Proposal.
   (3) A Purchase Order issued against the Master Agreement;
   (4) The Solicitation; and
   (5) Contractor's response to the Solicitation, including but not limited to Contractor's Terms and Conditions contained in Response, as revised and accepted by the Lead State.

These documents shall be read to be consistent and complementary. Any conflict among these documents shall be resolved by giving priority to these documents in the order listed above. Contractor terms and conditions that apply to this Master Agreement are only those that are expressly accepted by the Lead State and must be in writing and attached to this Master Agreement as an Exhibit or Attachment.

A. GENERAL TERMS, CONDITIONS & INSTRUCTIONS

1. Period of Performance

The initial term of the master agreement shall be 1 (one) year with renewal provisions as outlined in Section 3 of the NASPO ValuePoint Master Terms and Conditions (Section B of this Exhibit) which typically extend the original contract period for four (4) additional years.

2. Contract Administrator

The Lead State Contract Administrator identified below is the single point of contact during this procurement process. Offerors and interested persons shall direct to the Lead State Contract Administrator all questions concerning the procurement process, technical requirements of the RFP, contractual requirements, changes, clarifications, and protests, the award process, and any other questions that may arise related to this solicitation and this resulting Master Agreement. The Lead State Contract Administrator designated by the State of Oklahoma, OMES Central Purchasing is:

Theresa Johnson Strategic Initiatives Purchasing Officer
State of Oklahoma, OMES Central Purchasing
5005 N. Lincoln Blvd., STE 300
Oklahoma City, OK 73105
Theresa. Johnson@omes.ok.gov
Phone: 405/522-1077

3. Authorized Users

This Master Agreement may be used by state governments (including departments, agencies, institutions), institutions of higher education, political subdivisions (i.e., colleges, school districts, counties, cities, etc.), the District of Columbia, territories of the United States, and other eligible entities subject to approval of the individual state procurement director and compliance with local statutory and regulatory provisions.

4. Definitions

"Lead State" means the State conducting this cooperative procurement, evaluation, and award and centrally administering any resulting Master Agreement(s)

"Offeror" means the company or firm who submits a proposal in response to this Request for Proposal.

"Proposal" means the official written response submitted by an Offeror in response to this Request for Proposal.

"Request for Proposals" or "RFP" means the entire solicitation document, including all parts, sections, exhibits, attachments, and Amendments.

5. Certification of Non-Debarment

By submitting a response to this solicitation the prospective primary participant and any other subcontract certifies to the best of their knowledge and belief, that they and their principals or participants:

Participants:

5.1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal, State or local department or agency;

5.2. Have not within a three-year period preceding this proposal been convicted or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) contract; or for violation of Federal or State antitrust statues or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

5.3. Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses listed above this certification; and

5.4. Have not with a three-year period preceding this application/proposal had one or more public (Federal, State or local) contracts terminated for cause or default.
Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to its solicitation response.

6. Insurance

The Contractor agrees to acquire insurance from an insurance carrier or carriers licensed to conduct business in each Participating Entity's state at the prescribed levels set forth in Section 21 of the NASPO ValuePoint Master Agreement Terms and Conditions of this Exhibit.

7. Governing Laws and Regulations

This procurement is conducted by the regulations and the laws of the State of Oklahoma. Venue for any administrative or judicial action relating to this procurement, evaluation, and award shall be in Oklahoma County, Oklahoma. The provisions governing choice of law and venue for issues arising after award and during contract performance are specified in section 35 of the NASPO ValuePoint Master Agreement Terms and Conditions of this Exhibit.

8. NASPO ValuePoint Administrative Fee and Reporting Requirements

Contractor agrees to pay a NASPO ValuePoint administrative fee as specified Section 26 of the NASPO ValuePoint Master Agreement Terms and Conditions. Moreover, specific summary and detailed usage

reporting requirements are prescribed by Section 27 of NASPO ValuePoint Master Agreement Terms and Conditions of this Exhibit.

Contractor shall identify the person responsible for providing the mandatory usage reports. (This information must be kept current during the contract period). Contractor will be required to provide reporting contact within 15 days of Master Agreement execution.

9. NASPO ValuePoint eMarket Center

Contractor agrees to cooperate with NASPO ValuePoint and SciQuest (and any authorized agent or successor entity to SciQuest) to integrate its presence in the NASPO ValuePoint eMarket Center either through an electronic catalog (hosted or punchout site) or unique ordering instructions. Refer to Attachment A, Section 36, NASPO ValuePoint Master Agreement Terms and Conditions for the prescribed requirements. Those terms and conditions require as a minimum that the Offeror agree to participate in development of ordering instructions. Proposer shall respond how they can support the eMarket Center in the Proposal through either a hosted catalog or punchout solution.

10. Cost, Prices, and Rates

Prices and rates shall include all anticipated charges, including, but not limited to, standard freight and delivery, cost of materials and product, transaction fees, overhead, profits, and other costs and expenses incidental to the Offeror's performance. Any travel costs must be included in the cost of the products and services offered under this Master Agreement. No billing for travel will be allowed under this Master Agreement.

Pricing will remain fixed for the initial term of this Master Agreement, which is one year. Any request for price or rate adjustment following the initial Master Agreement term is subject to the requirements of Section of the NASPO ValuePoint Master Agreement Terms and Conditions of this Exhibit.

11. Oklahoma Open Records Act

This Master Agreement and all proposal and other materials submitted in response to Solicitation SW#17300 shall be the property of the State of Oklahoma and subject to the Oklahoma Open Records Act.

12. Contractor Single Point of Contact

All Offerors were to include a single point of contact in their Proposal. This single point of contact shall be the primary person the Lead State may contact in regards to this Master Agreement.

B. NASPO VALUEPOINT TERMS AND CONDITIONS

1. Master Agreement Order of Precedence

Any Order placed under this Master Agreement shall consist of the following documents:

(1) Participating Entity's Participating Addendum ("PA");

(2) Oklahoma NASPO ValuePoint Master Agreement Award;

a. Summary;
b. General Terms, Conditions and Instructions;
c. NASPO ValuePoint Terms and Conditions;
d. Scope of Work;
e. Price and Cost Proposal.

(3) A Purchase Order issued against the Master Agreement;

(4) The Solicitation; and

(5) Contractor's response to the Solicitation, including but not limited to Contractor's Terms and Conditions contained in Response, as revised and accepted by the Lead State.

These documents shall be read to be consistent and complementary. Any conflict among these documents shall be resolved by giving priority to these documents in the order listed above. Contractor terms and conditions that apply to this Master Agreement are only those that are expressly accepted by the Lead State and must be in writing and attached to this Master Agreement as an Exhibit or Attachment.

2. Definitions

Acceptance is defined by the applicable commercial code, except Acceptance shall not occur before the completion of delivery in accordance with the Order, installation if required, and a reasonable time for inspection of the Product. Acceptance shall occur not later than thirty (30) business days after the date of delivery of the products to the Participating or Purchasing Entity.

Contractor means the person or entity delivering Products or performing services under the terms and conditions set forth in this Master Agreement.

Embedded Software means one or more software applications which permanently reside on a computing device.

Intellectual Property means any and all patents, copyrights, service marks, trademarks, trade secrets, trade names, patentable inventions, or other similar proprietary rights, in tangible or intangible form, and all rights, title, and interest therein.

Lead State means the State centrally administering any resulting Master Agreement(s).

Master Agreement means the underlying agreement executed by and between the Lead State, acting on behalf of the NASPO ValuePoint program, and the Contractor, as now or hereafter amended.

NASPO ValuePoint is the NASPO Cooperative Purchasing Organization LLC, doing business as NASPO ValuePoint, a 501(c) (3) limited liability company that is a subsidiary organization the National Association of State Procurement Officials (NASPO), the sole member of NASPO ValuePoint. NASPO ValuePoint facilitates administration of the NASPO cooperative group contracting consortium of state chief procurement

officials for the benefit of state departments, institutions, agencies, and political subdivisions and other eligible entities (i.e., colleges, school districts, counties, cities, some nonprofit organizations, etc.) for all states and the District of Columbia. NASPO ValuePoint is identified in the Master Agreement as the recipient of reports and may perform contract administration functions relating to collecting and receiving reports as well as other contract administration functions as assigned by the Lead State.

Order or Purchase Order means any purchase order, sales order, contract or other document used by a Purchasing Entity to order the Products. Participating Addendum means a bilateral agreement executed by a Contractor and a Participating Entity incorporating this Master Agreement and any other additional Participating Entity specific language or other requirements, e.g. ordering procedures specific to the Participating Entity, other terms and conditions.

Participating Addendum means a bilateral agreement executed by a Contractor and a Participating Entity incorporating this Master Agreement and any other additional Participating Entity specific language or other requirements, e.g. ordering procedures specific to the Participating Entity, other terms and conditions.

Participating Entity means a state, or other legal entity, properly authorized to enter into a Participating Addendum.

Participating State means a state, the District of Columbia, or one of the territories of the United States that is listed in the Request for Proposal as intending to participate. A Participating State is not required to participate through execution of a Participating Addendum. Upon execution of the Participating Addendum, a Participating State becomes a Participating Entity; however, a Participating State listed in the Request for Proposals is not required to participate through execution of a Participating Addendum.

Product means any equipment, software (including embedded software), documentation, service or other deliverable supplied or created by the Contractor pursuant to this Master Agreement. The term Products, supplies and services, and products and services are used interchangeably in these terms and conditions.

Purchasing Entity means a state (as well as the District of Columbia and U.S. territories), city, county, district, other political subdivision of a State, and a nonprofit organization under the laws of some states if authorized by a Participating Addendum, who issues a Purchase Order against the Master Agreement and becomes financially committed to the purchase.

NASPO ValuePoint Program Provisions

3. Term of the Master Agreement

The initial term of this Master Agreement is for one (1) years. This Master Agreement may be extended beyond the original contract period for four (4) additional years at the Lead State's discretion and by mutual agreement and upon review of requirements of Participating Entities, current market conditions, and Contractor performance.

4. Amendments

The terms of this Master Agreement shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without prior written agreement of the Lead State and Contractor.

5. Participants and Scope

a. Contractor may not deliver Products under this Master Agreement until a Participating Addendum acceptable to the Participating Entity and Contractor is executed. The Oklahoma Terms and Conditions and NASPO ValuePoint Master Agreement Terms and Conditions are applicable to any Order by a Participating Entity (and other Purchasing Entities covered by their Participating Addendum), except to the extent altered, modified, supplemented or amended by a Participating Addendum. By way of illustration and not limitation, this authority may apply to unique delivery and invoicing requirements, confidentiality requirements, defaults on Orders, governing law and venue relating to Orders by a Participating Entity, indemnification, and insurance requirements. Statutory or constitutional requirements relating to availability of funds may require specific language in some Participating Addenda in order to comply with applicable law. The expectation is that these alterations, modifications, supplements, or amendments will be addressed in the Participating Addendum or, with the consent of the Purchasing Entity and Contractor, may be included in the ordering document (e.g. purchase order or contract) used by the Purchasing Entity to place the Order.

b. Use of specific NASPO ValuePoint cooperative Master Agreements by state agencies, political subdivisions and other Participating Entities (including cooperatives) authorized by individual state's statutes to use state contracts are subject to the approval of the respective State Chief Procurement Official. Issues of interpretation and eligibility for participation are solely within the authority of the respective State Chief Procurement Official.

c. Obligations under this Master Agreement are limited to those Participating Entities who have signed a Participating Addendum and Purchasing Entities within the scope of those Participating Addenda. Financial obligations of Participating States are limited to the orders placed by the departments or other state agencies and institutions having available funds. Participating States incur no financial obligations on behalf of other Purchasing Entities. Contractor shall email a fully executed PDF copy of each Participating Addendum to PA@naspovaluepoint.org to support documentation of participation and posting in appropriate data bases.

d. NASPO Cooperative Purchasing Organization LLC, doing business as NASPO ValuePoint, is not a party to the Master Agreement. It is a nonprofit cooperative purchasing organization assisting states in administering the NASPO cooperative purchasing program for state government departments, institutions, agencies and political subdivisions (e.g., colleges, school districts, counties, cities, etc.) for all 50 states, the District of Columbia and the territories of the United States.

e. State Participating Addenda or other Participating Addenda shall not be construed to amend the terms of this Master Agreement between the Lead State and Contractor that prescribe NASPO ValuePoint Program requirements: Term of the Master Agreement; Amendments; Participants and Scope; Administrative Fee; NASPO ValuePoint Summary and Detailed Usage Reports; NASPO ValuePoint Cooperative Program Marketing and Performance Review; NASPO ValuePoint eMarketCenter; Right to Publish; Price and Rate Guarantee Period; and Individual Customers. Any such language shall be void and of no effect.

f. Participating Entities who are not states may under some circumstances sign their own Participating Addendum, subject to the approval of participation by the Chief Procurement Official of the state where the Participating Entity is located. Coordinate requests for such participation through NASPO ValuePoint. Any permission to participate through execution of a Participating Addendum is not a determination that

procurement authority exists in the Participating Entity; they must ensure that they have the requisite procurement authority to execute a Participating Addendum.

g. Resale. "Resale" means any payment in exchange for transfer of tangible goods, software, or assignment of the right to services. Subject to any specific conditions included in the solicitation or Contractor's proposal as accepted by the Lead State, or as explicitly permitted in a Participating Addendum, Purchasing Entities may not resell Products (the definition of which includes services that are deliverables). Absent any such condition or explicit permission, this limitation does not prohibit: payments by employees of a Purchasing Entity for Products; sales of Products to the general public as surplus property; and fees associated with inventory transactions with other governmental or nonprofit entities and consistent with a Purchasing Entity's laws and regulations. Any sale or transfer permitted by this subsection must be consistent with license rights granted for use of intellectual property.

6. Administrative Fees

a. The Contractor shall pay to NASPO ValuePoint, or its assignee, a NASPO ValuePoint Administrative Fee of one-quarter of one percent (0.25% or 0.0025) no later than sixty (60) days following the end of each calendar quarter. The NASPO ValuePoint Administrative Fee shall be submitted quarterly and is based on all sales of products and services under the Master Agreement (less any charges for taxes or shipping). The NASPO ValuePoint Administrative Fee is not negotiable. This fee is to be included as part of the pricing submitted with proposal.

b. Additionally, some states may require an additional fee be paid directly to the state only on purchases made by Purchasing Entities within that state. For all such requests, the fee level, payment method and schedule for such reports and payments will be incorporated into the Participating Addendum that is made a part of the Master Agreement. The Contractor may adjust the Master Agreement pricing accordingly for purchases made by Purchasing Entities within the jurisdiction of the state. All such agreements shall not affect the NASPO ValuePoint Administrative Fee percentage or the prices paid by the Purchasing Entities outside the jurisdiction of the state requesting the additional fee. The NASPO ValuePoint Administrative Fee in subsection 7.26 a. shall be based on the gross amount of all sales (less any charges for taxes or shipping) at the adjusted prices (if any) in Participating Addenda.

7. NASPO ValuePoint Summary and Detailed Usage Reports

In addition to other reports that may be required by this solicitation, the Contractor shall provide the following NASPO ValuePoint reports.

a. Summary Sales Data. The Contractor shall submit quarterly sales reports directly to NASPO ValuePoint using the NASPO ValuePoint Quarterly Sales/Administrative Fee Reporting Tool found at http://www.naspo.org/WNCPO/Calculator.aspx. Any/all sales made under this Master Agreement shall be reported as cumulative totals by state. Even if Contractor experiences zero sales during a calendar quarter, a report is still required. Reports shall be due no later than thirty (30) days following the end of the calendar quarter (as specified in the reporting tool).

b. Detailed Sales Data. Contractor shall also report detailed sales data by: (1) state; (2) entity/customer type, e.g. local government, higher education, K12, non-profit; (3) Purchasing Entity name; (4) Purchasing Entity

bill-to and ship-to locations; (4) Purchasing Entity and Contractor Purchase Order identifier/number(s); (5) Purchase Order Type (e.g. sales order, credit, return, upgrade, determined by industry practices); (6) Purchase Order date; (7) Ship Date; (8) and line item description, including product number if used. The report shall be submitted in any form required by the solicitation. Reports are due on a quarterly basis and must be received by the Lead State and NASPO ValuePoint Cooperative Development Team no later than thirty (30) days after the end of the reporting period. Reports shall be delivered to the Lead State and to the NASPO ValuePoint Cooperative Development Team electronically through a designated portal, email, CD-ROM, flash drive or other method as determined by the Lead State and NASPO ValuePoint. Detailed sales data reports shall include sales information for all sales under Participating Addenda executed under this Master Agreement. The format for the detailed sales data report is in shown in Attachment I – Usage Reporting Template

c. Reportable sales for the summary sales data report and detailed sales data report includes sales to employees for personal use where authorized by the solicitation and the Participating Addendum. Report data for employees should be limited to ONLY the state and entity they are participating under the authority of (state and agency, city, county, school district, etc.) and the amount of sales. No personal identification numbers, e.g. names, addresses, social security numbers or any other numerical identifier, may be submitted with any report.

d. Contractor shall provide the NASPO ValuePoint Cooperative Development Coordinator with an executive summary each quarter that includes, at a minimum, a list of states with an active Participating Addendum, states that Contractor is in negotiations with and any Participating Addendum roll out or implementation activities and issues. NASPO ValuePoint Cooperative Development Coordinator and Contractor will determine the format and content of the executive summary. The executive summary is due thirty (30) days after the conclusion of each calendar quarter.

e. Timely submission of these reports is a material requirement of the Master Agreement. The recipient of the reports shall have exclusive ownership of the media containing the reports. The Lead State and NASPO ValuePoint shall have a perpetual, irrevocable, non-exclusive, royalty free, transferable right to display, modify, copy, and otherwise use reports, data and information provided under this section.

8. NASPO ValuePoint Cooperative Program Marketing and Performance Review

a. Contractor agrees to work cooperatively with NASPO ValuePoint personnel. Contractor agrees to present plans to NASPO ValuePoint for the education of Contractor's contract administrator(s) and sales/marketing workforce regarding the Master Agreement contract, including the competitive nature of NASPO ValuePoint procurements, the Master agreement and participating addendum process, and the manner in which qualifying entities can participate in the Master Agreement.

b. Contractor agrees to participate in an annual contract performance review at a location selected by the Lead State and NASPO ValuePoint, which may include a discussion of marketing action plans, target strategies, marketing materials, as well as Contractor reporting and timeliness of payment of administration fees.

9. NASPO ValuePoint eMarket Center

a. In July 2011, NASPO ValuePoint entered into a multi-year agreement with SciQuest, Inc. whereby SciQuest will provide certain electronic catalog hosting and management services to enable eligible NASPO ValuePoint's customers to access a central online website to view and/or shop the goods and services available from existing NASPO ValuePoint Cooperative Contracts. The central online website is referred to as the NASPO ValuePoint eMarket Center.

b. The Contractor will have visibility in the eMarket Center through Ordering Instructions. These Ordering Instructions are available at no cost to the Contractor and provide customers information regarding the Contractors website and ordering information. The Contractor is required at a minimum to participate in the eMarket Center through Ordering Instructions.

c. At a minimum, the Contractor agrees to the following timeline: NASPO ValuePoint eMarket Center Site Admin shall provide a written request to the Contractor to begin Ordering Instruction process. The Contractor shall have thirty (30) days from receipt of written request to work with NASPO ValuePoint to provide any unique information and ordering instructions that the Contractor would like the customer to have.

d. If the solicitation requires either a catalog hosted on or integration of a punchout site with eMarket Center or either solution is proposed by a Contractor and accepted by the Lead State, the provisions of the eMarket Center Appendix to these NASPO ValuePoint Master Agreement Terms and Conditions apply.

10. Right to Publish

Throughout the duration of this Master Agreement, Contractor must secure from the Lead State prior approval for the release of any information that pertains to the potential work or activities covered by the Master Agreement. The Contractor shall not make any representations of NASPO Value Point's opinion or position as to the quality or effectiveness of the services that are the subject of this Master Agreement without prior written consent. Failure to adhere to this requirement may result in termination of the Master Agreement for cause.

11. Price and Rate Guarantee Period

All prices and rates must be guaranteed for the initial term of the Master Agreement. Following the initial Master Agreement period, any request for price or rate adjustment must be for an equal guarantee period, and must be made at least 30 days prior to the effective date. Requests for price or rate adjustment must include sufficient documentation supporting the request. Any adjustment or amendment to the Master Agreement shall not be effective unless approved by the Lead State. No retroactive adjustments to prices or rates will be allowed.

12. Individual Customers

Except to the extent modified by a Participating Addendum, each Purchasing Entity shall follow the terms and conditions of the Master Agreement which include the Oklahoma Terms and Conditions and NASPO ValuePoint Master Agreement Terms and Conditions, and applicable Participating Addendum and will have

the same rights and responsibilities for their purchases as the Lead State has in the Master Agreement, including but not limited to, any indemnity or right to recover any costs as such right is defined in the Master Agreement and applicable Participating Addendum for their purchases. Each Purchasing Entity will be responsible for its own charges, fees, and liabilities. The Contractor will apply the charges and invoice each Purchasing Entity individually.

Administration of Orders

13. Ordering (Negotiated)

a. Master Agreement order and purchase order numbers shall be clearly shown on all acknowledgments, shipping labels, packing slips, invoices, and on all correspondence.

b. The resulting Master Agreements permit Purchasing Entities to define project-specific requirements and informally compete the requirement among companies having a Master Agreement on an "as needed" basis. This procedure may also be used when requirements are aggregated or other firm commitments may be made to achieve reductions in pricing. This procedure may be modified in Participating Addenda and adapted to the Purchasing Entity's rules and policies. The Purchasing Entity may in its sole discretion determine which Master Agreement Contractors should be solicited for a quote. The Purchasing Entity may select the quote that it considers most advantageous, cost and other factors considered.

c. Each Purchasing Entity will identify and utilize its own appropriate purchasing procedure and documentation. Contractor is expected to become familiar with the Purchasing Entities' rules, policies, and procedures regarding the ordering of supplies and/or services contemplated by this Master Agreement.

d. Contractor shall not begin work without a valid Purchase Order or other appropriate commitment document in compliance with the law of the Purchasing Entity.

e. Orders may be placed consistent with the terms of this Master Agreement during the term of the Master Agreement.

f. All Orders pursuant to this Master Agreement, at a minimum, shall include:

(1) The services or supplies being delivered;

(2) The place and requested time of delivery;

(3) A billing address;

(4) The name, phone number, and address of the Purchasing Entity representative;

(5) The price per hour or other pricing elements consistent with this Master Agreement and the contractor's proposal; and

(6) The Master Agreement identifier.

g. All communications concerning administration of Orders placed shall be furnished solely to the authorized purchasing agent within the Purchasing Entity's purchasing office, or to such other individual identified in writing in the Order.

h. Orders must be placed pursuant to this Master Agreement prior to the termination date thereof, but may have a delivery date or performance period up to 120 days past the then-current termination date of this Master Agreement. Contractor is reminded that financial obligations of Purchasing Entities payable after the current applicable fiscal year are contingent upon agency funds for that purpose being appropriated, budgeted, and otherwise made available.

i. Notwithstanding the expiration or termination of this Master Agreement, Contractor agrees to perform in accordance with the terms of any Orders then outstanding at the time of such expiration or termination. Contractor shall not honor any Orders placed after the expiration or termination of this Master Agreement, or otherwise inconsistent with its terms. Orders from any separate indefinite quantity, task orders, or other form of indefinite delivery order arrangement priced against this Master Agreement may not be placed after the expiration or termination of this Master Agreement, notwithstanding the term of any such indefinite delivery order agreement.

14. Shipping and Delivery (Negotiated)

a. The prices are the delivered price to any Purchasing Entity. All deliveries shall be F.O.B. destination, freight pre-paid, with all standard ground transportation and handling charges paid by the Contractor. Responsibility and liability for loss or damage shall remain the Contractor's until final inspection and acceptance when responsibility shall pass to the Buyer except as to latent defects, fraud and Contractor's warranty obligations. The minimum shipment amount, if any, will be found in the special terms and conditions. Any order for less than the specified amount is to be shipped with the freight prepaid and added as a separate item on the invoice. Any portion of an order to be shipped without transportation charges that is back ordered shall be shipped without charge.

b. All deliveries will be "Inside Deliveries" as designated by a representative of the Purchasing Entity placing the Order. Inside Delivery refers to a delivery to other than a loading dock, front lobby, or reception area. Specific delivery instructions will be noted on the order form or Purchase Order. Any damage to the building interior, scratched .walls, damage to the freight elevator, etc., will be the responsibility of the Offeror. If damage does occur, it is the responsibility of the Offeror to immediately notify the Purchasing Entity placing the Order.

c. All products must be delivered in the manufacturer's standard package. Costs shall include all packing and/or crating charges. Cases shall be of durable construction, good condition, properly labeled and suitable in every respect for storage and handling of contents. Each shipping carton shall be marked with the item description, brand and manufacturer product number, quantity, and the Ordering Entity's Purchase Order number.

15. Laws and Regulations

Any and all Products offered and furnished shall comply fully with all applicable Federal and State laws and regulations.

16. Inspection and Acceptance (Negotiated)

a. Where the Master Agreement or an Order does not otherwise specify a process for inspection and Acceptance, this section governs. This section is not intended to limit rights and remedies under the applicable commercial code.

b. All Products are subject to inspection at reasonable times and places before Acceptance, which shall not be later than thirty (30) days after the date of delivery of the products to the Participating or Purchasing Entity. Contractor shall provide right of access to the Lead State, or to any other authorized agent or official of the Lead State or other Participating or Purchasing Entity, at reasonable times, in order to monitor and evaluate performance, compliance, and/or quality assurance requirements under this Master Agreement. Products that do not meet specifications may be rejected. Failure to reject upon receipt, however, does not relieve the contractor of liability for material (nonconformity that substantial impairs value) latent or hidden defects subsequently revealed when goods are put to use. Acceptance of such goods may be revoked in accordance with the provisions of the applicable commercial code, and the Contractor is liable for any resulting expense incurred by the Purchasing Entity related to the preparation and shipping of Product rejected and returned, or for which Acceptance is revoked.

c. If any services do not conform to contract requirements, the Purchasing Entity may require the Contractor to perform the services again in conformity with contract requirements, at no increase in Order amount. When defects cannot be corrected by re-performance, the Purchasing Entity may require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and reduce the contract price to reflect the reduced value of services performed.

d. The warranty period shall begin upon Acceptance.

e. Acceptance Testing may be explicitly set out in a Master Agreement to ensure conformance to an explicit standard of performance. Acceptance Testing means the process set forth in the Master Agreement for e. Acceptance Testing may be explicitly set out in a Master Agreement to ensure conformance to an explicit standard of performance. Acceptance Testing means the process set forth in the Master Agreement for ascertaining that the Product meets the standard of performance prior to Acceptance by the Purchasing Entity. If Acceptance Testing is prescribed, this subsection applies to applicable Products purchased under this Master Agreement, including any additional, replacement, or substitute Product(s) and any Product(s) which are modified by or with the written approval of Contractor after Acceptance by the Purchasing Entity. The Acceptance Testing period shall be thirty (30) calendar days or other time period identified in this Master Agreement or the Participating Addendum, starting from the day after the Product is delivered or, if installed, the day after the Product is installed and Contractor certifies that the Product is ready for Acceptance Testing. If the Product does not meet the standard of performance during the initial period of Acceptance Testing, Purchasing Entity may, at its discretion, continue Acceptance Testing on a day-to-day basis until the standard of performance is met. Upon rejection, the Contractor will have fifteen (15) calendar days to cure the standard of performance issue(s). If after the cure period, the Product still has not met the standard of performance, the Purchasing Entity may, at its option: (a) declare Contractor to be in breach and terminate the Order; (b) demand replacement Product from Contractor at no additional cost to Purchasing Entity; or, (c) continue the cure period for an additional time period agreed upon by the Purchasing Entity and the Contractor. Contractor shall pay all costs related to the preparation and shipping of Product returned

pursuant to the section. No Product shall be deemed Accepted and no charges shall be paid until the standard of performance is met. The warranty period shall begin upon Acceptance.

17. Payment

Payment after Acceptance is normally made within 30 days following the date the entire order is delivered or the date a correct invoice is received, whichever is later. After 45 days the Contractor may assess overdue account charges up to a maximum rate of one percent per month on the outstanding balance, unless a different late payment amount is specified in a Participating Addendum, Order, or otherwise prescribed by applicable law. Payments will be remitted by mail. Payments may be made via a State or political subdivision "Purchasing Card" with no additional charge.

18. Warranty (Negotiated)

Products purchased pursuant to this Master Agreement are subject to the terms and conditions set forth in Exhibit A, Contractor's Terms and Conditions of this Master Agreement.

19. Title of Product (Negotiated)

Upon Acceptance by the Purchasing Entity, Contractor shall convey to Purchasing Entity title to the Product free and clear of all liens, encumbrances, or other security interests. Transfer of title to the Product shall include an irrevocable and perpetual license to use any Embedded Software in the Product. If Purchasing Entity subsequently transfers title of the Product to another entity, Purchasing Entity shall have the right to transfer the license to use the Embedded Software with the transfer of Product title. A subsequent transfer of this software license shall be at no additional cost or charge to either Purchasing Entity or Purchasing Entity's transferee. The Embedded Software may not be reverse engineered, decompiled, altered, or transferred. Purchasing Entity agrees that it will not attempt to defeat any copy protection mechanism.

20. License of Pre-Existing Intellectual Property

a. Contractor grants to the Purchasing Entity a nonexclusive, perpetual, royalty-free, irrevocable, and non-transferable license to use, publish, translate and reproduce any tangible media associated with the sale of the Product, and its derivatives, used or delivered under this Master Agreement, but not created under it ("Pre-existing Intellectual Property"). The Contractor shall be responsible for ensuring that this license is consistent with any third party rights in the Pre-existing Intellectual Property.

General Provisions

21. Insurance

a. Unless otherwise agreed in a Participating Addendum, Contractor shall, during the term of this Master Agreement, maintain in full force and effect, the insurance described in this section. Contractor shall acquire such insurance from an insurance carrier or carriers licensed to conduct business in each Participating Entity's state and having a rating of A-, Class VII or better, in the most recently published edition of A.M.

Best's Insurance Reports. Failure to buy and maintain the required insurance may result in this Master Agreement's termination or, at a Participating Entity's option, result in termination of its Participating Addendum.

b. Coverage shall be written on an occurrence basis. The minimum acceptable limits shall be as indicated below:

(1) Commercial General Liability covering premises operations, independent contractors, products and completed operations, blanket contractual liability, personal injury (including death), advertising liability, and property damage, with a limit of not less than $1 million per occurrence/$2 million general aggregate;

(2) Contractor must comply with any applicable State Workers Compensation or Employers Liability Insurance requirements.

c. Contractor shall pay premiums on all insurance policies. Contractor shall provide notice to a Participating Entity who is a state within five (5) business days after

Contractor is first aware of expiration, cancellation or nonrenewal of such policy or is first aware that cancellation is threatened or expiration, nonrenewal or expiration otherwise may occur.

d. Prior to commencement of performance, Contractor shall provide to the Lead State a written endorsement to the Contractor's general liability insurance policy or other documentary evidence acceptable to the Lead State that (1) names the Participating

States identified in the Request for Proposal as additional insureds, (2) provides that written notice of cancellation shall be delivered in accordance with the policy provisions, and (3) provides that the Contractor's liability insurance policy shall be primary, with any liability insurance of any Participating State as secondary and noncontributory. Unless otherwise agreed in any Participating Addendum, other state Participating Entities' rights and Contractor's obligations are the same as those specified in the first sentence of this subsection except the endorsement is provided to the applicable state.

e. Contractor shall furnish to the Lead State copies of certificates of all required insurance in a form sufficient to show required coverage within thirty (30) calendar days of the execution of this Master Agreement and prior to performing any work. Copies of renewal certificates of all required insurance shall be furnished within thirty (30) days after any renewal date to the applicable state Participating Entity. Failure to provide evidence of coverage may, at the sole option of the Lead State, or any Participating Entity, result in this Master Agreement's termination or the termination of any Participating Addendum.

f. Coverage and limits shall not limit Contractor's liability and obligations under this Master Agreement, any Participating Addendum, or any Purchase Order.

22. Records Administration and Audit.

a. The Contractor shall maintain books, records, documents, and other evidence pertaining to this Master Agreement and Orders placed by Purchasing Entities under it to the extent and in such detail as shall adequately reflect performance and administration of payments and fees. Contractor shall permit the Lead State, a Participating Entity, a Purchasing Entity, the federal government (including its grant awarding entities and the U.S. Comptroller General), and any other duly authorized agent of a governmental agency, to audit, inspect, examine, copy and/or transcribe Contractor's books, documents, papers and records directly pertinent to this Master Agreement or orders placed by a Purchasing Entity under it for the purpose of making audits, examinations, excerpts, and transcriptions. This right shall survive for a period of seven (7) years following termination of this Agreement or final payment for any order placed by a Purchasing Entity

against this Agreement, whichever is later, or such longer period as is required by the Purchasing Entity's state statutes, to assure compliance with the terms hereof or to evaluate performance hereunder.
b. Without limiting any other remedy available to any governmental entity, the Contractor shall reimburse the applicable Lead State, Participating Entity, or Purchasing Entity for any overpayments inconsistent with the terms of the Master Agreement or Orders or underpayment of fees found as a result of the examination of the Contractor's records.
c. The rights and obligations herein exist in addition to any quality assurance obligation in the Master Agreement requiring the Contractor to self-audit contract obligations and that permits the Lead State to review compliance with those obligations.

23. Confidentiality, Non-Disclosure, and Injunctive Relief

a. Confidentiality. Contractor acknowledges that it and its employees or agents may, in the course of providing a Product under this Master Agreement, be exposed to or acquire information that is confidential to Purchasing Entity or Purchasing Entity's clients. Any and all information of any form that is marked as confidential or would by its nature be deemed confidential obtained by Contractor or its employees or agents in the performance of this Master Agreement, including, but not necessarily limited to (1) any Purchasing Entity's records, (2) personnel records, and (3) information concerning individuals, is confidential information of Purchasing Entity ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Contractor shall be treated in the same manner as the Confidential Information. Confidential Information does not include information that (1) is or becomes (other than by disclosure by Contractor) publicly known; (2) is furnished by Purchasing Entity to others without restrictions similar to those imposed by this Master Agreement; (3) is rightfully in Contractor's possession without the obligation of nondisclosure prior to the time of its disclosure under this Master Agreement; (4) is obtained from a source other than Purchasing Entity without the obligation of confidentiality, (5) is disclosed with the written consent of Purchasing Entity or; (6) is independently developed by employees, agents or subcontractors of Contractor who can be shown to have had no access to the Confidential Information.
b. Non-Disclosure. Contractor shall hold Confidential Information in confidence, using at least the industry standard of confidentiality, and shall not copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than what is necessary to the performance of Orders placed under this Master Agreement. Contractor shall advise each of its employees and agents of their obligations to keep Confidential Information confidential. Contractor shall use commercially reasonable efforts to assist Purchasing Entity in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the generality of the foregoing, Contractor shall advise Purchasing Entity, applicable Participating Entity, and the Lead State immediately if Contractor learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Master Agreement, and Contractor shall at its expense cooperate with Purchasing Entity in seeking injunctive or other equitable relief in the name of Purchasing Entity or Contractor against any such person. Except as directed by Purchasing Entity, Contractor will not at any time during or after the term of this Master Agreement disclose, directly or indirectly, any Confidential Information to any person, except in accordance with this Master Agreement, and that upon termination of this Master Agreement or at Purchasing Entity's request, Contractor

shall turn over to Purchasing Entity all documents, papers, and other matter in Contractor's possession that embody Confidential Information. Notwithstanding the foregoing, Contractor may keep one copy of such Confidential Information necessary for quality assurance, audits and evidence of the performance of this Master Agreement.

c. Injunctive Relief. Contractor acknowledges that breach of this section, including disclosure of any Confidential Information, will cause irreparable injury to Purchasing Entity that is inadequately compensable in damages. Accordingly, Purchasing Entity may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Contractor acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interests of Purchasing Entity and are reasonable in scope and content.

d. Purchasing Entity Law. These provisions shall be applicable only to extent they are not in conflict with the applicable public disclosure laws of any Purchasing Entity.

24. Public Information

This Master Agreement and all related documents are subject to disclosure pursuant to the Purchasing Entity's public information laws.

25. Assignment/Subcontracts

a. Contractor shall not assign, sell, transfer, subcontract or sublet rights, or delegate responsibilities under this Master Agreement, in whole or in part, without the prior written approval of the Lead State.

b. The Lead State reserves the right to assign any rights or duties, including written assignment of contract administration duties to NASPO Cooperative Purchasing Organization LLC, doing business as NASPO ValuePoint.

26. Changes in Contractor Representation

The Contractor must notify the Lead State of changes in the Contractor's key administrative personnel managing the Master Agreement in writing within 10 calendar days of the change. The Lead State reserves the right to approve changes in key personnel, as identified in the Contractor's Proposal. The Contractor agrees to propose replacement key personnel having substantially equal or better education, training, and experience as was possessed by the key person proposed and evaluated in the
Contractor's Proposal.

27. Independent Contractor

The Contractor shall be an independent contractor. Contractor shall have no authorization, express or implied, to bind the Lead State, Participating States, other Participating Entities, or Purchasing Entities to any agreements, settlements, liability or understanding whatsoever, and agrees not to hold itself out as agent except as expressly set forth herein or as expressly agreed in any Participating Addendum.

28. Cancellation

Unless otherwise stated, this Master Agreement may be canceled by either party upon 60 days written notice prior to the effective date of the cancellation. Further, any Participating Entity may cancel its participation upon 30 days written notice, unless otherwise limited or stated in the Participating Addendum. Cancellation may be in whole or in part. Any cancellation under this provision shall not affect the rights and obligations attending orders outstanding at the time of cancellation, including any right of a Purchasing Entity to indemnification by the Contractor, rights of payment for Products delivered and accepted, rights attending any warranty or default in performance in association with any Order, and requirements for records administration and audit. Cancellation of the Master Agreement due to Contractor default may be immediate.

29. Force Majeure

Neither party to this Master Agreement shall be held responsible for delay or default caused by unusually severe weather, fire or other casualty, act of God, strike or labor dispute, war or other violence, or any law, order or requirement of any governmental agency or authority which are beyond that party's reasonable control. The Lead State may terminate this Master Agreement after determining such delay or default will reasonably prevent successful performance of the Master Agreement.

30. Defaults and Remedies

a. The occurrence of any of the following events shall be an event of default under this Master Agreement:
(1) Nonperformance of contractual requirements; or
(2) A material breach of any term or condition of this Master Agreement; or
(3) Any certification, representation or warranty by Contractor in response to the solicitation or in this Master Agreement that proves to be untrue or materially misleading; or
(4) Institution of proceedings under any bankruptcy, insolvency, reorganization or similar law, by or against Contractor, or the appointment of a receiver or similar officer for Contractor or any of its property, which is not vacated or fully stayed within thirty (30) calendar days after the institution or occurrence thereof; or
(5) Any default specified in another section of this Master Agreement.
b. Upon the occurrence of an event of default, the Lead State shall issue a written notice of default, identifying the nature of the default, and providing a period of 15 calendar days in which Contractor shall have an opportunity to cure the default. The
Lead State shall not be required to provide advance written notice or a cure period and may immediately terminate this Master Agreement in whole or in part if the Lead State, in its sole discretion, determines that it is reasonably necessary to preserve public safety or prevent immediate public crisis. Time allowed for cure shall not diminish or eliminate Contractor's liability for damages, including liquidated damages to the extent provided for under this Master Agreement.
c. If Contractor is afforded an opportunity to cure and fails to cure the default within the period specified in the written notice of default, Contractor shall be in breach of its obligations under this Master Agreement and the Lead State shall have the right to exercise any or all of the following remedies:
(1) Exercise any remedy provided by law; and

(2) Terminate this Master Agreement and any related Contracts or portions thereof; and
(3) Impose liquidated damages as provided in this Master Agreement; and
(4) Suspend Contractor from being able to respond to future bid solicitations; and
(5) Suspend Contractor's performance; and
(6) Withhold payment until the default is remedied.
d. Unless otherwise specified in the Participating Addendum, in the event of a default under a Participating Addendum, a Participating Entity shall provide a written notice of default as described in this section and shall have all of the rights and remedies under this paragraph regarding its participation in the Master Agreement, in addition to those set forth in its Participating Addendum. Unless otherwise specified in a Purchase
Order, a Purchasing Entity shall provide written notice of default as described in this section and have all of the rights and remedies under this paragraph and any applicable
Participating Addendum with respect to an Order placed by the Purchasing Entity.
Nothing in these Master Agreement Terms and Conditions shall be construed to limit the rights and remedies available to a Purchasing Entity under the applicable commercial code.

31. Waiver of Breach

Failure of the Lead State, Participating Entity, or Purchasing Entity to declare a default or enforce any rights and remedies shall not operate as a waiver under this Master Agreement or Participating Addendum. Any waiver by the Lead State, Participating Entity, or Purchasing Entity must be in writing. Waiver by the Lead State or Participating Entity of any default, right or remedy under this Master Agreement or Participating Addendum, or by Purchasing Entity with respect to any Purchase Order, or breach of any terms or requirements of this Master Agreement, a Participating Addendum, or Purchase Order shall not be construed or operate as a waiver of any subsequent default or breach of such term or requirement, or of any other term or requirement under this Master Agreement, Participating Addendum, or Purchase Order.

32. Debarment

The Contractor certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction (contract) by any governmental department or agency. This certification represents a recurring certification made at the time any Order is placed under this Master Agreement. If the Contractor cannot certify this statement, attach a written explanation for review by the Lead State.

33. Indemnification

a. The Contractor shall defend, indemnify and hold harmless NASPO, NASPO Cooperative Purchasing Organization LLC (doing business as NASPO ValuePoint), the Lead State, Participating Entities, and Purchasing Entities, along with their officers, agents, and employees as well as any person or entity for which they may be liable, from and against third-party claims, damages or causes of action including reasonable attorneys' fees and related costs for any death, injury, or damage to tangible property arising from

act(s), error(s), or omission(s) of the Contractor, its employees or subcontractors or volunteers, at any tier, relating to the performance under the Master Agreement.

b. Indemnification – Intellectual Property. The Contractor shall defend, indemnify and hold harmless NASPO, NASPO Cooperative Purchasing Organization LLC (doing business as NASPO ValuePoint), the Lead State, Participating Entities, Purchasing Entities, along with their officers, agents, and employees as well as any person or entity for which they may be liable ("Indemnified Party"), from and against claims, damages or causes of action including reasonable attorneys' fees and related costs arising out of the claim that the Product or its use, infringes Intellectual Property rights ("Intellectual Property Claim") of another person or entity.

(1) The Contractor's obligations under this section shall not extend to any combination of the Product with any other product, system or method, unless the Product, system or method is:

(a) Provided by the Contractor or the Contractor's subsidiaries or affiliates;

(b) Specified by the Contractor to work with the Product; or

(c) Reasonably required, in order to use the Product in its intended manner, and the infringement could not have been avoided by substituting another reasonably available product, system or method capable of performing the same function; or

(d) It would be reasonably expected to use the Product in combination with such product, system or method.

(2) The Indemnified Party shall notify the Contractor within a reasonable time after receiving notice of an Intellectual Property Claim. Even if the Indemnified Party fails to provide reasonable notice, the Contractor shall not be relieved from its obligations unless the Contractor can demonstrate that it was prejudiced in defending the Intellectual Property Claim resulting in increased expenses or loss to the Contractor.

If the Contractor promptly and reasonably investigates and defends any Intellectual Property Claim, it shall have control over the defense and settlement of it. However, the Indemnified Party must consent in writing for any money damages or obligations for which it may be responsible. The Indemnified Party shall furnish, at the Contractor's reasonable request and expense, information and assistance necessary for such defense. If the Contractor fails to vigorously pursue the defense or settlement of the Intellectual Property Claim, the Indemnified Party may assume the defense or settlement of it and the Contractor shall be liable for all costs and expenses, including reasonable attorneys' fees and related costs, incurred by the Indemnified Party in the pursuit of the Intellectual Property Claim. Unless otherwise agreed in writing, this section is not subject to any limitations of liability in this Master Agreement or in any other document executed in conjunction with this Master Agreement.

34. No Waiver of Sovereign Immunity

In no event shall this Master Agreement, any Participating Addendum or any contract or any Purchase Order issued thereunder, or any act of the Lead State, a Participating Entity, or a Purchasing Entity be a waiver of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. This section applies to a claim brought against the Participating Entities who are states only to the extent Congress has appropriately abrogated the state's sovereign immunity and is not consent by the state to be sued in federal court. This section is also not a waiver by the state of any form of immunity, including but not limited to sovereign immunity and immunity based on the Eleventh Amendment to the Constitution of the United States.

35. Governing Law and Venue

a. The procurement, evaluation, and award of the Master Agreement shall be governed by and construed in accordance with the laws of the Lead State sponsoring and administering the procurement. The construction and effect of the Master Agreement after award shall be governed by the law of the state serving as Lead State. The construction and effect of any Participating Addendum or Order against the Master Agreement shall be governed by and construed in accordance with the laws of the Participating Entity's or Purchasing Entity's State.

b. Unless otherwise specified in the RFP, the venue for any protest, claim, dispute or action relating to the procurement, evaluation, and award is in the Lead State. Venue for any claim, dispute or action concerning the terms of the Master Agreement shall be in the state serving as Lead State. Venue for any claim, dispute, or action concerning any Order placed against the Master Agreement or the effect of a Participating Addendum shall be in the Purchasing Entity's State.

c. If a claim is brought in a federal forum, then it must be brought and adjudicated solely and exclusively within the United States District Court for (in decreasing order of priority): the Lead State for claims relating to the procurement, evaluation, award, or contract performance or administration if the Lead State is a party; a Participating State if a named party; the state where the Participating Entity or Purchasing Entity is located if either is a named party.

36. Assignment of Antitrust Rights

Contractor irrevocably assigns to a Participating Entity who is a state any claim for relief or cause of action which the Contractor now has or which may accrue to the Contractor in the future by reason of any violation of state or federal antitrust laws (15 U.S.C. § 1-15 or a Participating Entity's state antitrust provisions), as now in effect and as may be amended from time to time, in connection with any goods or services provided in that state for the purpose of carrying out the Contractor's obligations under this Master Agreement or Participating Addendum, including, at the Participating Entity's option, the right to control any such litigation on such claim for relief or cause of action.

37. Contract Provisions for Orders Utilizing Federal Funds.

Pursuant to Appendix II to 2 Code of Federal Regulations (CFR) Part 200, Contract Provisions for Non-Federal Entity Contracts Under Federal Awards, Orders funded with federal funds may have additional contractual requirements or certifications that must be satisfied at the time the Order is placed or upon delivery. These federal requirements may be proposed by Participating Entities in Participating Addenda and Purchasing Entities for incorporation in Orders placed under this Master Agreement.

38. Leasing or Alternative Financing Methods.

The procurement and other applicable laws of some Purchasing Entities may permit the use of leasing or alternative financing methods for the acquisition of Products under this Master Agreement. Where the terms and conditions are not otherwise prescribed in an applicable Participating Addendum, the terms and

conditions for leasing or alternative financing methods are subject to negotiation between the Contractor and Purchasing Entity.

eMarket Center Appendix

a. This Appendix applies whenever a catalog hosted by or integration of a punchout site with eMarket Center is required by the solicitation or either solution is proposed by a Contractor and accepted by the Lead State.

b. Supplier's Interface with the eMarket Center. There is no cost charged by SciQuest to the Contractor for loading a hosted catalog or integrating a punchout site.

c. At a minimum, the Contractor agrees to the following:
(1) Implementation Timeline: NASPO ValuePoint eMarket Center Site Admin shall provide a written request to the Contractor to begin enablement process. The Contractor shall have fifteen (15) days from receipt of written request to work with NASPO ValuePoint and SciQuest to set up an enablement schedule, at which time SciQuest's technical documentation shall be provided to the Contractor. The schedule will include future calls and milestone dates related to test and go live dates. The contractor shall have a total of Ninety (90) days to deliver either a (1) hosted catalog or (2) punch-out catalog, from date of receipt of written request.

(2) NASPO ValuePoint and SciQuest will work with the Contractor, to decide which of the catalog structures (either hosted or punch-out as further described below) shall be provided by the Contractor. **Whether hosted or punch-out, the catalog must be strictly limited to the Contractor's awarded contract offering (e.g. products and/or services not authorized through the resulting cooperative contract should not be viewable by NASPO ValuePoint Participating Entity users).**
(a) Hosted Catalog. By providing a hosted catalog, the Contractor is providing a list of its awarded products/services and pricing in an electronic data file in a format acceptable to SciQuest, such as Tab Delimited Text files. In this scenario, the Contractor must submit updated electronic data once per quarter to the eMarket Center for the Lead State's approval to maintain the most up-to-date version of its product/service offering under the cooperative contract in the eMarket Center.
(b) Punch-Out Catalog. By providing a punch-out catalog, the Contractor is providing its own online catalog, which must be capable of being integrated with the eMarket Center as a. Standard punch-in via Commerce eXtensible Markup Language (cXML). In this scenario, the Contractor shall validate that its online catalog is up-to-date by providing a written update [every Insert Time Frame Here] to the Lead State stating they have audited the offered products/services and pricing listed on its online catalog. The site must also return detailed UNSPSC codes (as outlined in line 3) for each line item.
Contractor also agrees to provide e-Quote functionality to facilitate volume discounts.
d. Revising Pricing and Product Offerings: Any revisions to product/service offerings (new products, altered SKUs, new pricing, etc.) must be pre-approved by the Lead
State and shall be subject to any other applicable restrictions with respect to the frequency or amount of such revisions. However, no cooperative contract enabled in Page 21 of 22 NASPO ValuePoint Master Agreement Ts and Cs, (November 2015) the eMarket Center may include price changes on a more frequent basis than once per quarter. The following conditions apply with respect to hosted catalogs:
(1). Updated pricing files are required by the 1st of the month and shall go into effect in the eMarket Center on the 1st day of the following month (i.e. file received on 1/01/13 would be effective in the eMarket Center

on 2/01/13). Files received after the 1st of the month may be delayed up to a month (i.e. file received on 11/06/09 would be effect in the eMarket Center on 1/01/10).
(2) Lead State-approved price changes are not effective until implemented within the eMarket Center. Errors in the Contractor's submitted pricing files will delay the implementation of the price changes in eMarket Center.
e. Supplier Network Requirements: Contractor shall join the SciQuest Supplier Network (SQSN) and shall use the SciQuest's Supplier Portal to import the Contractor's catalog and pricing, into the SciQuest system, and view reports on catalog spend and product/pricing freshness. The Contractor can receive orders through electronic delivery (cXML) or through low-tech options such as fax. More information about the
SQSN can be found at: www.sciquest.com or call the SciQuest Supplier Network Services team at 800-233-1121.
f. Minimum Requirements: Whether the Contractor is providing a hosted catalog or a punch-out catalog, the Contractor agrees to meet the following requirements:
(1) Catalog must contain the most current pricing, including all applicable administrative fees and/or discounts, as well as the most up-to-date product/service offerings the Contractor is authorized to provide in accordance with the cooperative contract; and
(2) The accuracy of the catalog must be maintained by Contractor throughout the duration of the cooperative contract and
(3) The Catalog must include a Lead State contract identification number; and
(4) The Catalog must include detailed product line item descriptions; and
(5) The Catalog must include pictures when possible; and
(6) The Catalog must include any additional NASPO ValuePoint and Participating
Addendum requirements. Although suppliers in the SQSN normally submit one (1) catalog, it is possible to have multiple contracts applicable to different NASPO
ValuePoint Participating Entities. For example, a supplier may have different pricing for state government agencies and Board of Regents institutions. Suppliers have the ability and responsibility to submit separate contract pricing for the same catalog if applicable. The system will deliver the appropriate contract pricing to the user viewing the catalog.
g. Order Acceptance Requirements: Contractor must be able to accept Purchase
Orders via fax or cXML. The Contractor shall provide positive confirmation via phone or email within 24 hours of the Contractor's receipt of the Purchase Order. If the Page 22 of 22 NASPO ValuePoint Master Agreement Ts and Cs, (November 2015) Purchasing Order is received after 3pm EST on the day before a weekend or holiday, the Contractor must provide positive confirmation via phone or email on the next business day.
h. UNSPSC Requirements: Contractor shall support use of the United Nations Standard Product and Services Code (UNSPSC). UNSPSC versions that must be adhered to are driven by SciQuest for the suppliers and are upgraded every year. NASPO ValuePoint reserves the right to migrate to future versions of the UNSPSC and the Contractor shall be required to support the migration effort. All line items, goods or services provided under the resulting statewide contract must be associated to a UNSPSC code. All line items must be identified at the most detailed UNSPSC level indicated by segment, family, class and commodity. More information about the UNSPSC is available at: http://www.unspsc.com and http://www.unspsc.com/FAQs.asp#howdoesunspscwork.

i. Applicability: Contractor agrees that NASPO ValuePoint controls which contracts appear in the eMarket Center and that NASPO ValuePoint may elect at any time to remove any supplier's offering from the eMarket Center.

j. The Lead State reserves the right to approve the pricing on the eMarket Center. This catalog review right is solely for the benefit of the Lead State and Participating Entities, and the review and approval shall not waive the requirement that products and services be offered at prices (and approved fees) required by the Master Agreement.

k. Several NASPO ValuePoint Participating Entities currently maintain separate SciQuest eMarketplaces, these Participating Entities do enable certain NASPO ValuePoint Cooperative Contracts. In the event one of these entities elects to use this NASPO ValuePoint Cooperative Contract (available through the eMarket Center) but publish to their own eMarketplace, the Contractor agrees to work in good faith with the entity and NASPO ValuePoint to implement the catalog. NASPO ValuePoint does not anticipate that this will require substantial additional efforts by the Contractor; however, the supplier agrees to take commercially reasonable efforts to enable such separate SciQuest catalogs. **(March 2016)**

1. Use of Licensed Software

Contractor grants Customer a nonexclusive and transferable right to use the computer software package ("Licensed Software"). The License shall continue as long as Customer continues to own the product. Should Customer transfer the computer software package, the right to use the Licensed Software shall transfer with it. The License does not include any right to use the Licensed Software for purposes other than operation of the product. The License shall not affect the exclusive ownership by Contractor of the Licensed Software or any trademarks, copyrights, patents, trade secrets, or other intellectual property rights of Contractor related to the Licensed Software.

Customer agrees that only authorized officers, employees, and agents of Customer will use the Licensed Software. The Licensed Software will be used only on the products provided under this Master Agreement. Customer may transfer the Licensed Software in connection with the sale or transfer of the products provided under this Master Agreement.

2. LIMITED WARRANTY.

Philips Healthcare ("Philips") warrants that HeartStart FR2 series, HeartStart HS1 series, HeartStart FRx, and HeartStart FR3 defibrillators (and related accessories for these defibrillators described herein) sold by Philips or an authorized Philips distributor, if (i) used in accordance with its labeling and instructions for use, and (ii) properly maintained, shall substantially conform to material specifications published by Philips for such products and shall be substantially free from defects in material and workmanship for the warranty period specified. The HeartStart FR2 series and FR3 defibrillators are warranted for five (5) years from the date of shipment by Philips. The HS1 series and FRx defibrillators are warranted for eight (8) years from the date of shipment by Philips. Disposable defibrillation pads are warranted until the expiration date listed on the package. HeartStart FR2 series, HS1 series, and FRx non-rechargeable lithium batteries are warranted for four (4) years, and the FR3 battery for three (3) years, from the date of installation, provided the battery is installed by the shelf-life date stated on the battery. For all other accessories for the FR2 series, HS1 series, FRx, and FR3 defibrillators, Philips warrants such products for 12 months from the date of shipment by Philips. Philips warrants the media on which the data management software copies are contained for a period of 60 days from the date of shipment by Philips. This warranty does not apply to product defects resulting from improper or inadequate maintenance; use of the product with software, supplies or interfaces not supplied by Philips; use or operation of the product other than in accordance with Philips product specifications and written instruction; abuse, negligence, accident, loss or damage in transit; improper site preparation; or unauthorized repair or modification to the product ("Warranty Exclusions").

Customer's remedy and Philips' liability for breach of the foregoing warranty is as follows. If any product described herein fails to conform to the warranty set forth above, at its sole election (which election shall be made after Philips receives the product), Philips shall repair or replace the product, provided that (a) Philips

receives written notice in a timely manner that such product failed to conform and a detailed explanation of any alleged nonconformity; (b) such product is returned to Philips during the warranty period; and (c) Philips is reasonably satisfied that claimed nonconformities actually exist and were not caused by the Warranty Exclusions. Philips is obligated to this warranty, provided that Philips has given prior consent to have the product returned to it, and the product is returned using a Returned Goods Authorization (RGA) number provided by Philips. In such instance, Philips shall be responsible for the cost of shipping.

A. Contract Awards

Contract awards will only be made to manufacturers. Manufacturers should include as a part of their response approved distributers through which contract users are able to purchase products awarded on contract. All approved distributers should be identified using the provided form (Attachment E of the RFP). If awarded a contract, manufacturers shall ensure the Lead State Contract Administrator is provided with up to date information regarding the status of approved distributors. New distributors should be added using the provided form (Attachment E of the RFP). The Lead State Contract Administrator should be notified in writing, via email, of any distributors that should be removed from the list of approved distributors. Distributors may provide service nationally or locally. The distributor coverage area should be listed in the appropriate section of Attachment E. Each state represented by NASPO ValuePoint that chooses to participate in this Master Agreement independently has the option of deploying only resellers approved by the Participating State. The Participating State that chooses to exercise this option will define the process to add and remove resellers in their Participating Addendum. Awards will be made by the following categories: Public Access and Infrequent User AEDs, First Responder AEDs, and Professional Defibrillators. The specifications for each category can be found below. The State reserves the right to issue an award to an Offeror across all responsive categories if an Offeror meets the award criteria for any category or categories.

B. Additional Products

Manufacturers awarded a contract have the option of adding additional products at protected prices, where pricing is commensurate with pricing offered in their response. All such additions must be approved by the Lead State Contract Administrator prior to being made available.

C. Product Specifications

All Offerors responding must provide detailed device specifications demonstrating their ability to meet or exceed the listed criteria, or provide a justification as to why alternate specifications should be considered. The State will deem any response that does not meet the specifications listed below without providing adequate justification for an alternate bid non-responsive. Additionally, Offerors should classify products as Class 1
– Having No Medical Training or Class 2 – Slight Medical Training, and any other classes as appropriate. Offerors should include the cost associated with each device being bid separately using the provided Cost Proposal Forms (Attachment C). If cost information is provided outside of the separate cost proposal section, the Lead State reserves the right to redact an Offeror's proposal so that it complies with the requirements of the RFP. Such redaction may have a detrimental effect on the competitiveness of an Offeror's Proposal.

a. Public Access and Infrequent User AEDs
   i. The AED must enhance user performance by displaying visual icons or audible prompts.
   ii. The AED must guide the rescuer in following the proper rescue sequence.

iii. The AED must utilize a biphasic waveform with maximum energy setting of 200 Joules.
iv. The AED must be user configurable to adapt to local and changing protocols.
v. The AED must be capable of automatic self-tests of the internal circuitry delivery system.
vi. The AED self-tests perform automatic daily self-tests or be user programmable for 1-7 day time intervals.
vii. The AED must offer the capability of a user-activated manual self-test.
viii. The AED must include an easily identifiable on/off switch on the front of the device.
ix. The AED must have an easy to see status indicator that advises users if the unit requires service.
x. The AED must offer an audible tone that sounds if the unit requires service.
xi. The AED must record data to an internal memory.
xii. The AED must include the ability to download data to a computer.
xiii. The AED must utilize pre-connected, disposable, single use, self-adhesive electrode(s).
xiv. The electrode must have a shelf life of at least two years.
xv. The AED must have a cable length of at least 48 inches.
xvi. The AED must include a patient analysis system that automatically evaluates patient ECG or shockable/non-shockable rhythms.
xvii. The AED must be able to operate in a temperature range of 32 degrees Fahrenheit to 122 degrees Fahrenheit.
xviii. The AED must have a shock or abuse tolerance that passes the one meter, any edge, corner, or surface drop test in standby mode.

b. First Responder AEDs

i. The pediatric algorithm must alter the default energy levels the AED delivers to pediatric patients to levels of 50, 70 and 85 Joules.
ii. The electrode must offer a CPR rate and depth sensor and an adaptive metronome that assists rescuers in performing proper
CPR.
iii. The AED must offer disposable, single use, self-adhesive electrode(s) for ease of application.
iv. The AED must utilize a biphasic waveform.
v. The AED must be capable of operating in semi-automatic and/or manual mode.
vi. The AED must have the capability of monitoring a patient with a 3 lead patient cable through ECG electrodes.
vii. The energy settings must be user configurable with a pre-set maximum energy setting of 200 Joules or escalating variable energy range up to 360 Joules.
viii. The electrode must have a shelf-life of at least two years.
ix. The AED must invoke a specific pediatric algorithm when pediatric pads are attached.
x. The AED must have an internal memory capable of recording up to 7 hours of continuous information.
xi. The internal memory must be configurable to record information on up to four patients.
xii. The AED must meet water and particulate ingress ratings of IP55.
xiii. The AED must have a shock or abuse tolerance that passes the one meter, any edge, corner, or surface drop test in standby mode.
xiv. The AED must have multiple user configurable prompts.

c. Professional Defibrillator Specifications

i. General:

1. Unit must be able to digitally record ECG on a standard a removable card (optional).
2. Unit must be able to transmit 12-lead ECG information through a fax/modem card.
3. External paddles must be available.
4. Unit shall have a battery that shall be easily and rapidly replaced.
5. Unit shall have an affixed protective roll cage for added device protection.
6. Unit shall have integral carry bags providing an independent location for each cable.
7. Unit shall be able to be tested through multi-function cable or paddles.
8. Unit must provide testing capability which tests: charging, energy delivery, paddles, multi-function cable.
9. Unit must have a test cap to allow multi-function cable testing.
10. Unit must have built-in AC or DC charging as a standard feature.
11. Unit must provide 3 hours typical continuous ECG monitoring time with a new battery.
12. Unit must provide 4 hrs. typical continuous ECG monitoring time with a new Lithium Ion battery.
13. Unit must provide an OPS Clock Sync feature as a standard option.
14. The device must be compatible with the AHA Standards for Advanced Cardiac Life Support basis life support and Pediatric Life Support.
15. The device must be capable of monitoring the ECG with appropriate display and alarm (visual and audible).
16. The device shall provide normal operating capability for ALS users, including semi-automatic external defibrillation, manual defibrillation, synchronized cardio version and external pacing.
17. The unit shall have the capability to do Pulse Oximetry, 12 lead ECG, end-tidal C02 monitoring, capnography, NIBP, etc.

ii. Display:

1. Unit must have a high-resolution color liquid crystal display as a standard feature.
2. Unit must be able to change display from color to black on white or white on black through the push of a button.
3. Unit must have a screen with a sweep speed of 25 mm I sec.4. Unit must have a screen that provides a minimum viewing time of 4 seconds.
5. Unit must have a display that provides the following information: Heart Rate, Lead/Pads, Alarm On/Off, Sp02, EtC02, NIBP, AED functions and prompts, defibrillator test function, self-test function, error corrections and faults, Pacer functions, Code markers, alarm selection and limits, delivered energy, joule settings, ECG size, Synchronized cardioversion, optional EtC02 readings, Sp02 readings and NIBP readings.

iii. Defibrillator:

1. Unit must utilize a low energy, constant current biphasic waveform.
2. Unit must have the following energy selections available to provider in manual mode operation: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 50, 70, 85, 100, 120, 150, 200 joules.
3. Unit must meet current AHA specifications for biphasic defibrillation.
4. Unit must allow provider the ability to adjust energy selection controls on device front panel or sternum paddle.

5. Unit must be able to charge to 200 joules in 6 seconds or less with a new fully charged battery.

6. Unit must display energy selected and delivered on monitor display, strip chart recorder and code summary.

7. Unit must have synchronized cardioversion capability with "sync" message displayed on monitor.

8. Unit must have optional paddles that are external anterior/anterior adult and pediatric paddles.

9. Unit must contain a built in defibrillator tester that tests energy output and continuity of the multifunction cable and paddles documented on strip chart recorder and optional PCMCIA card.

10. Unit must have a "Multi-function" cable that is field replaceable.

iv. Recorder:

1. Unit must utilize a thermal strip chart recorder.

2. Strip chart recorder must use at least 90mm paper width thermal recording paper.

3. Strip chart recorder must utilize a 6 second delay.

4. Strip chart recorder must be able to print the following annotations: Time, date, defib. energy, heart rate, pacer output (Pacer version only), QRS sync marker, ECG SIZE,lead, alarm, DEFIB TEST OK/FAIL, ANALYZE ECG, PADS OFF, ANALYSIS HALTED, NOISY ECG, SHOCK ADVISED,NO SHOCK ADVISED, ECG TOO LARGE and diagnostic bandwidth.

5. Unit must have user configurable print out modes offering manual or automatic recording options initiated by alarm activation or defibrillator discharge.

6. Strip chart recorder must be able to print 3 leads simultaneously, diagnostic bandwidth and a 4x3 12-lead printout.

v. Pacemaker:

1. Unit must utilize a constant current 40 ms pace pulse width.

2. Unit must have a continuously variable current level.

3. Unit must have a continuously variable pacing rate from 30-180 ppm.

4. Pacer parameters must be maintained when switching back to defibrillation or monitor mode.

5. The heart rate alarms must function in the pacing mode.

6. Unit must have mechanism to allow viewing of intrinsic patient rhythm without losing pacing capture.

7. Unit must be configurable for initial setting of pacing rate.

8. Unit must display pacing rate and milliamps on display.

9. The pacer must continue to deliver life-saving therapy in the event an ECG lead falls off.

10. Unit must be able to pace through multi-function or pacing electrodes.

vi. 12- lead ECG:

1. The 12-lead parameter must reside within a defibrillator weighing less than 15 lbs.

2. The 12-lead parameter must be able to provide a diagnostic 12-lead ECG 4x3 printout by holding the recorder button for two seconds.

3. The 12-lead parameter must be capable of providing a diagnostic 12-lead ECG printout with interpretation by pressing the acquire button in the 12-lead mode.
4. The 12-lead parameter must allow direct transmission of 12- lead ECG via land or cell phone to a standard fax machine.
5. The 12-lead parameter must provide a user configuration that allows the option of printing detailed measurements along with the interpretation.
6. The 12-lead ECG must be capable of being acquired without entering deep menus and without the use of a trim knob.
7. The unit must offer an optional 0.05 to 40 Hz bandwidth.
8. The 12-lead parameter must allow users to easily insert patient name, age and gender using soft keys on the defibrillator.
9. The 12-lead parameter must allow users to print the 12 SLAnalysis, including measurements and patient name, age and gender on 90mm fan-fold paper.
10. The 12-lead parameter must be capable of storing up to 24 pre-programmed telephone numbers facilitating rapid and easy 12-lead ECG transmission.
11. The 12-lead parameter must allow configuration of user defined lead groups for rapid printout and review of pertinent ECG.
12. The 12-lead patient cable must consist of 4 limb leads and a separate V lead cable.
13. The 12-lead patient cable must be capable of providing limb lead signals directly to the defibrillator when only the limb leads are attached.
14. The 12-lead patient cable must accommodate either snap or clip connectors.
15. The 12-lead parameter must be capable of providing an automatic patient identifier using 7 alphanumeric characters.
16. The 12-lead parameter must be capable of providing a device identifier using 3 alphanumeric characters.
17. The unit must be upgradeable to allow the use of an integrated Bluetooth option for the wireless transmission of 12-lead and vital sign data via a cell phone or other communication technology.
18. The unit must provide serial communication capability through an RS232 serial port.
19. The unit must be able to transmit 12-lead and vital data both automatically and manually on acquisition.
20. The unit must be able to transmit all data stored on a PC card to a remote handheld device or laptop.
21. The unit must be able to provide the option for both landline and cellular transmission when utilizing a Bluetooth wireless option.
22. The unit must offer the option of direct fax transmission via a Bluetooth option.

vii. Pulse Oximetry:

1. The unit must have an integral pulse oximeter or be upgradeable to include an integral Pulse Oximeter.
2. The unit must utilize pulse oximetry that has FDA 51 Ok clearance for use during patient motion and low perfusion.
3. The unit must utilize sensors that work in bright sunlight.
4. The unit must utilize a pulse oximeter with alarms that are user adjustable in the field.

viii. Capnography:

1. The unit, when purchased with Sp02, must have an EtC02 port.
2. All units with an EtC02 port must be upgradeable to include C02 by plugging in a mainstream or side stream CAPNO 5 sensor.
3. The unit must be able to offer the option to upgrade to either mainstream or sidestream capnography with sensor located outside of the unit allowing easy service and replacement if needed.
4. The defibrillator must be capable of providing continuous EtC02 and Respiratory Rate readings as well as a capnogram for on-screen display or print-out.
5. The C02 sensors used must not require a yearly calibration check.

ix. Non-Invasive Blood Pressure:

1. Unit must be capable of acquiring a blood pressure within a typical measurement time of 30 seconds or less on average.
2. Unit must incorporate oscillometric technology.
3. Unit must display systolic, diastolic and mean pressures.
4. Unit must be capable of taking automatic, stat or manual measurements.
5. Automatic intervals should be user adjustable to 2.5, 5, 10, 15, 20, 30, 45, 60, 90, and 120 minutes.
6. Stat mode must allow up to 10 measurements within 5 minutes.
7. Unit must include an artifact indicator which is displayed when excessive artifact is detected.
8. Unit must display a cuff inflation status bar.
9. Unit be capable of displaying and/or printing up to 4 hours of patient BP history data.

D. Support Specifications

Specifications for product consumables, accessories, and support can be found below. Each Offeror should bid the items or services requested in order to submit a complete Proposal. Where unable to provide an applicable product or service that has been specifically requested, Offerors should provide an explanation for the omission.

a. Product Consumables and Accessories

i. Market Basket Items

A list of the most commonly used consumables and accessories have been identified as market basket on contract. For each device offered, Offerors should bid the relevant market basket included below:

a. Batteries
b. Adult Pads (electrodes)
c. Pediatric Pads (electrodes)
d. Carrying Cases
e. Wall Mount Kits
f. Fast Response Kits

Offerors should include in the technical response the market basket items being bid and the specifications of each. No pricing information should be included in the technical response.

ii. Catalogue Discount

In addition to the line item pricing of their offered devices and market basket items, Offerors must include in their cost proposal a blanket discount off of their catalogue price for items in their catalogue which are not otherwise included in their cost proposal.

Pricing information should be included on Attachment C – Cost

Proposal Forms. No pricing information should be included in the technical response.

b. Warranties and Extended Warranties

i. Basic Warranty

All Offerors must include a basic warranty for their products for no less than one year at no additional cost to Participating States. Warranties must guarantee the safe and effective operation of devices for the duration of the warranty and the cost for repair or replacement of devices under warranty must be covered by the

Offeror. Each Offeror must include a complete description of the coverage provided under their basic warranty.

ii. Extended Warranty

Offerors may bid an extended warranty past the term of the basic warranty provided under the contract. Offerors must include a complete description of the coverage provided under the extended warranty in their technical response.

c. Product Training

i. Product Documentation

All product documentation, manuals, and specifications must be provided at the request of Participating States for no additional cost.

ii. Web/Video Training

Offerors must provide online or multimedia training options at no additional cost to the participating States. Offerors must include in their Proposal a description of the online and multimedia training options that are available.

iii. On-site Training

Offerors should include a description of their ability to provide onsite training, as requested. The cost for on-site training should be reflected in the Offerors' cost proposals as a separate per day rate for each Participating State.

d. Software Updates

i. Offerors must include a description of updates required for the AED unit to maintain full functionality over the anticipated life of the unit and the methodology for performing or accessing the updates.

e. Customer and Service Support

i. 24/7 Call Support

24/7 Call Technical Support must be offered for all devices for a period of no less than 3 years after purchase at no additional cost to the Participating States.

ii. Service Plan

Offerors must propose a bi-annual service agreement to provide maintenance and repair on their proposed devices. Offerors Service Agreement will include, but are not limited to, the following services and national regulations. Offerors must be aware of local requirements for the States in which they will be servicing.

Offerors will submit their detailed plan on what is included and how they will provide maintenance and repairs on their proposed devices. Pricing will be on a semi-annual basis.

All work performed under the service agreement must meet the Manufacturers specifications for that device.

Offerors may submit additional information on whether they have different types of service agreements to provide maintenance and repair on their devices, i.e., standard service agreement or premier service agreement.

f. Value Added Options

Offerors may include in their Proposal additional Value Added options not specifically requested in the scope of work. Value Added options should not deviate from the nature of products and services requested in the scope of work and should include a thorough description of the option and how it brings value to the State. Examples include battery replacement plans, unconventional training options, and other services not specified. Award of Value Added options is subject to the approval of the Lead State.

Cost for this Master Agreements shall be based on the following:

Fixed rate line item pricing on devices and market basket items and a percentage discount off a supplier's catalogue pricing shall be offered on SW300. Price Schedule for each or any category of goods identified in Attachment B of this RFP and reflected in the Price Schedule.

The percentage discounts offered for each type of service in Attachment B of this RFP shall remain firm for the duration of the NASPO ValuePoint Master Agreements, including all optional renewals.

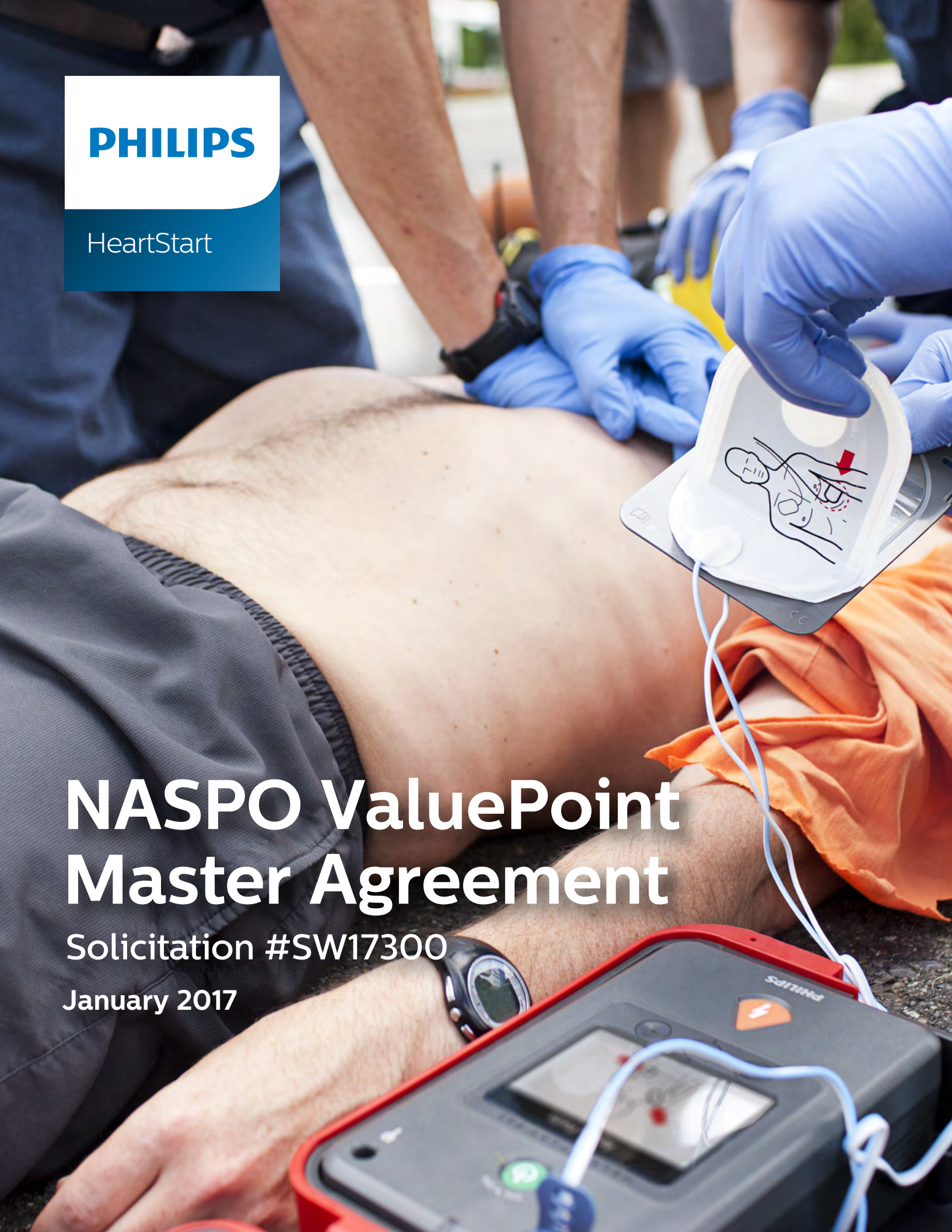
Each of the categories, excluding on-site training, must have a single price or rate list for all Participating Entities.

Offeror must submit cost, prices and rates as required by the Cost Proposal Forms (Attachment C). Prices and rates shall include all anticipated charges, including but not limited to, freight and delivery, cost of materials and product, transaction fees, overhead, profits, and other costs or expenses incidental to the Contractor's performance.

The prices, rates and costs proposed in the Offeror's response must be valid for a minimum of 1 year after any resulting Master Agreement is signed. Offeror's cost proposal must describe how future cost increases will be minimized and capped and how both increases and decreases will be passed on to the Lead State if the Master Agreement is renewed after the initial term. The Offeror must explain the proposed process to implement cost changes, and how the Lead State will be notified. Cost changes may not occur more than once per quarter and only with the prior approval of the lead state.

PHILIPS

HeartStart



NASPO ValuePoint Master Agreement

Solicitation #SW17300

January 2017

PHILIPS

Philips Healthcare

January 2017

Gerald Elrod II
OMES Central Purchasing
5005 N. Lincoln Blvd. STE 300
Oklahoma City, OK 73105
Gerald.Elrod@omes.ok.gov
405/522-1037

Re: Solicitation # SW17300 for AED Units and Accessories

Dear Mr. Elrod,

Philips is pleased to respond to the State of Oklahoma/NASPO bid request for **AED Units and Accessories.**

In response to the bid request, Philips is offering its FRx AED, FR3 AED, OnSite AED as well as the Philips HeartStart MRx ALS Monitor/Defibrillator in this bid. Please see Section 5 –Technical Responses for our response to all your resuscitation specifications. Pricing for all Philips defibrillator products is included under separate cover.

Oklahoma/NASPO has the right to accept or reject this proposal in part, or in its entirety. Any adjustment to the final purchase agreement must be made in writing and agreed to by both parties. Philips agrees to negotiate these Terms and Conditions upon award of bid.

Thank you for the opportunity to submit our bid. We look forward to a continued working relationship with the State and the NASPO organization.

Sincerely,

Mark K. Johnson
Mark K. Johnson
National Sales Director, ICM/Corp AED
Emergency Care and Resuscitation
Philips Healthcare
678-488-5014
mark.k.johnson@philips.com

Bob Horkavy
Bob Horkavy
Account Manager
Emergency Care and Resuscitation
Philips Healthcare
(919) 943-7419
bob.horkavy@philips.com

Contacts

Mark K. Johnson
National Sales Director, ICM/Corp AED
Emergency Care and Resuscitation
Philips Healthcare
678-488-5014
mark.k.johnson@philips.com

Bob Horkavy
Account Manager
Philips Healthcares.com
(919) 943-7419
bob.horkavy@philips.com

Philips Healthcare
3000 Minuteman Road
Andover, MA 01810

PHILIPS

Section 1

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PHILIPS

Section 2

Administrative Forms

PHILIPS

ATTACHMENT D

LEAD STATE ADMINISTRATIVE FORMS

Responding Bidder Information

"Certification for Competitive Bid and Contract" MUST be submitted along with the response to the Solicitation.

1. **RE: Solicitation #** SW300

2. **Bidder General Information:**

FEI / SSN : [redacted] VEN ID:

Company Name: Philips Healthcare a division of Philips Electronics North America Corporation

3. **Bidder Contact Information:**

Address: 3000 Minuteman Rd

City: Andover State: MA Zip Code: 01810

Contact Name: Bob Horkavy

Contact Title: Account Manager

Phone #: 919 943-7419 FAX#:

Email: bob.horkavy@philips.com Website: http://www.usa.philips.com/healthcare/medical-products

4. **Oklahoma Sales Tax Permit[1]:**

☒ YES – Permit #: 099028

☐ NO – Exempt pursuant to Oklahoma Laws or Rules

5. **Registration with the Oklahoma Secretary of State:**

☐ YES - Filing Number:

☒ NO - Prior to the contract award, the successful bidder will be required to register with the Secretary of State or must attach a signed statement that provides specific details supporting the exemption the supplier is claiming (www.sos.ok.gov or 405-521-3911).

6. **Workers' Compensation Insurance Coverage:**

Bidder is required to provide with the bid a certificate of insurance showing proof of compliance with the Oklahoma Workers' Compensation Act.

☒ YES – include a certificate of insurance with the bid

☐ NO - attach a signed statement that provides specific details supporting the exemption you are claiming from the Workers' Compensation Act (Note: Pursuant to Attorney General Opinion #07-8, the exemption from 85 O.S. 2011, § 311 applies only to employers who are natural persons, such as sole proprietors, and does not apply to employers who are entities created by law, including but not limited to corporations, partnerships and limited liability companies.)[2]

Digitally signed by Mark Uzdanovich
DN: cn=Mark Uzdanovich, o=Philips, ou=Sr. Contract, Manager, email=mark.uzdanovich@philips.com, c=US
Date: 2016.12.30 10:34:28 -05'00'

Authorized Signature — December 30, 2016 (Date)

Mark A Uzdanovich (Printed Name) — Sr. Manager, Contracts (Title)

[1] **For frequently asked questions concerning Oklahoma Sales Tax Permit, see http://www.tax.ok.gov/faq/faqbussales.html**

[2] **For frequently asked questions concerning workers' compensation insurance, see http://www.ok.gov/oid/faqs.html#c221**

Certification for Competitive Bid and/or Contract (Non-Collusion Certification)

NOTE: *A certification shall be included with any competitive bid and/or contract exceeding $5,000.00 submitted to the State for goods or services.*

Solicitation or Purchase Order #: SW300

Supplier Legal Name: Philips Healthcare a division of Philips Electronics North America Corporation

SECTION I [74 O.S. § 85.22]:

A. For purposes of competitive bid,

1. I am the duly authorized agent of the above named bidder submitting the competitive bid herewith, for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and state officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to said bid;
2. I am fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and have been personally and directly involved in the proceedings leading to the submission of such bid; and
3. Neither the bidder nor anyone subject to the bidder's direction or control has been a party:
    a. to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,
    b. to any collusion with any state official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor
    c. in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract, nor
    d. to any collusion with any state agency or political subdivision official or employee as to create a sole-source acquisition in contradiction to Section 85.45j.1 of this title.

B. I certify, if awarded the contract, whether competitively bid or not, neither the contractor nor anyone subject to the contractor's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring this contract herein.

SECTION II [74 O.S. § 85.42]:

For the purpose of a contract for services, the supplier also certifies that no person who has been involved in any manner in the development of this contract while employed by the State of Oklahoma shall be employed by the supplier to fulfill any of the services provided for under said contract.

The undersigned, duly authorized agent for the above named supplier, by signing below acknowledges this certification statement is executed for the purposes of:

☒ **the competitive bid attached herewith and contract, if awarded to said supplier;**

OR

☐ the contract attached herewith, which was not competitively bid and awarded by the agency pursuant to applicable Oklahoma statutes.

Digitally signed by Mark Uzdanovich
DN: cn=Mark Uzdanovich, o=Philips, ou=Sr. Contract, Manager, email=mark.uzdanovich@philips.com, c=US
Date: 2016.12.30 10:35:55 -05'00'

Supplier Authorized Signature

December 30, 2016
Certified This Date

Mark A Uzdanovich
Printed Name

Sr. Manager, Contracts
Title

919-943-7419
Phone Number

bob.horkavy@philips.com
Email

855-873-4500
Fax Number

Amendment of Solicitation

Date of Issuance: 12/01/2016 **Solicitation No.** SW17300

Requisition No. SW300 **Amendment No.** 1

Hour and date specified for receipt of offers is changed: ☒ No ☐ Yes, to: _____ 3:00 PM CST/CDT

Pursuant to OAC 260:115-7-30(d), this document shall serve as official notice of amendment to the Solicitation identified above. Such notice is being provided to all suppliers to which the original solicitation was sent.

Suppliers submitting bids or quotations shall acknowledge receipt of this solicitation amendment prior to the hour and date specified in the solicitation as follows:

(1) Sign and return a copy of this amendment with the solicitation response being submitted; or,

(2) If the supplier has already submitted a response, this acknowledgement must be signed and returned prior to the solicitation deadline. All amendment acknowledgements submitted separately shall have the solicitation number and bid opening date printed clearly on the front of the envelope.

ISSUED BY and RETURN TO:

U.S. Postal Delivery or Personal or Common Carrier Delivery:

Office of Management and Enterprise Services
Central Purchasing
5005 N. Lincoln Blvd., Ste. 300
Oklahoma City, OK 73105

Gerald Elrod
Contracting Officer

405 - 522 - 1037
Phone Number

Gerald.elrod@omes.ok.gov
E-Mail Address

Description of Amendment:

a. This is to incorporate the following:

The closing date and time will be 3:00PM Central on January 10, 2017.

Additionally, the State of Idaho has signed an intent to participate and is included with the other joining States.

b. All other terms and conditions remain unchanged.

Philips Healthcare, a division of Philips Electronics North America Corporation — Supplier Company Name (**PRINT**)

December 30, 2016 — Date

Mark A Uzdanovich — Authorized Representative Name (**PRINT**)

Sr. Manager, Contracts — Title

_____ — Authorized Representative Signature

Amendment of Solicitation

Date of Issuance: 12/21/2016 **Solicitation No.** SW17300

Requisition No. SW300 **Amendment No.** 2

Hour and date specified for receipt of offers is changed: ☒ No ☐ Yes, to: _____ 3:00 PM CST/CDT

Pursuant to OAC 260:115-7-30(d), this document shall serve as official notice of amendment to the Solicitation identified above. Such notice is being provided to all suppliers to which the original solicitation was sent.

Suppliers submitting bids or quotations shall acknowledge receipt of this solicitation amendment prior to the hour and date specified in the solicitation as follows:

(1) Sign and return a copy of this amendment with the solicitation response being submitted; or,

(2) If the supplier has already submitted a response, this acknowledgement must be signed and returned prior to the solicitation deadline. All amendment acknowledgements submitted separately shall have the solicitation number and bid opening date printed clearly on the front of the envelope.

ISSUED BY and RETURN TO:

U.S. Postal Delivery or Personal or Common Carrier Delivery:

Office of Management and Enterprise Services
Central Purchasing
5005 N. Lincoln Blvd., Ste. 300
Oklahoma City, OK 73105

Gerald Elrod
Contracting Officer

405 - 522 - 1037
Phone Number

Gerald.Elrod@omes.ok.gov
E-Mail Address

Description of Amendment:

a. This is to incorporate the following:

The following document has been added:

"SW300 – QUESTIONS AND ANSWERS.DOCX" has been added to the solicitation.

The following documents have been updated:

"SW300 – SOLICITATION – 20161129.PDF" has been replaced with "SW300 – SOLICITATION – 20161221.PDF"

"SW300 – ATTACHMENT E – APPROVED DISTRIBUTORS FORM.XLSX" has been replaced with "SW300 – ATTACHMENT E – APPROVED DISTRIBUTORS FORM – REVISION 1.XLSX"

"SW300 – ATTACHMENT G – HISTORIC AND ANTICIPATED USAGE.XLS" has been replaced with "SW300 – ATTACHMENT G – HISTORIC AND ANTICIPATED USAGE – REVISION 1.XLS"

Attachment B, Section A. "Contract Awards" has been modified to include the following language:

"Distributors may provide service nationally or locally. The distributor coverage area should be listed in the appropriate section of Attachment E.

Each state represented by NASPOValuePoint that chooses to participate in this Master Agreement independently has the option of deploying only resellers approved by the Participating State. The Participating State that chooses to exercise this option will define the process to add and remove resellers in their Participating Addendum."

Attachment E has been updated to include a field for coverage area.

Description of Amendment - continuing

Attachment G has been updated to include accurate usage information.

b. All other terms and conditions remain unchanged.

Philips Healthcare, a Division of Philips Electronics North America Corporation		December 30, 2016
Supplier Company Name (**PRINT**)		Date
Mark A Uzdanovich	Sr. Contracts, Manager	
Authorized Representative Name (**PRINT**)	Title	Authorized Representative Signature

Section 3

Executive Summary

PHILIPS

Executive Summary

Philips is proposing a renewal of our long-term master agreement with the State of Oklahoma and NASPO ValuePoint, designed to support your objective to secure a contract for Automated External Defibrillator (AED) units and accessories and our Cardiac Monitor/Defibrillator, including service and support options. We propose to enter into an initial term of one (1) year with the option, upon mutual written agreement, for four (4) additional renewal periods of one (1) year each.

The proposed solutions for the Oklahoma Solicitation Number SW17300, NASPO ValuePoint Master Agreement is for AED Units and Accessories as well as our Cardiac Monitor/Defibrillator.

In our response to Section C – Product Specifications, in Section 5, we have indicated our compliance to your required specifications, denoted the models we are proposing and addressed your training, warranty and service option needs. We have also provided detailed product brochures and technical data sheets in Section 10, Supplemental Information, for more detailed information on our proposed Resuscitation models.

We have been part of the SW300 NASPO Agreement for the last 5 years, and we are looking forward to our continued participation in this Master Agreement. We have provided our proposed pricing in Section 6, which is provided under separate cover from our technical response.

Philips Automatic External Defibrillators (AEDs) Offered:

As a global leader in defibrillation technology, Philips helped chart the course for widespread use of automated external defibrillators (AEDs) among professional responders. Today, Philips continues to provide AED solutions specifically designed for the full spectrum of responders from lay people to clinicians.

HeartStart Onsite - Public Access and Infrequent User AEDs

The **Philips HeartStart Onsite** defibrillator is designed for the ordinary person in the extraordinary moment, OnSite is ready to act and ready to go. It allows virtually anyone to treat the most common cause of sudden cardiac arrest (SCA) by delivering a shock quickly and effectively, wherever SCA happens.

With access to the right equipment and support, everyone can help save a life. Philips HeartStart OnSite defibrillator with Life Guidance acts as your personal coach to guide you through a cardiac emergency with a simple, step-by-step process. Adaptive instructions keep you on track, and intelligent sensors automatically deliver the right therapy, helping give you the confidence to lead the way to save a life.

HeartStart FRx - First Responder AEDs

Philips HeartStart FRx defibrillator with Life Guidance is designed for those who get there first. With access to the right equipment and support, everyone can help save a life. Philips HeartStart FRx defibrillator with Life Guidance acts as your personal coach to guide you through a cardiac emergency with a simple, step-by-step process.

Adaptive instructions keep you on track and intelligent sensors automatically deliver the right therapy, helping give you the confidence to lead the way to save a life.

The HeartStart FRx defibrillator includes advanced Life Guidance features to help guide the treatment of sudden cardiac arrest. With easy set-up, clear voice prompts, and rugged design, HeartStart FRx is designed for all on-the-spot responders.

HeartStart FR3 - Professional Defibrillator Specifications

Philips HeartStart FR3 Defibrillator for professional responders is designed to make lifesaving faster, easier, and better.

Faster – helping you do your job faster as it significantly reduces deployment time. It eliminates steps to help you start the right therapy – CPR or defibrillation – on your patient faster. Responders can also quickly disconnect the pads and CPR meter from the HeartStart FR3 and connect them to the HeartStart MRx monitor/defibrillator, for fast patient hand-off.

Easier – helping make your job easier because it is small, light, and easy to carry. The optional Q-CPR measurement and feedback technology is set up to help you perform guidelines-compliant CPR. Additionally, HeartStart FR3 is designed to be rugged, reliable, and ready to use.

Better – helping you improve your response by supporting a culture of continuous improvement, including training opportunities to fine-tune SCA response.

The HeartStart FR3 is small and light, which makes it easy to carry and maneuver in tight places.

Philips HeartStart MRx Monitor/Defibrillator

The Philips HeartStart MRx Monitor/Defibrillator system with Q-CPR employs the very latest in features for easy measurement and feedback of patient condition in **real time**. Unlike any other solution of its kind, it enables retrospective review of the essential components of CPR delivery along with other resuscitation data – like ECG, CO_2 and defibrillation and patient care events.

Additionally, Philips open systems approach to data management helps you streamline information so that it flows from your EMS units to, and throughout the hospital for enhanced patient care and operational efficiency. We are pleased to present the following information that highlights the powerful combination of features and benefits that our solution would bring to your ALS capabilities.

For more details on all of our proposal models, please refer to Section 10 for the technical data sheets and product brochures.

PHILIPS

Section 4

Offeror Profile

PHILIPS

Section 4

Offeror Profile

Offeror Profile. A brief profile of the offeror should be included. The following information should be included in the profile:

a. Your company's full legal name.

Philips Healthcare a division of Philips Electronics North America Corporation

b. Primary business address.

3000 Minuteman Road

Andover, MA 01810

c. Describe your company ownership structure.

Philips Electronics North America Corporation is a wholly-owned subsidiary of Philips Holding USA Inc. Philips Holding USA Inc. is located at 3000 Minuteman Rd., Andover, MA 01810.

d. Employee size (number of employees).

Our more than 37,000 employees, working in 100 countries, are committed to helping you create meaningful moments of care, whether in the hospital room, the living room or the boardroom.

e. Website.

http://www.usa.philips.com/healthcare

f. Sales contact information.

Bob Horkavy
Account Manager
(919) 943-7419
bob.horkavy@philips.com

g. A brief history of your company and the year it was founded.

Philips Healthcare has long provided the equipment and technologies that are on the cutting-edge of the healthcare market. From 1933 when Philips manufactured the first x-ray tubes for medical applications to 1998 when Philips launched a Healthcare Services group dedicated to the advancement of healthcare technology that meets the specialized needs of clinicians as well as patients, Philips Healthcare is well positioned to transform the healthcare possibilities of tomorrow into the realities of today.

After launching a Healthcare Services group in 1998, Philips Electronics invested heavily in its medical business segment in order to further enhance its product portfolio. In October of that year, Philips Electronics acquired ATL Ultrasound of Bothell, Washington, an innovator in all digital ultrasound systems, including a broad product range comprised of both high-definition and compact systems. In recent years, product innovations have resulted in advanced signal processing such as tissue harmonic imaging; 3D; and panoramic imaging.

To expand our presence in nuclear medicine, Philips acquired ADAC Laboratories of Milpitas, California, on December 18, 2000. Today, Philips Medical offers hospitals, research facilities and outpatient centers with the most advanced NM technology available in the healthcare market including gantry-free nuclear medicine gamma cameras, SPECT and PET systems, computers and clinical software.

On August 1, 2001, Philips acquired Agilent Technologies' Healthcare Solutions Group of Andover, Massachusetts. The purchase of Agilent's former healthcare business transformed Philips into the number two medical equipment provider in the world. Key products include diagnostic cardiology, ultrasound imaging, patient monitoring, automated external defibrillators, point of care diagnostic systems, related supplies, and professional services and support.

Just a few months later on October 19, 2001, Philips completed a three-year acquisition strategy through its purchase of Marconi Medical Systems of Cleveland, Ohio -- a medical imaging innovator since 1915. Key products include leading multi-slice CT systems as well as advanced applications in cardiology, oncology and PET/CT imaging.

Philips also acquired Stentor on July 6, 2005, a leading provider of picture archiving and communication systems (PACS) used for storing, managing and distributing digital radiology images throughout hospitals and healthcare facilities. Additionally, Philips acquired Witt Biomedical Corporation, the largest supplier of hemodynamic monitoring and clinical reporting systems used in cardiology catheterization laboratories and Intermagnetics General Corporation, a technological innovator in the MRI market. In 2007 Philips acquired Ximis, VMI, Healthwatch, Raytel, Emergin, Visicu, and Respironics, Inc. Philips' latest acquisition in 2015, was Volcano, a global leader in catheter-based imaging and measuring solutions for cardiovascular applications. In addition to these strategic acquisitions, Philips continues to enhance its offerings through select affiliations.

PHILIPS

Section 5

Technical Response

PHILIPS

Section 5

Technical Responses

Technical Response. This section should constitute the technical response of the Proposal and must contain at least the following information:

A. A complete narrative of the Offeror's assessment of the work to be performed, the Offerors ability and approach, and the resources necessary to fulfill the requirements. This should demonstrate the Offeror's understanding of the desired overall performance expectations and clearly indicate any options or alternatives proposed.

Philips is proposing a renewal of our long-term master agreement with the State of Oklahoma and NASPO ValuePoint, designed to support your objective to secure a contract for Automated External Defibrillator (AED) units and accessories and Cardiac Monitor/Defibrillators, including service and support options. We propose to enter into an initial term of one (1) year with the option, upon mutual written agreement, for four (4) additional renewal periods of one (1) year each.

The proposed solutions for the Oklahoma Solicitation Number SW17300, NASPO ValuePoint Master Agreement is for AED Units and Accessories as well as our Cardiac Monitor/Defibrillator.

In our response to Section C – Product Specifications, below, we have indicated our compliance to your required specifications, denoted the models we are proposing and addressed your training, warranty and service option needs. We have also provided detailed product brochures and technical data sheets in Section 9, Supplemental Information, for more detailed information on our proposed Resuscitation models.

We have been part of the SW300 NASPO Agreement for the last 5 years, and we are looking forward to our continued participation in this Master Agreement. We have provided our proposed pricing in Section 6, which is provided under separate cover from our technical response.

B. A specific point-by-point response, in the order listed, to each requirement in the RFP and scope of work (Attachment B).

Please refer to Section C, below, for Philips responses to your required specifications.

Section 4: Administrative and Technical Response Requirements

This section contains technical requirements pertaining to the RFP for Automated External Defibrillator (AED) units and accessories, service and support. Other sections of this RFP contain additional requirements that must be met in order to be considered responsive. Offerors must identify in their Proposal how their company meets (or exceeds) all requirements listed in Section 4 of this RFP.

4.1. Mandatory Minimum Administrative Proposal Requirements

This section contains the minimum requirements that must be met in order to be considered for the evaluation phase. All of the items described in this section are nonnegotiable. All Offerors must state willingness and demonstrate ability to satisfy these requirements in the Proposal submitted for consideration.

a. Contractor Single Point of Contact.

All Offerors must include a single point of contact in their Proposal. This single point of contact shall be the primary person the Lead State may contact in regards to the resulting Master Agreement.

Bob Horkavy
Account Manager
Philips Healthcares.com
(919) 943-7419
bob.horkavy@philips.com

b. Compliance with Specifications

All Offerors must meet or exceed the specifications listed in the Category for which an Offeror's device is being bid. Inability to meet the listed specifications may result in disqualification of the device being bid as non-responsive.

4.2. NASPO ValuePoint Master Agreement Statement of Compliance

NASPO ValuePoint Master Agreement(s) resulting from this RFP will constitute the final agreement except for negotiated terms and conditions specific to a Participating Entity's Participating Addendum.

The Master Agreement will include, but not be limited to, the NASPO ValuePoint Standard Terms and Conditions in Attachment A and Lead State specific terms and conditions required to execute a Master Agreement, the Scope of Work (Attachment B) and selected portions of the Offeror's Proposal.

This section highlights particular terms and conditions of NASPO ValuePoint Master Agreement Terms and Conditions, although Offerors will be bound to all the terms and conditions when executing a Master Agreement as shown in Attachment A. Offerors must include a statement in their Proposal that they have read and understand all of the terms and conditions as shown in the Master Agreement (Attachment A).

4.2.a. Insurance

To be eligible for award, the Offeror agrees to acquire insurance from an insurance carrier or carriers licensed to conduct business in each Participating Entity's state at the prescribed levels set forth in Section 21 of the NASPO ValuePoint Master Agreement Terms and Conditions. Describe your insurance or plans to obtain insurance satisfying the requirements in Section 21.

4.2.b NASPO ValuePoint Administrative Fee and Reporting Requirements

To be eligible for award, the Offeror agrees to pay a NASPO ValuePoint administrative fee as specified in Section 6 of the NASPO ValuePoint Master Agreement Terms and Conditions. Moreover, specific summary and detailed usage reporting requirements are prescribed by Section 7 of the NASPO ValuePoint Master Agreement Terms and Conditions.

Offerors shall include with their response a detailed usage fee and reporting plan, as described in Section 6 of the RFP.

Philips complies. Please see Section 7 of our proposal response.

4.2.c NASPO ValuePoint eMarket Center

To be eligible for award, the Offeror agrees, by submission of a Proposal, to cooperate with NASPO ValuePoint and SciQuest (and any authorized agent or successor entity to SciQuest) to integrate its presence in the NASPO ValuePoint eMarket Center either through an electronic catalog (hosted or punchout site) or unique ordering instructions.

Refer to Attachment A, Section 9, NASPO ValuePoint Master Agreement Terms and Conditions for the prescribed requirements.

Those terms and conditions require as a minimum that the Offeror agrees to participate in development of ordering instructions. Offeror shall respond how they can support the eMarket Center in the Proposal through either a hosted catalog or punchout solution.

4.3 Lead State Terms and Conditions.

Refer to Attachment H for the Lead State Special Terms and Conditions that apply to this solicitation. Offeror shall indicate in their Proposal that they have read and understand all of the requirements shown in the Lead State Special Terms and Conditions.

4.4 Participating State Terms and Conditions.

As a courtesy to Offerors, some Participating States' specific Terms and Conditions are provided as Attachments to this solicitation. These are for informational purposes only and will be negotiated with other Participating States after award of the Master Agreement. Each State reserves the right to negotiate additional terms and conditions in its Participating Addendums. Offerors shall submit a

statement that they understand they may be required to negotiate these additional terms and conditions when executing a Participating Addendum.

4.5 Promotion of the NASPO ValuePoint Master Agreement

The NASPO ValuePoint Master Agreement Terms and Conditions include program provisions governing participation in the cooperative, reporting and payment of administrative fees, and marketing/education relating to the NASPO ValuePoint cooperative procurement program. In this regard:

a. Briefly describe how you intend to promote the use of the Master Agreement.

   By entering into this agreement, Philips will offer NASPO contract to customers who are eligible to purchase using this method.

b. Knowing that state procurement officials (CPO) must permit use of the Master Agreement in their state, how will you integrate the CPO's permission into your plan for promoting the agreement?

   Please see our response to "a" above.

c. Public entities are sensitive to "scope" issues, that is, whether performance is within the intended scope of the solicitation as awarded. In the context of your method of promoting agreements of this nature, how would you clarify any questions regarding the scope of the agreement with respect to any potential order?

   Please see our response to "a" above.

d. How will your company manage due dates for administrative fee payments and usage reports?

   Offeror's internal business process requires sales reports be prepared within 7 business days following the close of a quarter. Reportable data is collected from any participating distributors during this period as well. The data is validated and formatted as required by the receiving agency. The fee payment is requisitioned as required by Offeror's internal process. When processed, the payment is delivered to the receiving entity, via their designated instructions, under separate cover from the report. The report is delivered to the State as prescribed in their PA or other governing instruction.

e. Through its Cooperative Development Coordinators and Education & Outreach team, NASPO ValuePoint assists Lead States by engaging vendors in strategies aimed at promoting master agreements. What opportunities and/or challenges do you see in working with NASPO ValuePoint staff in this way?

   By entering into this agreement, Philips will offer NASPO contract to customers who are eligible to purchase using this method.

4.6 Scope of Work

Offerors shall demonstrate in their Proposal how they meet or exceed the requirements of each section of the Scope of Work in Attachment B. Offerors shall show each requirement and its response in their Proposal.

Philips acknowledges. Please see below.

Attachment B: Scope of Work

A. Contract Awards

Contract awards will only be made to manufacturers. Manufacturers should include as a part of their response approved distributers through which contract users are able to purchase products awarded on contract. All approved distributers should be identified using the provided form (Attachment E).

If awarded a contract, manufacturers shall ensure the Lead State Contract Administrator is provided with up to date information regarding the status of approved distributors. New distributors should be added using the provided form (Attachment E). The Lead State Contract Administrator should be notified in writing, via email, of any distributors that should be removed from the list of approved distributors. Distributors may provide service nationally or locally. The distributor coverage area should be listed in the appropriate section of Attachment E.

Each state represented by NASPO ValuePoint that chooses to participate in this Master Agreement independently has the option of deploying only resellers approved by the Participating State. The Participating State that chooses to exercise this option will define the process to add and remove resellers in their Participating Addendum.

Awards will be made by the following categories: Public Access and Infrequent User AEDs, First Responder AEDs, and Professional Defibrillators. The specifications for each category can be found below. The State reserves the right to issue an award to an Offeror across all responsive categories if an Offeror meets the award criteria for any category or categories.

B. Additional Products

Manufacturers awarded a contract have the option of adding additional products at protected prices, where pricing is commensurate with pricing offered in their response.

All such additions must be approved by the Lead State Contract Administrator prior to being made available.

C. Product Specifications

All Offerors responding must provide detailed device specifications demonstrating their ability to meet or exceed the listed criteria, or provide a justification as to why alternate specifications should be considered. The State will deem any response that does not meet the specifications listed below without

providing adequate justification for an alternate bid non-responsive. Additionally, Offerors should classify products as Class 1 – Having No Medical Training or Class 2 – Slight Medical Training, and any other classes as appropriate.

Offerors should include the cost associated with each device being bid separately using the provided Cost Proposal Forms (Attachment C). If cost information is provided outside of the separate cost proposal section, the Lead State reserves the right to redact an Offeror's proposal so that it complies with the requirements of the RFP. Such redaction may have a detrimental effect on the competitiveness of an Offeror's Proposal.

a. Public Access and Infrequent User AEDs

Philips is proposing our HeartStart Onsite, HeartStart FRx and HeartStart FR3 for the Public Access and Infrequent User AEDs.

Philips HeartStart Onsite:

Class 1 – Having No Medical Training (As defined by this RFP)

The **Philips HeartStart Onsite** defibrillator is designed for the ordinary person in the extraordinary moment, OnSite is ready to act and ready to go. It allows virtually anyone to treat the most common cause of sudden cardiac arrest (SCA) by delivering a shock quickly and effectively, wherever SCA happens.

Philips HeartStart Onsite - A simple, step-by-step process with clear, adaptive voice instructions empowers even the most inexperienced responders.

With access to the right equipment and support, everyone can help save a life. Philips HeartStart OnSite defibrillator with Life Guidance acts as your personal coach to guide you through a cardiac emergency with a simple, step-by-step process. Adaptive instructions keep you on track, and intelligent sensors automatically deliver the right therapy, helping give you the confidence to lead the way to save a life.

Guides you through every step

Just pull the green handle to activate your OnSite defibrillator, and Life Guidance voice instructions will calmly and clearly guide you through the entire process – from placing each pad on the patient to performing cardiopulmonary resuscitation (CPR) and delivering a defibrillation shock. It even guides you on the frequency and depth of chest compressions, as well as breaths.

Use OnSite to train

To give you confidence in your ability, you also can install a special pads cartridge that temporarily turns your OnSite defibrillator into a trainer, or watch our collection of videos that describe every aspect of the defibrillator.

Virtually ready to use out of the box

PHILIPS

With OnSite's Ready-Pack, you can enjoy peace of mind knowing your OnSite is deployed correctly and is ready to go when needed.

- Arrives with the SMART Pads cartridge and battery already installed
- Is positioned inside the carry case with a spare SMART Pads cartridge in place
- Just pull the green tab to launch the initial self-test
- Conducts 85 automatic self-tests daily, weekly, and monthly, including testing the pads

For more detailed specifications on the proposed Philips HeartStart Onsite, please see the enclosed technical data sheets and brochures.

Philips is proposing our HeartStart FRx and HeartStart FR3 for the First Responder AEDs.

HeartStart FRx:

Class 1 – Having No Medical Training (As defined by this RFP)

Philips HeartStart FRx defibrillator with Life Guidance is designed for those who get there first. With access to the right equipment and support, everyone can help save a life. Philips HeartStart FRx defibrillator with Life Guidance acts as your personal coach to guide you through a cardiac emergency with a simple, step-by-step process.

Adaptive instructions keep you on track and intelligent sensors automatically deliver the right therapy, helping give you the confidence to lead the way to save a life.

The HeartStart FRx defibrillator includes advanced Life Guidance features to help guide the treatment of sudden cardiac arrest. With easy set-up, clear voice prompts, and rugged design, HeartStart FRx is designed for all on-the-spot responders.

Patented Quick Shock of the Philips HeartStart FRx typically administers a shock just eight seconds after CPR, making the FRx among the fastest in its class at delivering shock treatment after CPR.

The FRx defibrillator features Life Guidance intuitive, step-by-step voice instructions, including CPR coaching, to help give responders the confidence that's needed when treating a cardiac arrest. A clear, calm voice and descriptive visual icons guide you through every step, from pad placement to cardiopulmonary resuscitation (CPR) and shock delivery. The voice prompts are paced to your actions, so that you don't need to worry about feeling rushed, overwhelmed, or slowed down.

CPR assistance

Just press the blue i-button for assistance with CPR, and Life Guidance provides instructions and audio cues for the appropriate number, rate, and depth of chest compressions, as well as for each breath. If the Infant/Child Key is inserted, the instructions adapt to CPR instructions that are appropriate for an infant or child.

Defibrillation guidance

To deliver a shock, simply place the pads on bare skin where indicated by the placement diagram, and press the orange Shock button when prompted. Flashing icons and a quick reference guide augment the voice instructions, so you'll know what to do even in a noisy setting.

EMS hand-off

The FRx even reminds you to be sure that emergency medical services (EMS) has been called. And once EMS arrives, hand-off is fast and easy because the FRx pads are compatible with advanced defibrillators from Philips and other manufacturers. Special adapters allow our pads to be plugged into advanced care devices to provide continuity of care.

For more detailed specifications on the proposed Philips HeartStart FRx, please see the enclosed technical data sheets and brochures.

HeartStart FR3:

Class 2 – Slight Medical Training (As defined by this RFP)

Philips HeartStart FR3 Defibrillator for professional responders is designed to make lifesaving faster, easier, and better.

Faster – helping you do your job faster as it significantly reduces deployment time. It eliminates steps to help you start the right therapy – CPR or defibrillation – on your patient faster. Responders can also quickly disconnect the pads and CPR meter from the HeartStart FR3 and connect them to the HeartStart MRx monitor/defibrillator, for fast patient hand-off.

Easier – helping make your job easier because it is small, light, and easy to carry. The optional Q-CPR measurement and feedback technology is set up to help you perform guidelines-compliant CPR. Additionally, HeartStart FR3 is designed to be rugged, reliable, and ready to use.

Better – helping you improve your response by

At only 3.5lbs The HeartStart FR3 is Small and light weight , which makes it easier to carry with your other equipment and easy to use and maneuver in tight places

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supporting a culture of continuous improvement, including training opportunities to fine-tune SCA response.

The HeartStart FR3 is small and light, which makes it easy to carry and maneuver in tight places.

For more detailed specifications on the proposed Philips HeartStart FR3, please see the enclosed technical data sheets and brochures.

i. The AED must enhance user performance by displaying visual icons or audible prompts.

ii. The AED must guide the rescuer in following the proper rescue sequence.

iii. The AED must utilize a biphasic waveform with maximum energy setting of 200 Joules.

iv. The AED must be user configurable to adapt to local and changing protocols.

Philips proposed AEDs are highly configurable, and we will work with the customer in regards to adapting to local and changing protocols. While we cannot commit to future protocol's, historically, Philips defibrillators not only adhere to the AHA standards and protocols, our relationship with the AHA has helped drive the guidelines.

v. The AED must be capable of automatic self-tests of the internal circuitry delivery system.

vi. The AED self-tests perform automatic daily self-tests or be user programmable for 1-7 day time intervals.

vii. The AED must offer the capability of a user-activated manual selftest.

viii. The AED must include an easily identifiable on/off switch on the front of the device.

ix. The AED must have an easy to see status indicator that advises users if the unit requires service.

x. The AED must offer an audible tone that sounds if the unit requires service.

xi. The AED must record data to an internal memory.

xii. The AED must include the ability to download data to a computer.

xiii. The AED must utilize pre-connected, disposable, single use, self-adhesive electrode(s).

xiv. The electrode must have a shelf life of at least two years.

xv. The AED must have a cable length of at least 48 inches.

xvi. The AED must include a patient analysis system that automatically evaluates patient ECG or shockable/non-shockable rhythms.

xvii. The AED must be able to operate in a temperature range of 32 degrees Fahrenheit to 122 degrees Fahrenheit.

xviii. The AED must have a shock or abuse tolerance that passes the one meter, any edge, corner, or surface drop test in standby mode.

Every Philips proposed AED meets this spec, but additionally the HeartStart FRx withstands a 1.22meter drop.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart On-Site, FRx and FR3 AED models.

b. First Responder AEDs

Philips is proposing our HeartStart FR3 for the First Responder AEDs.

HeartStart FR3:

Class 2 – Slight Medical Training (As defined by this RFP)

Philips HeartStart FR3 Defibrillator for professional responders is designed to make lifesaving faster, easier, and better.

At only 3.5lbs The HeartStart FR3 is Small and light weight , which makes it easier to carry with your other equipment and easy to use and maneuver in tight places

Faster – helping you do your job faster as it significantly reduces deployment time. It eliminates steps to help you start the right therapy – CPR or defibrillation – on your patient faster. Responders can also quickly disconnect the pads and CPR meter from the HeartStart FR3 and connect them to the HeartStart MRx monitor/defibrillator, for fast patient hand-off.

Easier – helping make your job easier because it is small, light, and easy to carry. The optional Q-CPR measurement and feedback technology is set up to help you perform guidelines-compliant CPR. Additionally, HeartStart FR3 is designed to be rugged, reliable, and ready to use.

Better – helping you improve your response by supporting a culture of continuous improvement, including training opportunities to fine-tune SCA response.

The HeartStart FR3 is small and light, which makes it easy to carry and maneuver in tight places.

For more detailed specifications on the proposed Philips HeartStart FR3, please see the enclosed technical data sheets and brochures.

i. The pediatric algorithm must alter the default energy levels the AED delivers to pediatric patients to levels of 50, 70 and 85 Joules.

The Philips SMART Biphasic pediatric algorithm is 50 joules fixed.

ii. The electrode must offer a CPR rate and depth sensor and an adaptive metronome that assists rescuers in performing proper CPR.

Using Philips Q-CPR technology, we provide immediate feedback on rate & depth. In addition, CPR measures release., a critical component in the CPR cycle.

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iii. The AED must offer disposable, single use, self-adhesive electrode(s)for ease of application.

iv. The AED must utilize a biphasic waveform.

v. The AED must be capable of operating in semi-automatic and/or manual mode.

vi. The AED must have the capability of monitoring a patient with a 3 lead patient cable through ECG electrodes.

vii. The energy settings must be user configurable with a pre-set maximum energy setting of 200 Joules or escalating variable energy range up to 360 Joules.

Using Philips SMART Biphasic algorithm, we use pre-set non-escalating 150 joules to insure we use our best shock first consistent with AHA recommendations.

viii. The electrode must have a shelf-life of at least two years.

ix. The AED must invoke a specific pediatric algorithm when pediatric pads are attached.

x. The AED must have an internal memory capable of recording up to 7 hours of continuous information.

xi. The internal memory must be configurable to record information on up to four patients.

xii. The AED must meet water and particulate ingress ratings of IP55.

xiii. The AED must have a shock or abuse tolerance that passes the

one meter, any edge, corner, or surface drop test in standby mode.

xiv. The AED must have multiple user configurable prompts.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart FR3 AED model.

c. Professional Defibrillator Specifications

Philips is proposing our HeartStart MRx Monitor/Defibrillator for the Professional Defibrillator category.

Philips HeartStart MRx Monitor/Defibrillator:

Class 3 – Professional (As defined by this RFP).

The Philips HeartStart MRx Monitor/Defibrillator system with Q-CPR employs the very latest in features for easy measurement and feedback of patient condition in **real time**. Unlike any other solution of its kind, it enables retrospective review of the essential components of CPR delivery along with other resuscitation data – like ECG, CO_2 and defibrillation and patient care events.

Additionally, Philips open systems approach to data management helps you streamline information so that it flows from your EMS units to, and throughout the hospital for enhanced patient care and operational efficiency. We are pleased to present the following information that highlights the powerful combination of features and benefits that our solution would bring to your ALS capabilities.

Philips HeartStart MRx Monitor/Defibrillator with Q-CPR

Philips offers a full range of resuscitation products to help improve survival outcomes wherever and whenever Sudden Cardiac Arrest (SCA) occurs. Our products are designed, tested, and manufactured to the highest levels of quality and performance; as if the life of someone we love depends on it.

The Philips HeartStart MRx Monitor/Defibrillator provides several best-in-class advantages important to both EMS and hospital care providers – the longest battery-powered operating time, the largest color display, and fastest time to shock of any monitor / defibrillator. The Philips HeartStart MRx Monitor / Defibrillator provides the ability to stream all 12 leads of ECG on one screen and to transmit the 12-Lead report to your local STEMI center.

Real Time CPR Feedback Monitoring

Philips' Q-CPR™ is the most clinically proven CPR measurement and feedback tool. Next-Generation Q-CPR offers several vital advances, based on the latest research, and input from current Q-CPR users.

The award-winning digital Q-CPR meter enables you to rapidly adjust performance with dynamic, real-time feedback for each compression, displayed directly at patient chest level. In your hands, the Q-CPR meter helps ensure that every compression meets depth, rate, and 'complete release' targets to help improve the patient's chance of survival and increase the opportunity for a complete neurological recovery. Q-CPR features enhanced visual feedback and voice prompts that are configurable to 'ON' for those times when the scene requires audible feedback.

Only Q-CPR provides hyperventilation protection. Hyperventilation is relatively common and harmful during CPR, and only Q-CPR provides hyperventilation protection. Science shows that hyperventilation decreases coronary perfusion and research indicates that excessive ventilations are common. Competitors are unable to provide ventilation measurement or feedback of any kind. Without measuring ventilation you don't know what the ventilation rate is during resuscitation.

Reinforce effective CPR technique. Data generated by Q-CPR and presented by Event Review Pro provide the objective evidence required to reinforce effective techniques and motivate change where needed, enabling system-wide QA/QI and supporting continuous CPR training.

Our Most Potent Therapy, First Shock, Every Shock.

Philips pioneered biphasic therapy in external defibrillators with our first AED, the ForeRunner. Today, biphasic is the industry's gold standard. While all manufacturers have followed our lead, each employs a proprietary approach; however Biphasic therapies are not all alike. **Philips SMART Biphasic is the most proven therapy in the industry, backed by more evidence than any other waveform.** Studies show this waveform is highly effective across the entire spectrum of patients. It combines high current to

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maximize efficacy with low energy to minimize the harmful side effects of myocardial stunning and accompanying dysfunction, which can be fatal to an already fragile heart.

By minimizing side effects, SMART Biphasic can deliver its most potent therapy from the very first shock. There is no reason to hold back. Highest shock strength from the start, with minimal side effects. The best of both worlds, patent portfolios protecting waveform designs, manufacturers use distinct shock.

Philips HeartStart MRx Monitor / Defibrillator Important Features:

SMART Biphasic waveform Technology	Q-CPR including ventilation feedback
Analysis on screen	AED mode
Synchronized cardioversion	Non-invasive pacing
EtCO2 monitoring	SpO2 monitoring
Non-invasive blood pressure monitoring	Large, bright, easy-to-view display
Device diagnostic mode	Longest battery life
Temperature - an increasingly important parameter	Greater levels of configurability to meet the needs of each Customer
Highly configurable data connectivity	Ventilation monitoring during a code
Clinical Support Decision Tools such as DXL Algorithm with ACI-TIPI	Training and on-going clinical support- our clinicians train your clinicians
Task-specific views such as: Monitoring, 12-Lead Diagnostic, Manual Therapy and Pacer Mode	Manual mode with shock delivery through defibrillation pads or paddles

For more detailed specifications on the proposed Philips HeartStart MRx, please see the enclosed technical data sheets and brochures.

i. General:

1. Unit must be able to digitally record ECG on a standard a removable card (optional).

2. Unit must be able to transmit 12-lead ECG information through a fax/modem card.

3. External paddles must be available.

4. Unit shall have a battery that shall be easily and rapidly replaced.

5. Unit shall have an affixed protective roll cage for added device protection.

6. Unit shall have integral carry bags providing an independent location for each cable.

7. Unit shall be able to be tested through multi-function cable or paddles.

8. Unit must provide testing capability which tests: charging, energy delivery, paddles, multi-function cable.

9. Unit must have a test cap to allow multi-function cable testing.

10. Unit must have built-in AC or DC charging as a standard feature.

11. Unit must provide 3 hours typical continuous ECG monitoring time with a new battery.

12. Unit must provide 4 hrs typical continuous ECG monitoring time with a new Lithium Ion battery.

13. Unit must provide an OPS Clock Sync feature as a standard option.

Philips clarifies. The MRx has a clock that displays the current date and time on the top of the display screen.

14. The device must be compatible with the AHA Standards for Advanced Cardiac Life Support basis life support and Pediatric Life Support.

15. The device must be capable of monitoring the ECG with appropriate display and alarm (visual and audible).

16. The device shall provide normal operating capability for ALS users, including semi-automatic external defibrillation, manual defibrillation, synchronized cardio version and external pacing.

17. The unit shall have the capability to do Pulse Oximetry, 12 lead ECG, end-tidal C02 monitoring, capnography, NIBP, etc.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

ii. Display:

1. Unit must have a high-resolution color liquid crystal display as a standard feature.

Philips clarifies. The MRx display specifications are listed below:

Display

Size:	8.4in diagonal (128mm x 171mm)
Type:	TFT Color LCD
Resolution:	640 x 480 pixels (VGA)
Wave Viewing Time:	5 seconds (ECG)
Sweep Speed:	25 mm/s nominal (stationary trace; sweeping erase bar) for ECG, Invasive Pressures and SpO2; 6.25 mm/s for CO2

2. Unit must be able to change display from color to black on white or white on black through the push of a button.

3. Unit must have a screen with a sweep speed of 25 mm I sec.

4. Unit must have a screen that provides a minimum viewing time of 4 seconds.

5. Unit must have a display that provides the following information: Heart Rate, Lead/Pads, Alarm On/Off, Sp02, EtC02, NIBP, AED functions and prompts, defibrillator test function, self-test function, error corrections and faults, Pacer functions, Code markers, alarm selection and limits, delivered energy, joule settings, ECG size, Synchronized cardioversion, optional EtC02 readings, Sp02 readings and NIBP readings.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

iii. Defibrillator:

1. Unit must utilize a low energy, constant current biphasic waveform.

Philips clarifies. Low energy Biphasic Truncated Exponential. Waveform parameters adjusted as a function of patient impedance.

2. Unit must have the following energy selections available to provider in manual mode operation: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 50, 70, 85, 100, 120, 150, 200 joules.

Philips clarifies. The proposed MRx monitor/defibrillator offer the following energy selections: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 50, 70, 85, 100, 120, 150, 170, 200.

3. Unit must meet current AHA specifications for biphasic defibrillation.

4. Unit must allow provider the ability to adjust energy selection controls on device front panel or sternum paddle.

5. Unit must be able to charge to 200 joules in 6 seconds or less with a new fully charged battery.

6. Unit must display energy selected and delivered on monitor display, strip chart recorder and code summary.

7. Unit must have synchronized cardioversion capability with "sync" message displayed on monitor.

8. Unit must have optional paddles that are external anterior/anterior adult and pediatric paddles.

9. Unit must contain a built in defibrillator tester that tests energy output and continuity of the multifunction cable and paddles documented on strip chart recorder and optional PCMCIA card.

Philips clarifies. The MRx uses a compact flash card which is similar to a PCMCIA card. The MRx performs an hourly, daily, and weekly self-test. We recommend that users perform a manual test of the defibrillator weekly. A test load is provided for this and the results are stored in the MRx and can be printed as needed.

10. Unit must have a "Multi-function" cable that is field replaceable

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

iv. Recorder:

1. Unit must utilize a thermal strip chart recorder.

2. Strip chart recorder must use at least 90mm paper width thermal recording paper.

Philips clarifies. 50mm or 75mm available.

3. Strip chart recorder must utilize a 6 second delay.

Philips clarifies. Printer prints real-time or 10 second delay.

4. Strip chart recorder must be able to print the following annotations: Time, date, defib. energy, heart rate, pacer output (Pacer version only), QRS sync marker, ECG SIZE, lead, alarm, DEFIB TEST OK/FAIL, ANALYZE ECG, PADS OFF, ANALYSIS HALTED, NOISY ECG, SHOCK ADVISED, NO SHOCK ADVISED, ECG TOO LARGE and diagnostic bandwidth.

The Philips MRx has a wide array of printing capabilities. While some of the terms used above may not be the same terms utilized by the MRx, the MRx certainly records and will print the intending information for all of the items listed. Below is a general description describing the various printable reports.

Thermal Array Printer

Continuous ECG Strip: The Print key starts and stops the strip. The printer can be configured to run real time or with a 10-second delay. The strip prints the primary ECG lead and a second or third wave (75mm printer only) with event annotations and measurements.

Auto Printing: The printer can be configured to automatically print on Mark Events, Charge, Shock, and Alarm. When an alarm condition occurs, the unit prints the Primary ECG wave, the alarming wave, if configured, and a third wave (75mm printer only).

Reports: The following can be printed:

- Event Summary (short, medium, and long)
- Vital Sign Trends
- 12-Lead
- Operational Check
- Configuration
- Status Log
- Device Information

Speed: 25 or 50 mm/s with an accuracy of +5%

Amplitude Accuracy: +5% or + 40 uV, whichever is greater

Paper Size:

- 50 mm (W) x 30 m (100 ft.) (L)
- 75 mm (W) x 30 m (100 ft.) (L)

5. Unit must have user configurable print out modes offering manual or automatic recording options initiated by alarm activation or defibrillator discharge.

6. Strip chart recorder must be able to print 3 leads simultaneously, diagnostic bandwidth and a 4x3 12-lead printout.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

v. Pacemaker:

1. Unit must utilize a constant current 40 ms pace pulse width.

With +/- 10% accuracy

2. Unit must have a continuously variable current level.

3. Unit must have a continuously variable pacing rate from 30-180 ppm.

4. Pacer parameters must be maintained when switching back to defibrillation or monitor mode.

5. The heart rate alarms must function in the pacing mode.

6. Unit must have mechanism to allow viewing of intrinsic patient rhythm without losing pacing capture.

7. Unit must be configurable for initial setting of pacing rate.

8. Unit must display pacing rate and milliamps on display.

9. The pacer must continue to deliver life-saving therapy in the event an ECG lead falls off.

10. Unit must be able to pace through multi-function or pacing electrodes.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

vi. 12- lead ECG:

1. The 12-lead parameter must reside within a defibrillator weighing less than 15 lbs.

2. The 12-lead parameter must be able to provide a diagnostic 12-lead ECG 4x3 printout by holding the recorder button for two seconds.

3. The 12-lead parameter must be capable of providing a diagnostic 12-lead ECG printout with interpretation by pressing the acquire button in the 12-lead mode.

4. The 12-lead parameter must allow direct transmission of 12-lead ECG via land or cell phone to a standard fax machine.

Philips clarifies. The Mrx supports transmission via WIFI and Cellular to Telemedicine server that will output to email, fax or a networked printer.

5. The 12-lead parameter must provide a user configuration that allows the option of printing detailed measurements along with the interpretation.

6. The 12-lead ECG must be capable of being acquired without entering deep menus and without the use of a trim knob.

7. The unit must offer an optional 0.05 to 40hz bandwidth.

8. The 12-lead parameter must allow users to easily insert patient name, age and gender using soft keys on the defibrillator.

9. The 12-lead parameter must allow users to print the 12 SL Analysis, including measurements and patient name, age and gender on 90mm fan-fold paper.

Philips clarifies. The Philips MRx utilizes the DXL 12 Lead Algorithm. Please see description for the IFU below. Also, Philips MRx utilizes a 75mm paper width in a roll.

The optional 12-Lead ECG function, using Philips' DXL 12-Lead Algorithm, is available in Monitor Mode and allows you to preview, acquire, print, copy, and store a 12-Lead ECG. In addition, the 12-Lead function provides computerized ECG analysis using the DXL Algorithm. A report with measurements and interpretive statements from the analysis is displayed, stored and printed, as configured. Certain interpretive results generate Critical Value statements which alert you to an interpretation which may mean your patient needs immediate attention.

The Philips DXL 12-Lead Algorithm provides an analysis of the amplitudes, durations, and morphologies of the ECG waveforms and the associated rhythm. Patient age and gender are used to define normal limits for heart rate, axis deviation, time intervals, and voltage values, for interpretation accuracy in tachycardia, bradycardia, prolongation or shortening of PR and QT intervals, hypertrophy, early repolarization, myocardial infarction and culprit artery detection. DXL Algorithm adult criteria apply if the patient age is 16 years old or older. Pediatric criteria apply if the patient age is less than 16. The DXL Algorithm also identifies paced patients automatically.

The DXL Algorithm also includes the optional Acute Cardiac Ischemia Time-Insensitive Predictive Instrument (ACI-TIPI) and Thrombolytic Predictive Instrument (TPI) algorithms. ACI-TIPI generates a 0-100% predicted probability score of Acute Cardiac Ischemia (ACI). TPI predicts patient outcomes with and without thrombolytic therapy for an acute myocardial infarction.

10. The 12-lead parameter must be capable of storing up to 24 pre-programmed telephone numbers facilitating rapid and easy 12-lead ECG transmission.

Philips clarifies. The MRx supports up to 20 sites that can hold up to 20 destinations in each site on the telemedicine server.

11. The 12-lead parameter must allow configuration of user defined lead groups for rapid printout and review of pertinent ECG.

12. The 12-lead patient cable must consist of 4 limb leads and a separate V lead cable.

13. The 12-lead patient cable must be capable of providing limb lead signals directly to the defibrillator when only the limb leads are attached.

14. The 12-lead patient cable must accommodate either snap or clip connectors.

15. The 12-lead parameter must be capable of providing an automatic patient identifier using 7 alphanumeric characters.

16. The 12-lead parameter must be capable of providing a device identifier using 3 alphanumeric characters.

17. The unit must be upgradeable to allow the use of an integrated Bluetooth option for the wireless transmission of 12-lead and vital sign data via a cell phone or other communication technology.

Philips takes exception. Bluetooth is not available. Wireless transmission is accomplished via Wireless Link.

18. The unit must provide serial communication capability through an RS232 serial port.

19. The unit must be able to transmit 12-lead and vital data both automatically and manually on acquisition.

20. The unit must be able to transmit all data stored on a PC card to a remote handheld device or laptop.

21. The unit must be able to provide the option for both landline and cellular transmission when utilizing a Bluetooth wireless option.

Philips takes exception. Bluetooth is not available. Wireless transmission is accomplished via Wireless Link.

22. The unit must offer the option of direct fax transmission via a Bluetooth option.

Philips takes exception. Bluetooth is not available. Wireless transmission is accomplished via Wireless Link.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

vii. Pulse Oximetry:

1. The unit must have an integral pulse oximeter or be upgradeable to include an integral Pulse Oximeter.

2. The unit must utilize pulse oximetry that has FDA 51 Ok clearance for use during patient motion and low perfusion.

3. The unit must utilize sensors that work in bright sunlight.

Philips clarifies. May not be reliable in direct sunlight.

4. The unit must utilize a pulse oximeter with alarms that are user adjustable in the field.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

viii. Capnography:

1. The unit, when purchased with Sp02, must have an EtC02 port.

Philips clarifies. Two separate options, available independently of each other.

2. All units with an EtC02 port must be upgradeable to include C02 by plugging in a mainstream or sidestream CAPNO 5 sensor.

3. The unit must be able to offer the option to upgrade to either mainstream or sidestream capnography with sensor located outside of the unit allowing easy service and replacement if needed.

4. The defibrillator must be capable of providing continuous EtC02 and Respiratory Rate readings as well as a capnogram for on-screen display or print-out.

5. The C02 sensors used must not require a yearly calibration check.

Philips clarifies. C02 sensors used require a yearly calibration check or every 4,000 hours.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

ix. Non-Invasive Blood Pressure:

1. Unit must be capable of acquiring a blood pressure within a typical measurement time of 30 seconds or less on average.

2. Unit must incorporate oscillometric technology.

3. Unit must display systolic, diastolic and mean pressures.

4. Unit must be capable of taking automatic, stat or manual measurements.

5. Automatic intervals should be user adjustable to 2.5, 5, 10, 15, 20, 30, 45, 60, 90, and 120 minutes.

Philips clarifies. Automatic intervals are user adjustable to 2.5, 5, 10, 15, 30, 60, and 120 minutes. Every 1 minute is also available.

6. Stat mode must allow up to 10 measurements within 5 minutes.

Philips clarifies. The MRx does not have a designated STAT BP. Repetitive, manual cycled NBP is available. While the cycle for a NBP is usually around the 30-45 second timeframe, it can take up to 75

seconds to cycle depending on the patient. Our NBP does allow for a 1 minute BP schedule option within the menu and configuration settings.

7. Unit must include an artifact indicator which is displayed when excessive artifact is detected.

8. Unit must display a cuff inflation status bar.

9. Unit be capable of displaying and/or printing up to 4 hours of patient BP history data.

Philips complies with all specifications listed above, unless otherwise noted, with our proposed HeartStart MRx model.

D. Support Specifications

Specifications for product consumables, accessories, and support can be found below. Each Offeror should bid the items or services requested in order to submit a complete Proposal. Where unable to provide an applicable product or service that has been specifically requested, Offerors should provide an explanation for the omission.

Philips acknowledges.

a. Product Consumables and Accessories

i. Market Basket Items

A list of the most commonly used consumables and accessories have been identified as market basket on contract. For each device offered, Offerors should bid the relevant market basket included below:

a. Batteries

b. Adult Pads (electrodes)

c. Pediatric Pads (electrodes)

d. Carrying Cases

e. Wall Mount Kits

f. Fast Response Kits

Offerors should include in the technical response the market basket items being bid and the specifications of each. No pricing information should be included in the technical response.

Philips complies. Please see Section 10, Supplemental Information, for brochures that list the specifications of the “Market Basket” type consumables and accessories included in our proposal. Please see Attachment C for pricing on all applicable accessories and consumables.

ii. Catalogue Discount

In addition to the line item pricing of their offered devices and market basket items, Offerors must include in their cost proposal a blanket discount off of their catalogue price for items in their catalogue which are not otherwise included in their cost proposal.

Philips complies. Please see Attachment C for pricing on all applicable discounts.

Pricing information should be included on Attachment C – Cost Proposal Forms. No pricing information should be included in the technical response.

Philips complies. Please see Attachment C for pricing on all applicable discounts.

b. Warranties and Extended Warranties

i. Basic Warranty

All Offerors must include a basic warranty for their products for no less than one year at no additional cost to Participating States. Warranties must guarantee the safe and effective operation of devices for the duration of the warranty and the cost for repair or replacement of devices under warranty must be covered by the Offeror. Each Offeror must include a complete description of the coverage provided under their basic warranty.

Philips complies.

Warranty for the Onsite AED

The Onsite AED comes with an eight (8) year warranty.

Warranty for the FRx AED

The FRX AED comes with an eight (8) year warranty.

Warranty for the FR3 AED

The FR3 AED comes with a five (5) year warranty.

Warranty for the MRx Cardiac Monitor/Defibrillator

The Philips HeartStart MRx Monitor/Defibrillator (EMS model) comes with a choice of the following three warranties:

- One (1) year Onsite repair
- Two (2) year Bench warranty (return and repair with loaner), or
- Three (3) year Biomed parts only warranty

ii. Extended Warranty

Offerors may bid an extended warranty past the term of the basic warranty provided under the contract. Offerors must include a complete description of the coverage provided under the extended warranty in their technical response.

Service Plan Options for AEDs:

Service plans are not applicable for AEDs through Philips. The proposed AEDs come with 5 and 8 year warranties. Please see Section 10 for the details of the warranty for each proposed model. Customers have the option to purchase one year extended warranties as well, and the AED device performs daily, weekly and monthly self-checks.

Under warranty, there is repair and return or unit replacement.

Service Plan Options for MRx:

Philips offers service agreements to provide product support upon expiration of the product warranty. Customers who are not under warranty or who do not have a service plan can purchase service on a time and materials basis.

There are four service plan options for the Philips HeartStart MRx Monitor/Defibrillators. All come with technical and clinical phone support. They are:

- On-Site Comprehensive (full service plan)
- Bench Repair (send to Philips Repair Center with loaner)
- Support Parts (for parts) and
- Performance Assurance (preventative maintenance).

A brochure on applicable service plan options is located in Section 10.

c. Product Training

i. Product Documentation

All product documentation, manuals, and specifications must be provided at the request of Participating States for no additional cost.

Philips complies.

ii. Web/Video Training

Offerors must provide online or multimedia training options at no additional cost to the participating States. Offerors must include in their Proposal a description of the online and multimedia training options that are available.

Philips complies. See "iii. On-site Training" below for a detailed look at the comprehensive training Philips offers.

iii. On-site Training

Offerors should include a description of their ability to provide onsite training, as requested. The cost for on-site training should be reflected in the Offerors' cost proposals as a separate per day rate for each Participating State.

Please see below for AED training options:

Medic First Aid Training Courses

REF	DESCRIPTION
861280	Medic First Aid (MFA) Responder CPR/AED Training, select one option
Option S01	MFA Responder Training, 4-hour – CPR/AED (up to 12 students) Includes fundamental cardiopulmonary resuscitation (CPR) and operation of Philips HeartStart Defibrillator.
Option S02	MFA Responder Training, 6-hour – CPR/AED/First Aid (up to 12 students) Includes fundamental cardiopulmonary resuscitation (CPR), first aid, and operation of Philips HeartStart Defibrillator.

Vouchers for Training must be redeemed within one (1) year of date of purchase.
*Supplement courses include MFA blood borne pathogens, emergency oxygen, first aid or infant/child CPR.

AHA Heartsaver Training Courses

REF	DESCRIPTION
989803147641	AHA Heartsaver AED with Adult CPR (1- 8 Students) Includes adult cardiopulmonary resuscitation (CPR); operation of Philips HeartStart Defibrillator, using barrier devices in CPR, and giving first aid for choking.

Vouchers for Training must be redeemed within one (1) year of date of purchase.
*Supplement courses include MFA blood borne pathogens, emergency oxygen, first aid or infant/child CPR.

Please see below for **MRx** training options:

Philips will provide a complete In-Service training on the proposed solutions for customers. We adapt our training to customer's clinicians needs and plan our training around them. Training will include a meeting before the sale is finalized with Philips and the staff educator to review education needs and available resources, working towards a plan that will meet the needs of the customer. The training plan will include all parameters purchased by customers and will be administered by a Philips trained clinical specialist. Training is provided onsite at your facility so no travel costs are required.

All training includes end-user, super-user and train the trainer education so that your internal staff becomes competent to train new staff members without the extra cost of purchasing refresher training.

The training time line specific for each customer will be developed by a Philips clinical educator, in consultation with them. Training will be available at a mutually agreed upon time and place. Refresher training can be purchased for a fee, if needed.

Customers are entitled to 8 consecutive hours (7am-7pm) of training with a Philips Clinical Educator for every $75,000 in hardware purchased. Typically, this meets the needs of our customer base. Beyond what Philips bundles, education can be purchased at a fee per day.

d. Software Updates

i. Offerors must include a description of updates required for the AED unit to maintain full functionality over the anticipated life of the unit and the methodology for performing or accessing the updates.

SOFTWARE Updates to Philips proprietary operating system software that enhances existing system functions and operation without hardware changes, provided to the customer at no cost.

HARDWARE Hardware Reliability Updates enable the system in its current configuration to operate properly. These updates may be mandated by the FDA (recall), or may be safety related (i.e. Safety, performance, reliability modifications, etc.). These updates are covered under Warranty and/or contract and provided by Philips at no additional charge. Installation of the updates will be performed as directed in the Philips Field Change Order policy (i.e. Field Change Orders, Action for Performance modifications, Service Recommendations, Technical Notes, etc.).

Some updates are mandatory. If a customer elects not to install a mandatory update, then Philips shall have no obligation to continue servicing the equipment until such update is installed.

An 'eligible upgrade' is defined as a software or hardware enhancement to the existing system sold separately as an upgrade. Upgrades do not include system "forklift" sales or similar system swap-out promotions offered by Marketing. Philips reserves the right to charge for upgrades, which are considered new versions of the software hardware/ firmware that add new features or otherwise extend the clinical usefulness of the equipment beyond the original specifications. Customers can request upgrades when available and pricing will be based on the current list price at the time of the request.

Cost of upgrades is dependent on size and scope of the upgrade. Upgrades are priced as they are released. The Philips Account Manager can provide customers with pricing at the time of upgrade release.

Philips provides a discount for system upgrades to those customers covered by select Philips Service Agreements. Any other discounts are to be decided and agreed upon at the time of future sales.

Philips will notify all Customers of new updates and/or upgrades as they become available.

Upon mutual agreement between Philips and the customer, the most convenient time is blocked off for the enhancement or upgrade to be installed. Installation cost included in the cost of the upgrade.

e. Customer and Service Support

i. 24/7 Call Support

24/7 Call Technical Support must be offered for all devices for a period of no less than 3 years after purchase at no additional cost to the Participating States.

The AED helpline in Bothell is the first place to call for help with your AED devices.

For the MRx call the Customer Care Solutions Center. The CCSC is described below:

As technology advances, so does the need for experts who have the clinical knowledge and technical skills to address your most urgent challenges. Our team of engineers, clinicians, and service

professionals resolve over 75% of calls remotely, resulting in fast technical diagnosis and problem resolution to maximize availability of your patient monitoring systems.

Philips customer service professionals average 15 years of experience in product, network, software, data center, and information technology. And the quality of our people is unmatched – many hold advanced engineering, clinical, and technical degrees and multiple certifications.

Philips state-of-the art Customer Care Solutions Center operates around the clock, just like you do. So when you have a question or service issue, you have direct, 24X7 access to experts with knowledge specific to your Philips patient monitoring systems.

Only Philips support personnel take your calls and respond to them. An effective, timely resolution of the issue is our commitment to you. We'll answer your call in an average of 30 seconds and route you to the most qualified representative.

Our state-of-the-art 60,000 square-feet Customer Care Solutions Center in Alpharetta, Georgia is your first point of contact when you require service support as a part of your warranty or Philips RightFit Service Agreement.

Operating 24/7 to ensure that all calls are received and properly routed, the Solutions Center is the hub for the skills and knowledge of more than 400 technical and clinical support engineers, as well as parts agents, to handle more than 2,500 customer calls a day. You can easily access technical, applications and medical IT support, or simply order a part for your system.

Our Solutions Center has earned a winning reputation in the service industry. We offer:

- A state-of-the-art telephony system that quickly and accurately connects customers by service agreement terms to a knowledgeable support engineer.
- Our Modality Data Center, which simulates customers' environments through our secure, high-speed clinical network.
- Professional training facilities equipped with the latest audio and video tools and Philips diagnostic and monitoring equipment.
- More than 60 highly trained multilingual frontline agents who stand ready to handle your call. In turn, these frontline agents have at their disposal the services of:
    - 1800+ Field Service Engineers
    - 280+ Technical and Clinical National Support Engineers
    - 24+ Parts Agents

Responsiveness

Your call is immediately routed to a solutions specialist who has been trained in your clinical specialty and to repair and maintain the equipment in your facility. If this team can't answer your question, you will have direct access to our remote technical or applications experts or even on-site support, if needed.

Convenience

With just one call - via our service center's Direct Connect technology - you will be automatically routed to the appropriate clinical, technical, and IT support personnel. We have teams dedicated to every

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Philips system, including CT, Information Management, Nuclear Medicine, MRI, Patient Monitoring, PET, SPECT, Resuscitation, Ultrasound and X-ray. If necessary, you can even order parts.

Simulation Environment

No matter what type of system you have, our Modality Data Center is equipped with Philips products and software that enables our clinical and technical teams to simulate your working environment. Whether you're facing something as simple as preventative maintenance, or you require a diagnosis of workflow patterns across modalities, the Data Center has you covered. Moreover, for those customers who own older Philips systems, we maintain legacy machines in order to provide technical support for equipment no longer sold as new.

Remote Management

In many cases, Philips technicians and clinical experts can employ our Remote Desktop technology to take control of your system and guide you through the required steps for issue resolution – right over the phone!

Proactive Support

Often your medical equipment itself sends an alert to the Customer Care Service Center and issues can be addressed or fixed remotely even before you're aware of a problem. In fact, one out of three calls is resolved through our advanced remote capabilities.

Part of your service agreement

Philips U.S.-based Customer Care Service Center is available to you free of charge as part of your Philips Healthcare service agreement or warranty. Benefits include:

- More than 400 specialists at your service.
- Technical, applications and medical IT support personnel, who can service all Philips Healthcare systems and fill orders for parts.
- An industry-leading technical triage, which ensures that your call is routed directly to the appropriate team.
- Philips' access to extensive resources to help diagnose your problems, including a global knowledge-base and Philips Remote Services.

Philips Customer Services support you in every season of system ownership—from Planning through Start-up, Peak Usage and Renewal—by helping you simplify your operations in ways that let you spend more time focusing on what's most important: the needs of your patients.

ii. Service Plan

Offerors must propose a bi-annual service agreement to provide maintenance and repair on their proposed devices. Offerors Service Agreement will include, but are not limited to, the following services:

- Semi-annual physical inspection of AED's
- Program management and oversight
- Immediate notification of AED recalls and upgrades
- Repair or replace AED unit with loaner if needed
- Battery replacement program

- Inspect case and enclosure
- Data tracking of serial numbers, expiration dates, etc.
- Software and/or hardware updates
- Assurance of compliance of the AED unit with local, state and national regulations.

Offerors must be aware of local requirements for the States in which they will be servicing.

Offerors will submit their detailed plan on what is included and how they will provide maintenance and repairs on their proposed devices. Pricing will be on a semi-annual basis.

All work performed under the service agreement must meet the Manufacturers specifications for that device.

Offerors may submit additional information on whether they have different types of service agreements to provide maintenance and repair on their devices, i.e., standard service agreement or premier service agreement.

HeartStart AED Service Agreement information:

Service plans are not applicable for AEDs through Philips. Customers have the option to purchase one year extended warranties. Under warranty, there is repair and return or unit replacement only.

Service options for AEDs may be offered by authorized distributors. Customers would need to contact authorized distributors directly.

- Semi-annual physical inspection of AED's

  Semi-annual physical inspection of AEDs is not required. Philips AEDs perform daily, weekly, monthly tests. If device detects an issue, customer can contact customer service and a replacement will be provided through warranty. If customer still desires a physical inspection an ala carte service is available.

- Program management and oversight

  Program Management and oversight is available through third party providers

- Immediate notification of AED recalls and upgrades

  Philips complies at no additional cost to customer

- Repair or replace AED unit with loaner if needed

  Warranty exchange provided at no additional charge

- Battery replacement program

  Warranty exchange provided at no additional charge

- Inspect case and enclosure

  Available through ala carte inspection.

- Data tracking of serial numbers, expiration dates, etc.

Available through third party providers

- Software and/or hardware updates

  Please see “d. Software Updates” above for details.

- Assurance of compliance of the AED unit with local, state and national regulations.

  Available through third party providers

HeartStart MRx Service Agreement information:

Philips offers service agreements to provide product support upon expiration of the product warranty. Customers who are not under warranty or who do not have a service plan can purchase service on a time and materials basis.

There are four service plan options for the **Philips HeartStart MRx Monitor/Defibrillators**. All come with technical and clinical phone support. They are:

- On-Site Comprehensive (full service plan)
- Bench Repair (send to Philips Repair Center with loaner)
- Support Parts (for parts) and
- Performance Assurance (preventative maintenance).

A brochure on Service Plan options is located in Section 10.

f. Value Added Options

Offerors may include in their Proposal Additional Value Added options not specifically requested in the scope of work. Value Added options should not deviate from the nature of products and services requested in the scope of work and should include a thorough description of the option and how it brings value to the State. Examples include battery replacement plans, unconventional training options, and other services not specified. Award of Value Added options is subject to the approval of the Lead State.

As future value-added options become available, we are open to discussions with OK NASPO for additional options to be added to the master agreement.

Section 6

Cost (Submitted Under Separate Cover)

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Section 6

Cost Proposal

Please note: This binder does not contain any proposed pricing.

Section 7

Usage Fee and Reporting Plan

PHILIPS

Section 7

Usage Fee & Reporting Plan

Usage Fee and Reporting Plan. The detailed plan for meeting the Usage Fee and Reporting requirements of this RFP. This plan should provide a comprehensive description of how the Offeror plans to collect and deliver the data and fees required by NASPO ValuePoint and Participating States.

Offeror's internal business process requires sales reports be prepared within 7 business days following the close of a quarter. Reportable data is collected from any participating distributors during this period as well. The data is validated and formatted as required by the receiving agency. The fee payment is requisitioned as required by Offeror's internal process. When processed, the payment is delivered to the receiving entity, via their designated instructions, under separate cover from the report. The report is delivered to the State as prescribed in their PA or other governing instruction.

Section 6: Usage Fee and Reporting Plan

Offerors shall include in their proposal a detailed plan for meeting the usage fee and reporting requirements of NASPO ValuePoint and Participating States. All information within the plan must be kept current, with NASPO ValuePoint and the Lead State Contract Administrator being notified of any changes to the usage fee and reporting plan immediately.

The plan shall include, but not be limited to, the following components:

- Offerors shall identify the person responsible for providing the mandatory usage reports.
- Offerors shall identify the method and frequency in which usage data will be collected from authorized distributors.
- Offerors shall identify the method by which usage fees will be distributed to NASPO ValuePoint and applicable Participating States.
- Offerors shall identify the method in which up to date information will be provided to NASPO ValuePoint and the Lead State Contract Administrator.

Offeror's internal business process requires sales reports be prepared within 7 business days following the close of a quarter. Reportable data is collected from any participating distributors during this period as well. The data is validated and formatted as required by the receiving agency. The fee payment is requisitioned as required by Offeror's internal process. When processed, the payment is delivered to the receiving entity, via their designated instructions, under separate cover from the report. The report is delivered to the State as prescribed in their PA or other governing instruction.

Usage fees will be paid in accordance with contract requirements for each entity under SW17300 and for whom such payment method has been contractually and expressly stated. If no payment method is included in the contract, Offeror shall mail the payment to the State Procurement Official.

As information related to Offeror's participation becomes available during the course of the contract term, it shall be sent directly to the RFP lead shown on page 3 of the RFP, Solicitation Number SW17300,

or as may otherwise be required, with the expectation that the updated information shall be posted on the relevant website.

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Section 8

Approved Distributors

PHILIPS

Section 8

Approved Distributors

Approved Distributors. Contracts will exclusively be awarded to manufacturers. Offerors should include on the provided form (Attachment E) the requested information for all authorized distributors.

Philips' proposed list of distributors in Attachment E is contingent upon the distributors listed signing an agreement with Philips to participate in the OK NASPO contract and therefore is subject to change following the bid award.

NC SUPPLIER CONTACT FORM

Company Information	
Company Name	Philips Healthcare, a division of Philips Electronics North America Corporation
Address	3000 Minuteman Rd.
City, State, Zip Code	Andover, MA 01810
Company Phone	1-800-225-0230
Company Fax	
Description of Products Sold	Philips Healthcare focuses on diagnostic imaging, image-guided therapy, patient monitoring and health informatics, as well as in consumer health and home care.
Does your company utilize fulfillment partners/channel partners (dealers, distributors, resellers, etc.)? **Yes** ☐ **No** ☐	
Customer Service Phone Number	Philips Customer Care Solution Center at 1-800-722-9377
Federal Tax ID Number	13-3429115
Ariba Network ID (if applicable)	
Dun & Bradstreet Number	15-388-2816
Website URL (if applicable)	http://www.usa.philips.com/healthcare
Business Contact – Person who understands NC relationships and who can serve as a project manager	
First and Last Name	Bob Horkavy
Job Title	Account Manager
Phone Number	919 943-7419 (Mobile)
Fax Number	
E-Mail Address	bob.horkavy@philips.com
Address (if different from above)	
Technical Contact – (If different from above) – Person within your organization who can assist with the creation of an electronic product catalog for your contract line items	
First and Last Name	Bob Horkavy
Job Title	Account Manager
Phone Number	919 943-7419 (Mobile)
Fax Number	
E-Mail Address	bob.horkavy@philips.com
Address (if different from above)	
Corporate eCommerce Contact – (If different from above) – Person within your organization who best understands the company eCommerce initiatives and will communicate these initiatives to the organization	
First and Last Name	
Job Title	
Phone Number	
Fax Number	
E-Mail Address	
Address (if different from above)	

SERVICE DISTRIBUTION

SERVICE

Names, addresses and telephone numbers of representatives who will render services under this contract.
(Use additional sheets if necessary)

Name	**Bob Horkavy**	**Phone**	**919-943-7419**
Address	**148 Winter Street**	**Fax**	
City, State, Zip	**Kyle, TX 78640**	**Email**	bob.horkavy@philips.com

Name	**Jeff Adams**	**Phone**	**630-423-2397**
Address	**21 Citation Circle**	**Fax**	
City, State, Zip	**Wheaton, IL**	**Email**	jeff.adams@philips.com

Name	**Katie Boucher**	**Phone**	**206-550-5175**
Address	**4616 25th Avenue NE #615**	**Fax**	
City, State, Zip	**Seattle, WA 98105**	**Email**	katie.boucher@philips.com

Name	**Tony Giles**	**Phone**	**240-888-4826**
Address	**7116 Intrepid Lane**	**Fax**	
City, State, Zip	**Gaithersburg, MD 20879**	**Email**	anthony.giles@philips.com

Name	**Ralph Huttick**	**Phone**	**215-704-8213**
Address	**265 Saint Leonards Road**	**Fax**	
City, State, Zip	**Holland, PA 18966**	**Email**	ralph.huttick@philips.com

DISTRIBUTION

Number of distribution points from which contract will be serviced: _15_____. **Use additional sheets if necessary)**

Distribution points location (City & State):			
1	Bothell, WA	**8**	Pinellas Park, FL
2	Tewksbury, MA	**9**	Henderson, NV
3	Davie, FL	**10**	Sea Cliff, NY
4	Woodruff, WI	**11**	Danvers, MA
5	Chicago, IL	**12**	Rancho Cordova, CA
6	Brookfield, CT	**13**	Youngsville, NC
7	Reynoldsburg, OH	**14**	New York, NY
15	Brentwood, TN		

SERVICE
additional sheets if necessary)

Name	**Dennis Matarese**	**Phone**	**561-310-9423**
Address	**13457 William Myers Court**	**Fax**	
City, State, Zip	**Palm Beach Gardens, FL 33410**	**Email**	dennis.matarese@philips.com

Name	**Brent Madigan**	**Phone**	**925-332-9170**
Address	**14 Greenway Road**	**Fax**	
City, State, Zip	**Windham, NH 03087**	**Email**	brent.madigan@philips.com

Name	**Anthony Verdeja**	**Phone**	**720-357-5487**
Address	**2680 Blake Street, #21**	**Fax**	
City, State, Zip	**Denver, CO 80205**	**Email**	anthony.verdeja@philips.com

Name	**David Saltzman**	**Phone**	**516-459-1224**
Address	**6 Locus Street**	**Fax**	
City, State, Zip	**Sea Cliff, NY 11579**	**Email**	david.saltzman@philips.com

Name	**Mark Johnson**	**Phone**	**678-488-5015**
Address	**3494 Saville Court**	**Fax**	
City, State, Zip	**Acworth, GA 30101**	**Email**	mark.k.johnson@philips.com

ORDERING INFORMATION

List the authorized dealers that will service this contract **(Use additional sheets if necessary)**:

Name	One Beat CPR + AED	**FID #**	
Address	4350 Oakes Rd, #500-501	**Phone**	855-663-2328
City, State, Zip	Davie, FL 33314	**Fax**	954-321-5307
Contact	Lon Rosen	**Email**	lon@onebeatcpr.com
Coverage Area:	All States - National		

Name	Allied 100, LLC (AED Superstore)	**FID #**	
Address	1800 US Highway 51 N	**Phone**	800-544-0048
City, State, Zip	Woodruff, WI 54568	**Fax**	888-364-2377
Contact	Micah Bonberg	**Email**	micah@aeds.com
Coverage Area:	All States - National		

Name	Stewart Oxygen Services of IL, Inc., d/b/a SOS Technologies- Chicago	**FID #**	
Address	4900 N. Elston Ave.	**Phone**	888-705-6100
City, State, Zip	Chicago, IL 60630	**Fax**	888-554-6100
Contact	David Lipman	**Email**	dlipman@sos4safety.com
Coverage Area:	All States - National		

Name	Global Med Industries, LLC dba HeartSmart.com	**FID #**	
Address	5 Del Mar Drive, Unit E	**Phone**	800-422-8129
City, State, Zip	Brookfield, CT 06804	**Fax**	**860-967-0565**
Contact	**Amanda Marshall**	**Email**	amanda.marshalll@heartsmart.com
Coverage Area:	All States - National		

Name	The JANZ Corporation	**FID #**	
Address	6950 Americana Pkwy, Suite F	**Phone**	**614-759-7700**
City, State, Zip	Reynoldsburg, OH 43068	**Fax**	
Contact	**Rick Finsterbusch**	**Email**	rick.finsterbusch@janzcorporation.com
Coverage Area:	**AR, FL, HI, IA, IN, MN, MO, MT, NC, ND, NV, NY, OK, OR, SD, UT, VA, WA, WI**		

Name	Altra Medical Corp.	**FID #**	
Address	9105 Belcher Rd.	**Phone**	**727-541-5900**
City, State, Zip	Pinellas Park FL 33782	**Fax**	**727-541-5990**
Contact	**Leslie Roberts**	**Email**	loroberts@altramedical.com
Coverage Area:	**FL, NC**		

Product information telephone number: _____

Name	Enerspect Medical Solutions, LLC	**FID #**	
Address	35 E. Horizon Ridge Pkwy. #110: PMB 50	**Phone**	888-522-5574
City, State, Zip	Henderson, NY 89002	**Fax**	702-586-4910
Contact	David Shelton	**Email**	david.shelton@enerspect.com
Coverage Area:	NV, UT		

Name	G.E. Pickering, Inc.	**FID #**	
Address	263 Glen Cove Ave.	**Phone**	800-492-0255
City, State, Zip	Sea Cliff, NY 11579	**Fax**	516-671-9606
Contact	Wendy Martin	**Email**	wendy@gepickering.com
Coverage Area:	NY		

Name	CF Medical	**FID #**	
Address	12 Lakeview Ave.	**Phone**	866-242-8010
City, State, Zip	Danvers, MA 01923	**Fax**	978-750-0596
Contact	Ed Frisch	**Email**	ed@cfmedical.com
Coverage Area:	NY		

Name	Life-Assist Inc.	**FID #**	
Address	11277 Sunrise Park Dr.	**Phone**	800-824-6016
City, State, Zip	Rancho Cordova, CA 95742	**Fax**	**800-824-6016**
Contact	**Christine Waugh**	**Email**	christine@life-assist.com
Coverage Area:	MT, ND, NV, OR, SD, UT, WA, ID, TX		

Name	Southeastern Emergency Equipment	**FID #**	
Address	5760 Hwy 96 West	**Phone**	**800-334-6656**
City, State, Zip	Youngsville, NC 27596	**Fax**	**888-556-1048**
Contact	**Carla Baker**	**Email**	carla@seequip.com
Coverage Area:	**NC**		

Name	Emergency Skills, Inc.	**FID #**	
Address	350 Seventh Ave. Suite 505	**Phone**	**212-564-6833**
City, State, Zip	New York, NY 10001	**Fax**	**212-564-6793**
Contact	**Sarah Gillen**	**Email**	sarahg@emergencyskills.com
Coverage Area:	**NY**		

Name	DXE/BoundTree	**FID #**	
Address	1001 Flagpole Court	**Phone**	866-349-4363
City, State, Zip	Brentwood, TN 37027	**Fax**	844-318-0590
Contact	Reuben Dickenson	**Email**	Reuben.Dickenson@dxemed.com
Coverage Area:	VA		

Name		**FID #**	
Address		**Phone**	
City, State, Zip		**Fax**	
Contact		**Email**	
Coverage Area:			

Section 9

Comments to Attachment A and Attachment H

PHILIPS

Section 9

Comments to Attachment A and Attachment H

Philips response to Solicitation SW17300 does not convey its acceptance of the Attachment A terms and conditions. Philips reserves the right to negotiate directly with states electing to participate after the bid is awarded.

Section 10

Supplemental Information

PHILIPS

PHILIPS PRODUCT WARRANTY

Patient Care and Monitoring Solutions ("PCMS") Products

This product warranty document is an addition to the terms and conditions set forth in the quotation to which this warranty document is attached and applies to the Patient Care and Monitoring Solutions Products listed on the quotation, hereinafter "PCMS Products." This warranty does not apply to replacement parts. The terms and conditions of the quotation are incorporated into this warranty document. The capitalized terms herein have the same meaning as set forth in the quotation unless defined herein.

1. *WARRANTY*

A. **Commencement of Warranty Period.** For all products that do not require installation, the warranty period begins on the date of invoice. For products that require installation, the warranty period begins upon completion of installation and product availability for first patient use. Available for first patient use means the product has been installed and substantially meets Philips' published specifications.

B. **Product Specifications.** Product Specifications means specific technical information about Philips products, which is published in Philips product manuals and technical data sheets in effect on the date Philips ships Customer's order.

C. **Product Type and Warranty.**

Category 1: Software Only Products (including Software Upgrades)
If the PCMS Product described in the quotation includes only Philips software, then Philips warrants that any and all media on which the Software is delivered to the customer shall be free of defects in material and workmanship for a period of ninety (90) days or as otherwise stated in the "PCMS PRODUCT WARRANTY CLASSIFICATION TABLE".

Category 2: Philips Integrated Hardware/Software Products/Supplies.
Philips Integrated Hardware/Software Products are those which run on Philips designated hardware platforms and which contain hardware which is part of the Philips PCMS Product as described in the Product's Specifications. Philips warrants such PCMS Products against defects in materials and workmanship and will perform substantially within the Product's Specifications for a period of 12 months or as otherwise set forth on the attached Warranty Classification Table. Designated hardware platforms are hardware validated by Philips to operate PCMS software products in a manner consistent with Product Specifications. Philips warrants supplies products against defects in materials and workmanship for a minimum of one year or the balance of the product's shelf life.

Philips Hardware Product Upgrades are those which provide additional functionality to Integrated Hardware Products. Philips warrants such PCMS Product Upgrades against defects in materials and workmanship and will perform substantially within the Product's Specifications for a period of 90 days.

Category 3: Non-Philips Complementary PCMS Products.
Non Philips Complementary Products are Customer selected hardware, which are not part of the Philips PCMS Product as described in the Product's Specifications. For Non Philips Complementary Products, the hardware supplier warranty will be passed through to the customer and the Philips PCMS warranty shall not apply.

D. **Exclusions.** Philips does not warrant PCMS Products to operate error free or without interruption. Philips does not warrant third party hardware including hardware component upgrades; third party software including software upgrades; third party operating systems or operating system patches, fixes and updates. Network hardware components, network operating systems, and network wires are not covered by this warranty document. Consumables used in the operation of the PCMS Product, such as, but not limited to storage media, are not covered under this warranty document. Any fixes, patches, updates or upgrades to the Software, including without limitation, any professional services are not covered by any warranty or condition, express, implied, or statutory.

E. **Warranty Limitations**. The above warranties do not apply to defects resulting from improper or inadequate maintenance or configuration by Customer; Customer or third party supplied software, interfacing or consumables; unauthorized modification; improper use or operations outside of the Specifications for the PCMS Product; abuse, negligence, accident, loss or damage in transit; improper site preparation; or unauthorized maintenance or repair. The warranty services do not include: servicing or replacing components of the PCMS Product other than those listed in the exhibits; the cost of consumable materials; providing software updates and upgrades, back-up copies of software, or the programming of custom code providing any service or parts specifically excluded under the quotation.

The warranties do not include any service necessary due to: a design, specification, or instruction provided by Customer or Customer representative; the failure of anyone other than Philips or Philips' subcontractor to comply with Philips' written instructions or recommendations; any combining of the PCMS Product with a product or software of other manufacturers other than those recommended by Philips; any alteration or improper storage, handling, use or maintenance of the PCMS Product by anyone other than Philips or Philips' subcontractor.

THE WARRANTIES SET FORTH IN PHILIPS' WARRANTY DOCUMENT WITH RESPECT TO THIS PCMS PRODUCT (INCLUDING THE SOFTWARE PROVIDED WITH THE PCMS PRODUCT) ARE THE ONLY WARRANTIES MADE BY PHILIPS IN CONNECTION WITH THE PCMS PRODUCT, THE SOFTWARE, AND THE TRANSACTIONS CONTEMPLATED BY THE QUOTATION, AND ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

2. *ACCESS TO PCMS PRODUCT*

Philips shall have full, free and safe access to the PCMS Product and Customer's operation, performance and maintenance records for the PCMS Product, on each scheduled or requested warranty service visit. Philips shall also have access to and use of any machine, service, attachments, features or other equipment necessary to perform the necessary service contemplated herein at no charge to Philips. Customer waives warranty service if access is not provided to the PCMS Product and Customer's records. Should Philips be denied access to the PCMS Product or Customer's records at the agreed upon time, a charge equal to the appropriate hourly rate will be accepted by the Customer for "waiting time".

3. *WARRANTY COVERAGE & RESPONSE TIME*

Philips will provide to the Customer the on-site or remote Warranty service hours set forth on the Warranty Classification Table. Initial telephone response time will be within two (2) hours 8a.m. through 5p.m., Monday through Friday, excluding Philips holidays and within four (4) hours after hours Customer local time.

4. *TRANSFER OF PCMS INSTALLABLE PRODUCT*

At Philips' discretion, if Customer transfers or relocates the PCMS installable Product, or any portion thereof, all obligations under this warranty document will terminate unless Customer receives the prior written consent of Philips for the transfer or relocation. At Customer's request, Philips, at its discretion, will re-locate the PCMS Product and shall re-certify the PCMS Product, at the Customers expense.

5. *CUSTOMER RESPONSIBILITIES FOR NETWORKED PRODUCTS*

A. System Administrator. The Customer shall designate and train system administrator(s), as defined in the Professional Services Statement of Work (SOW) if applicable, who will serve as Philips' primary support contacts (the "Administrators") during the applicable warranty period. If the Customer does not have trained Administrators, then the Customer will be required to purchase an optional PCMS Product administration service from Philips.

B. Remote Access. The Customer shall provide Philips with remote access to the PCMS Product as per the Products Specifications and shall notify Philips of any changes to remote access connection procedures. Customer must also provide Philips with the network and local machine access privileges necessary to perform the warranty services. In the event that the Customer prohibits Philips from remotely accessing the PCMS Product and Philips unnecessarily sends a field service engineer to the PCMS Product site, the Customer will be charged for the services rendered based upon Philips' then-current standard labor and material rates.

C. Security. Philips has taken commercially reasonable steps to ensure that all software is free from computer viruses intentional or unintentional that disable, harm or otherwise disrupt computer systems or networks. Philips accepts no liability in respect to any loss, cost, damage, inconvenience or expense suffered as a result of any computer viruses. Post installation, Customer is solely responsible for providing adequate security to prevent unauthorized access to or use of the PCMS Product, including but not limited to access to proprietary and confidential information.

D. <u>Data Reconstruction.</u> The Customer is responsible for following the backup processes recommended in the Product Specifications. The Customer is responsible for the reconstruction, restoration, retrieval or recovery of any lost or altered patient records, files, programs, or data. Philips is not responsible for the reconstruction, restoration, retrieval or recovery of any lost or altered files, data, or programs.

6. *INTERFACE SUPPORT FOR NETWORKED PRODUCTS*

Philips' support of DICOM and HL7 interfaces to the PCMS Product is included in the applicable warranty period only to the extent that such interfaces exist at the PCMS Product location at the time of installation of the PCMS Product. PCMS Product interface support does not include the modification of any interface due to interface changes in third party hardware or software. In the case of a planned upgrade of the PCMS Product or any Software that involves modifications to the PCMS Product interface specifications, Philips requires that detailed technical information on such modifications be made available to Philips at least ninety (90) days in advance of the planned upgrade. In such a case Philips shall have the right, but not the obligation, to modify and upgrade the PCMS Product or Software to support such new interface specifications at a schedule and cost to be mutually approved by Philips and the Customer. The Customer shall pay the cost of any additional work required to implement and support the new interface specifications at Philips' then-current standard rates for such service.

7. *LIMITATIONS OF LIABILITY AND DISCLAIMERS*

The total liability, if any, of Philips for all damages and based on all claims, whether arising from breach of contract, breach of warranty, negligence, indemnity, strict liability or other tort, or otherwise, arising from a PCMS Product, licensed software, and/or service is limited to the price paid hereunder for the PCMS Product, licensed software, or service. This limitation shall not apply to third party claims for bodily injury or death caused by Philips' negligence or proven product defect.

IN NO EVENT SHALL PHILIPS BE LIABLE FOR ANY INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, BUSINESS INTERRUPTION, LOSS OF DATA, OR THE COST OF SUBSTITUTE PRODUCTS OR SERVICES WHETHER ARISING FROM BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHER TORT.

8. FORCE MAJEURE

Philips shall be excused from performing its obligations arising from any delay or default caused by events beyond its reasonable control including, but not limited to, acts of God, acts of third parties, acts of the other party, acts of any civil or military authority, fire, floods, war, embargoes, labor disputes, acts of sabotage, riots, accidents, delays of carriers, subcontractors or suppliers, voluntary or mandatory compliance with any government act, regulation or request, shortage of labor, materials or manufacturing facilities.

PCMS PRODUCT WARRANTY CLASSIFICATION TABLE

WARRANTY NAME	WARRANTY DESCRIPTION	SERVICE LOCATION	WARRANTY PERIOD	PERIOD of COVERAGE	RESPONSE TIME	PCMS PRODUCTS Product Number/Description
Onsite	Customer site repair	Onsite	1 year	7x24	Maximum next day onsite.	IntelliVue Patient Monitors [MX400, MX450, MX500, MX550, MX700, MX800, MX40, X2, MP2, MP5, MP5SC, MP20, MP30, MP40, MP50] IntelliVue MP2/X2 Battery Extension (865297) IntelliVue Telemetry System (1.4GH) IntelliVue Wireless Infrastructure (802.11) IntelliVue XDS – Preinstalled hardware (865159 XD5, XD6) Philips IntelliVue Information Center iX A Hardware (H options) – 866023, 866025, 866424 Philips IntelliVue Information Center iX B Hardware (866424) IntelliVue Information Center N.01 Hardware (H options) 866091, 866092, 866093, 866094, 866095, 866096, 866097, 866112, 866113; CareEvent Hardware (HW options) IEM Hardware & Alarm Reporting Solution (866326) Juniper Firewall (866395) Avalon FM20, FM30, FM40, FM50 Invivo Expression Patient Monitor – 865214 Invivo 866120 Expression MR200 (2)
Onsite	Customer site repair	Onsite	1 Year	8a.m. - 5p.m., Monday – Friday (6)	Maximum next business day	Multi Measurement Server (M3001A) Flexible Module Rack (M8048A), Hemo Extension Module (M3012A), Capnography Extension Module (M3014A), Microstream C02 Extension Module (M3015A/B) Intravascular Oxygen Saturation (SO_2) Module (M1011A) PageWriter TC70 Cardiograph (860315) Most repairs can be completed remotely. Occasional onsite support only if required. PageWriter TC50 (860310) Most repairs can be completed remotely. Occasional onsite support only if required. This is an optional warranty purchased with the TC50 as an option if desired. Stress System ST80i Trolley (860344) ST80i Treadmill (TKM42500) Parameter Modules: Cardiac Output, SP02, Mixed Venous, Invasive Pressure, Temperature IntelliBridge (865115) M3535A Hospital HeartStart MRx (1) M3536A EMS HeartStart MRx (1) M4735A HeartStart XL (1) Invivo Precess 3160 Patient Monitor – 865323, 465485 (2)(9) Invivo Precess 3160 Patient Monitor – 865111 (2)

						Information Portal 5 (IP5) – 865471 (9) Respironics HRC V60 Ventilator
Bench	Repair and return of customer unit	Philips Customer Repair Ctr.	1 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical 3 business days (5)	Innercool RTx Endovascular System Innercool STx consoles Invivo Essential SPO2 Patient Monitor – 865353 (9) Respironics ChMV Smartmonitor 2 With Modem, PCMCIA Respironics ChMV Smartmonitor 2 With PCMCIA Respironics ChMV Smartmonitor 2 Ps W/Modem Respironics ChMV Smartmonitor 2 Psl W/Modem Respironics ChMV BiliTx Homecare Package-Neonatal Panel Respironics ChMV BiliTx Homecare Package-Wrap Panel Respironics ChMV Bilichek Advanced System Respironics ChMV Masimo Rad-8 Oximeter
Bench	Repair and return of customer unit	Philips Customer Repair Ctr.	2 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical 5-7 business days (5)	Holter Recorders Respironics HRC NM3 Monitor Respironics HRC Trilogy 202 (11)
Bench	Repair and return of customer unit (with loaner) (2)	Philips Customer Repair Ctr	2 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical 3 business days (5)	SureSignsVM1,VM4,VM6,VM8,VSi,VS2+,VS4, VSV (7) SureSigns VS Wireless Bridge (W01 option) M3536A EMS HeartStart MRx (1) 860310 PageWriter TC50 Cardiograph (7) This is the standard warranty but can be changed to a one-year on-site warranty through the purchase of a product option.
Bench	Repair and return of customer unit	Philips Customer Repair Ctr	3 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical 3 business days (5)	860306 PageWriter TC30 Cardiograph SureSigns VM8 SE (7)
Bench	Repair and return of customer unit (with loaner) (2)	Philips Customer Repair Ctr.	5 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical 3 business days (5)	M3535A Hospital HeartStart MRx (1) M4735A / HeartStart XL (1)
Exchange	Product exchange	N/A	1 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical next business day	M1019A (G5) M1013A (G1) M1014A Spirometry Module Tympanic Temperature Module (866149) BIS Module (M1034B); EEG Module (M1027B) IntelliVue XDS – Hardware Only (865159 XD1) IntelliVue Cableless SpO2 Pod (865215), IntelliVue Cableless NIBP Pod (865216), IntelliVue Cableless Respiration Pod (865218) IntelliVue TcG10 Module (865298) IntelliVue NMT Module (865383) IntelliBridge EC5 ID-Module (865114) IntelliBridge EC40/80 Hub (865056) Avalon CL (866074, 866075, 866076, 866077) StressVue System (not including treadmills)(10) Stress System ST80i (860343) ST80i Upgrade Kit (860351) Invivo Expression Display Control Unit (DCU) Respironics ChMV NeoPAP CPAP Device
Exchange	Product exchange	N/A	5 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical next business day	861388 HeartStart FR3 Text 861389 HeartStart FR3 ECG M3860A HeartStart FR2+ (ECG) M3861A HeartStart FR2+ (TEXT) 861458 ReFurb FR2+ ECG 861459 ReFurb FR2+ TEXT
Exchange	Product exchange	N/A	8 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical next business day	M5066A HeartStart Onsite M5068A HeartStart Home 861304 HeartStart FRx

Media Replacement Only		NA	90 days (3)	NA	NA	Philips IntelliVue Information Center iX A Software (000 option) – 866023, 866025 Philips IntelliVue Information Center iX B Software 866389, 866390 IntelliVue Mobile Caregiver (866337, 866492) CareEvent A Software – 866435 IntelliSpace Event Management (release 11) 866030 IntelliVue Information Center N.01 Software (A options) 866091, 866092, 866093, 866094, 866095, 866096, 866097, 866112, 866113 IntelliBridge Enterprise (866183) IB SC50 Device Interfacing Engine (866022) IntelliVue Guardian Software (866009) CS770 IntelliSpace Critical Care and Anesthesia (866072) CompuRecord (865230) IntelliSpace Perinatal, Revision J – 866458, 866459 IntelliSpace Perinatal, Revision H– 866131, 866132; 866133 OBTV G.0 Software Only (865342) TraceMasterVue Software Only for Clinic, Basic, Standard, Enterprise, & Universal Editions (860326) including Software Only Upgrades IntelliSpace ECG 860426 (software application only) Holter Software System including Software Upgrades ECG Gateway Software (860331) Enhanced Web Server (866109) PIIC MultiPatient Web Server (866193) CSCN Specifications (865461)
Remote (4)	Remote Access	Remote \ Onsite	1 Year	8a.m. - 5p.m., Monday – Friday (6)	Maximum next business day	
Remote (4)	Part Replacement	Remote \ Onsite	1 Year	8a.m. - 5p.m., Monday – Friday (6)	Maximum next business day	StressVue treadmills only TKM42500 and TMX425
Biomed	In-house Biomedical Parts	Customer site	3 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical next business day	SureSignsVM1,VM4,VM6,VM8,VSi,VS2+ ,VS4, VSV (7) M3536A HeartStart MRx (1)
Biomed	In-house Biomedical Parts	Customer site	5 Year	8a.m. - 5p.m., Monday – Friday (6)	Typical next business day	M3535A HeartStart MRx (1) M4735A / HeartStart XL (1) SureSigns VM8 SE (7)

Notes:

1. These devices offer optional warranties; the Customer must select one at the time of order or the default of the one year warranty will be applied.
2. Philips will provide a loaner for period of time product is under repair.
3. Warranty applies to media only.
4. Most repairs can be completed remotely. Occasional onsite support may be required.
5. 3-7 days does not include transportation to and from Philips' Customer Repair Center.
6. Excluding scheduled Philips holidays.
7. These devices offer optional warranties; the Customer must select one at the time of order or the default warranty will be applied. Note: the VSi, VS2+, and VS4 offer purchasable warranties for extended years of service as well.
8. Demo equipment will receive the same warranty as new equipment.
9. Invivo Patient Monitors are supported both onsite and at the bench
10. Primary warranty is exchange although, if the problem cannot be resolved by the CCSC, then FSE onsite will be utilized.
11. When supplied by Philips, a 90 day warranty will be offered on the internal and detachable battery.

PHILIPS

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WARRANTY

LIMITED WARRANTY. Philips Medical Systems ("Philips") warrants that HeartStart FR2 series, HeartStart HS1 series, HeartStart FRx, and HeartStart FR3 defibrillators (and related accessories for these defibrillators described herein) sold by Philips or an authorized Philips distributor, if (i) used in accordance with its labeling and instructions for use, and (ii) properly maintained, shall substantially conform to material specifications published by Philips for such products and shall be substantially free from defects in material and workmanship for the warranty period specified. The HeartStart FR2 series and FR3 defibrillators are warranted for five (5) years from the date of shipment by Philips. The HS1 series and FRx defibrillators are warranted for eight (8) years from the date of shipment by Philips. Disposable defibrillation pads are warranted until the expiration date listed on the package. HeartStart FR2 series, HS1 series, and FRx non-rechargeable lithium batteries are warranted for four (4) years, and the FR3 battery for three (3) years, from the date of installation, provided the battery is installed by the shelf-life date stated on the battery. For all other accessories for the FR2 series, HS1 series, FRx, and FR3 defibrillators, Philips warrants such products for 12 months from the date of shipment by Philips. Philips warrants the media on which the data management software copies are contained for a period of 60 days from the date of shipment by Philips.

This warranty does not apply to product defects resulting from improper or inadequate maintenance; use of the product with software, supplies or interfaces not supplied by Philips; use or operation of the product other than in accordance with Philips product specifications and written instruction; abuse, negligence, accident, loss or damage in transit; improper site preparation; or unauthorized repair or modification to the product ("Warranty Exclusions").

Customer's exclusive remedy and Philips' sole liability for breach of the foregoing warranty is as follows. If any product described herein fails to conform to the warranty set forth above, at its sole election (which election shall be made after Philips receives the product), Philips shall repair or replace the product, provided that (a) Philips receives written notice in a timely manner that such product failed to conform and a detailed explanation of any alleged nonconformity; (b) such product is returned to Philips during the warranty period; and (c) Philips is reasonably satisfied that claimed nonconformities actually exist and were not caused by the Warranty Exclusions. Philips is obligated to this warranty, provided that Philips has given prior consent to have the product returned to it, and the product is returned using a Returned Goods Authorization (RGA) number provided by Philips. In such instance, Philips shall be responsible for the cost of shipping.

Delivering meaningful innovations

Philips HeartStart MRx Monitor/Defibrillator for emergency care

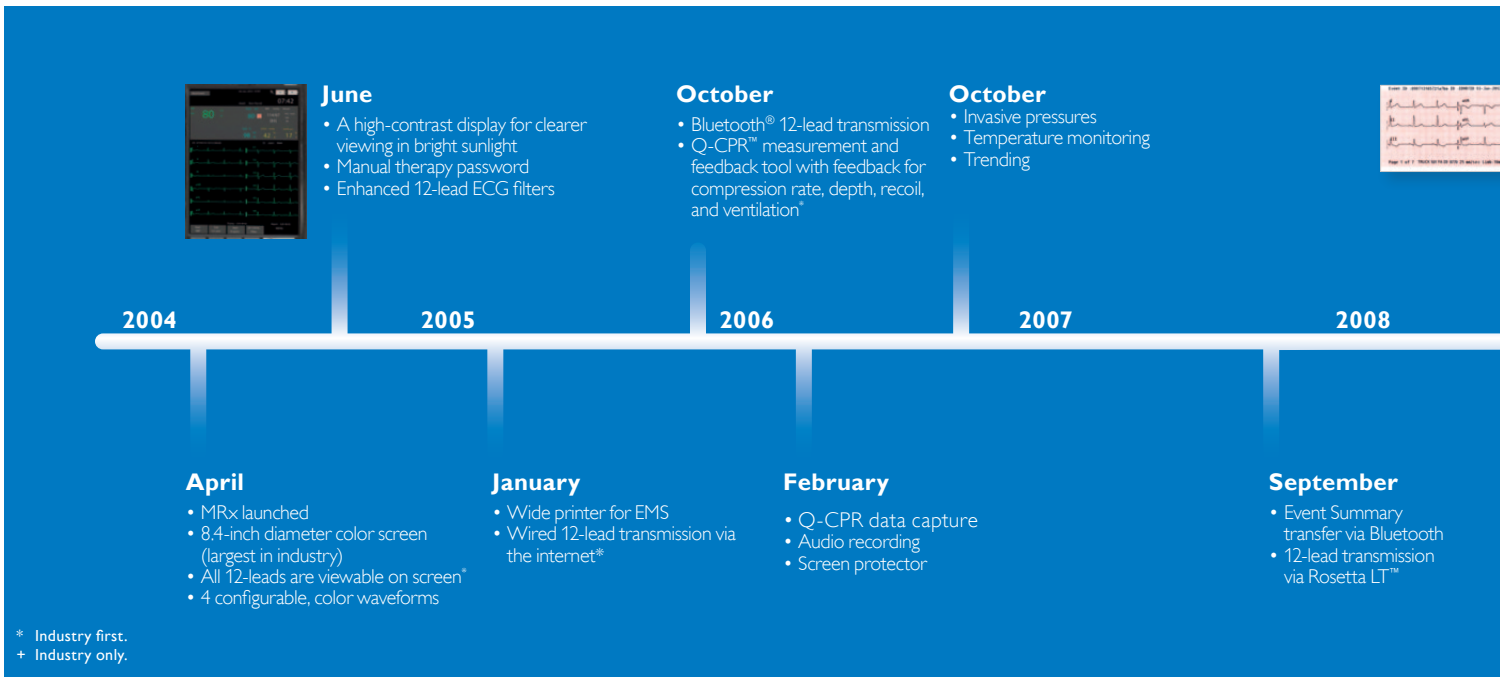
PHILIPS

Driving the course of

More and more, EMS is driving the course of emergency care by enabling clinical decisions that determine where, when, and how your patients are treated in the field and once they reach the hospital. You are leading the way with the adoption of new technologies, such as CPR measurement and feedback tools and clinical decision support tools that help detect STEMI, as well as more sophisticated medical treatment such as hypothermia protocols. Your efforts are resulting in earlier recognition of conditions and trends, earlier use of therapeutic interventions, and earlier reporting and care in the receiving hospitals, all of which are revolutionizing patient preparation.

> "When I first purchased the MRx monitors I knew I was getting a great piece of equipment. What I didn't know is that Philips Healthcare would transition from a vendor to a partner in saving lives everyday. Philips has continually provided support and knowledge that put them first in class. Their willingness to work with organizations to accomplish a task is something I will always appreciate."
>
> *Brian Rogers*
> *EMS Training Officer, Henderson Fire Department*
> *Chief Operating Officer/Principle, Community Ambulance*

As your needs evolve, so does your MRx.



care

Leading the way with meaningful innovations

Philips is leading the way with meaningful innovations in emergency care that can help you quickly and effectively respond to your patients and influence their course of care as never before.

Built to be rugged, reliable, and easy-to-use, the Philips HeartStart MRx Monitor/Defibrillator with our advanced DXL 12-Lead ECG algorithm seamlessly provides:

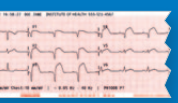
- Industry-leading patient monitoring capabilities
- Superb diagnostic measurements
- Robust and reliable STEMI clinical decision support tools
- Evidence-based, proven resuscitation therapies
- CPR guidance with the Q-CPR™ measurement and feedback tool
- Fast, seamless data transmission via Wi-Fi or cellular broadband

Our open systems approach to data management helps you streamline information so that it flows from your EMS agency to and throughout the hospital for enhanced patient care and operational efficiency.

A SMART investment

The HeartStart MRx is trusted by EMS agencies around the world. A key reason is investment protection. The MRx was built on a scalable platform from the start. As your needs evolve, so can your MRx. Once the MRx becomes part of your system, it can be easily upgraded in the field, giving you the benefits of Philips advancements while limiting additional cost or retraining.

Philips has a proven track record of listening to our customers and investing in innovations that result in valuable solutions designed specifically for your work environment to help enhance workflow and patient care.



May
- DXL 12-lead ECG algorithm
- ECG analysis statements on screen for printer independence
- ACI-TIPI and TPI

May
- Black carry bag designed to improve cable management and wear and tear
- Reinforced collar for therapy cable

August
- Enhanced Q-CPR, AHA and ERC Guidelines 2010 compatible
- Compliant vs non-compliant surface capability+
- Automatic lead switching+

2009 | 2010 | 2011 | 2012 | 2013

December
- Periodic clinical data transmission
- Batch LAN data transfer+
- 2nd generation Q-CPR

January
- One-second vitals recording
- Static IP address

March
- Tactical Grey color and enhanced user interface
- ECG signal enhancement
- Various software enhancements to help enhance patient care and workflow

May
- Enhanced data trasmission via Wi-Fi or cellular broadband
- Acute MI sensitivity control

Built tough and ready

for action

For whatever situation you face in a day, the HeartStart MRx is built to be tough and ready for action. It is designed to meet stringent test requirements including spraying water, military helicopter vibration, mechanical shock, one-meter drop, electro-magnetic compatibility, and extreme environmental conditions (temperature, humidity, and altitude).

Rugged and reliable

Active ready-for-use visual indicator flashes to signal the device has power and is in good functioning order to monitor and deliver therapy.

18 hours of continuous ECG monitoring with two fully charged batteries.

Automatic lead switching to the next preferred lead when a lead falls off or is cut when in monitor or manual defibrillation mode, letting you focus on the patient, not the monitor.

Enhanced ECG performance with improved connection points, more robust cables, and rugged lead sets. The EMS lead sets also have labels that can be seen in low-light environments.

Seamless wireless data transmission of 12-lead ECGs, periodic clinical data, and event summaries over Wi-Fi or cellular broadband improves speed, reduces workflow complexity, and helps increase reliability.

Choice of color with the tactical grey color designed to show less dirt and wear and tear over time. The original white MRx is available.

Intuitive and easy to use

Intuitive design with therapy controls and connections on the right, monitoring on the left.

Easy-to-use interface with contrasting colors for sync button, printer button, and menu and soft keys around the monitor face make it easier to find what you need fast. The tactical grey MRx provides even greater contrast.

Large color display shows 4 waveforms and numerics, or view all 12 leads at once with the 12-lead acquisition option.

Normal or high-contrast view adjustable for light conditions.

Comprehensive automated hourly, daily, weekly self-test results are available on the display.

Flexible Event Summary print options allows configuration of the desired clinical data, including CO_2 waveform, in the Event Summary report.

Enhanced event markers offer the ability to enter the dose and unit of measure providing great flexibility in patient care.

Tough Enough for the US Army

The same MRx model we ship to all EMS customers is tough enough to receive an Airworthiness Certification from the United States Army. The MRx was subjected to extensive testing for the most rigorous and demanding environments faced by military personnel.

Clinical decision support

For Philips, clinical decision support means delivering actionable clinical intelligence that can have a real impact on patient care, workflow, and financial outcomes. Our smart clinical decision support solutions analyze, interpret, and present data in meaningful ways that provide valuable information about changes in a patient's status.

Only Philips has the advanced DXL 12-Lead ECG algorithm, which takes STEMI decision support to a new level by providing unique data views that enable confident decision-making to help speed triage.

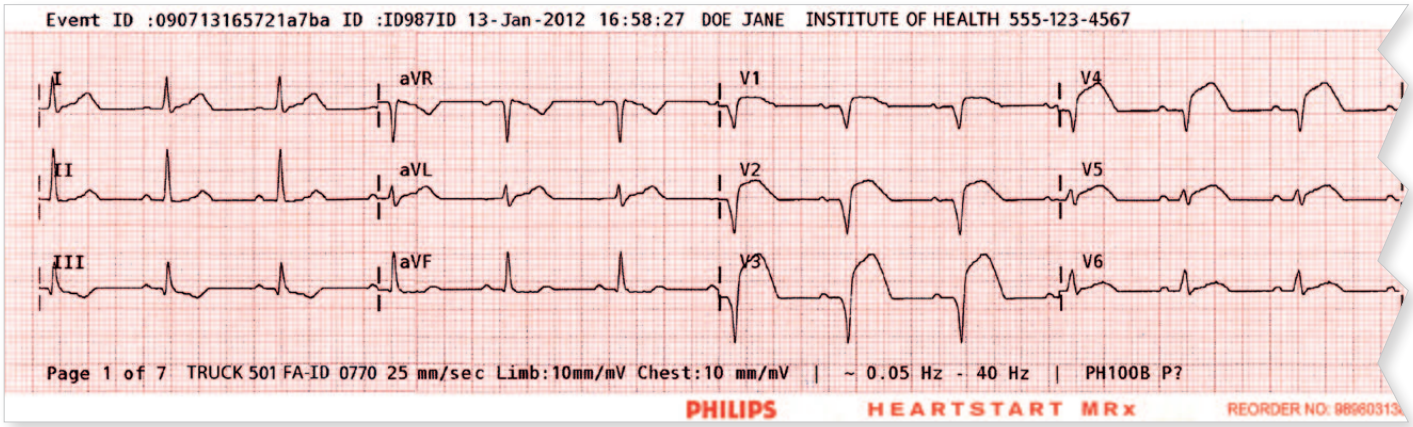
- Pinpoints the **STEMI-Culprit Artery** most likely responsible for the acute symptoms, which can assist in directing care in the field and treatment in the Cath Lab.
- Generates **Critical Values** for four distinct life-threatening conditions – acute MI, acute ischemia, complete heart block, and very fast heart rate – that require immediate clinical attention. An enhancement of the DXL 12-Lead ECG algorithm makes it easy to lower the acute MI sensitivity, potentially reducing false positives.
- Provides **Gender-Specific Diagnostic Criteria** to enhance recognition and interpretation of cardiac symptoms in women.

Pinpoint the STEMI-Culprit Artery most likely responsible for the patient's acute symptoms, which can assist in directing care in the field and treatment in the Cath Lab.

We also offer predictive instruments designed to help support confident decision-making.

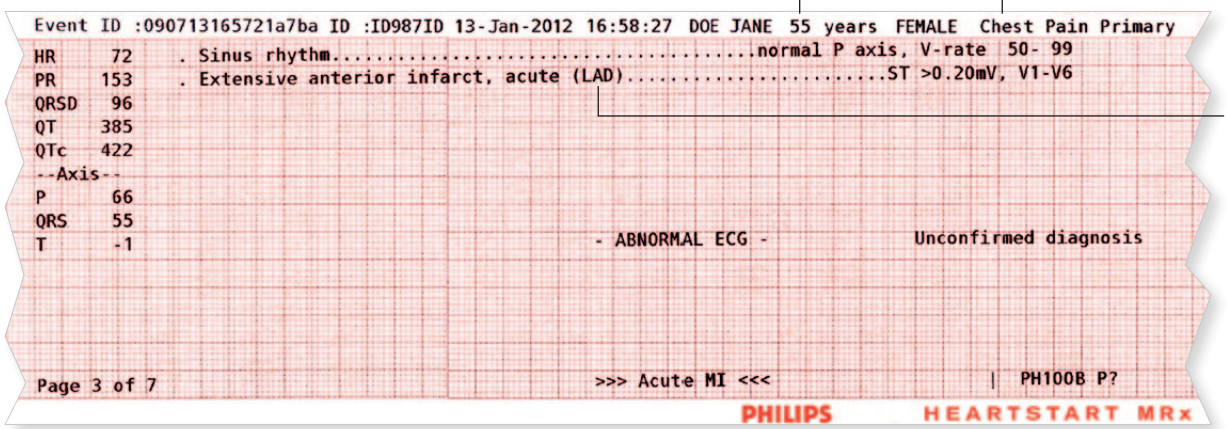
- **Acute Cardiac Ischemia – Time Insensitive Predictive Instrument (ACI-TIPI)** uses the 12-lead ECG to provide a percentage score for predicted probability that the patient is experiencing acute ischemia.
- **Thrombolytic Predictive Instrument (TPI)** uses the 12-lead ECG to help predict patient outcome with and without thrombolytic therapy.

12-lead ECG strip



STEMI decision support data

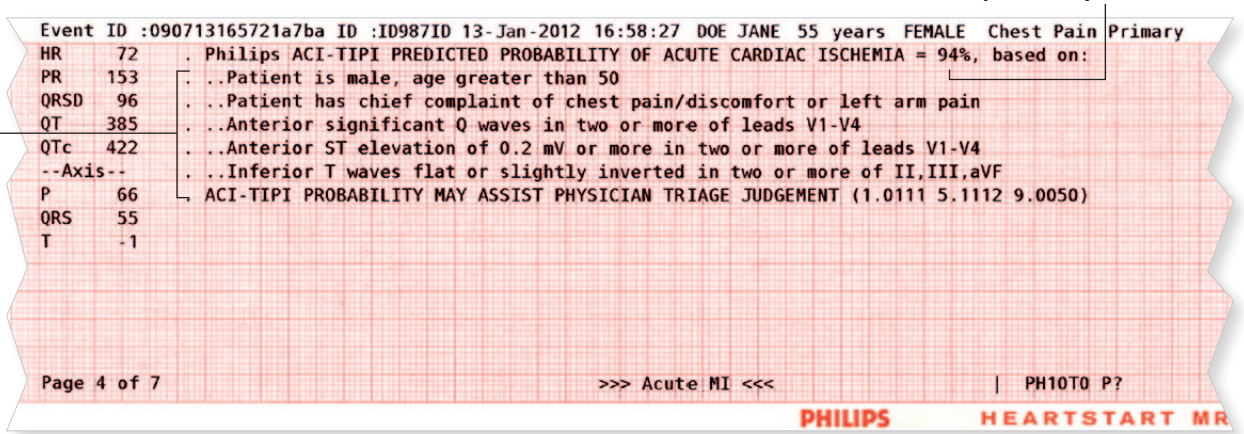
Patient age and chest pain status.



STEMI-Culprit Artery identification (Left Anterior Descending).

Acute cardiac ischemia predictive probability data

Predicted probability of acute ischemia.



Explanation of clinical factors behind the predicted probability.

Enhanced resuscitation

Philips continues to be a leader in developing meaningful innovations in resuscitation therapy, including the first biphasic waveform for an external defibrillator. Our evidence-based, proven resuscitation therapies are designed to work together to help you give sudden cardiac arrest (SCA) patients the best chance of surviving and returning to active living.

- **SMART Biphasic** therapy has been rigorously studied and is supported by substantial peer-reviewed, published data. It has been clinically proven to deliver high first shock efficacy for long-downtime SCA patients, as well as to effectively defibrillate across the full spectrum of patients, including those considered "difficult-to-treat."[1-5]
- **Q-CPR** measurement and feedback tool is supported by more published data than any other CPR quality improvement tool. It has been demonstrated to improve CPR delivery and patient outcomes.[6]
- **Quick Shock** enables fast time to shock. Delivering a shock quickly after chest compressions is critical as the benefits of CPR – oxygenated blood delivered to the vital organs – dissipate in seconds.[7,8]
- **Core temperature monitoring and trending** to support cooling protocols.
- **Noninvasive Pacing** using either demand or fixed mode. Supports protocols for demand mode only or, if configured, switches to fixed mode in the event a lead is lost, which allows the patient to be continuously paced.

"Q-CPR has been an important part of our success in improving survival from cardiac arrest in the City of Pittsburgh."

Ronald V. Romano
Division Chief
City of Pittsburgh Emergency Medical Services

therapies

Q-CPR: CPR quality improvement tool

Philips Q-CPR is supported by more published research than any other CPR quality improvement tool and is available as a fully integrated option with the HeartStart MRx.

The Q-CPR meter delivers instant audiovisual feedback so that every compression meets depth and rate, complete chest recoil, hands-off time, and ventilation rate to help improve the patient's chance of survival and increase the opportunity for a complete neurological recovery.

Q-CPR supports AHA/ERC 2010 CPR Guidelines. The HeartStart MRx can be configured to display either the AHA or ERC protocol for depth and rate.

Q-CPR at a glance

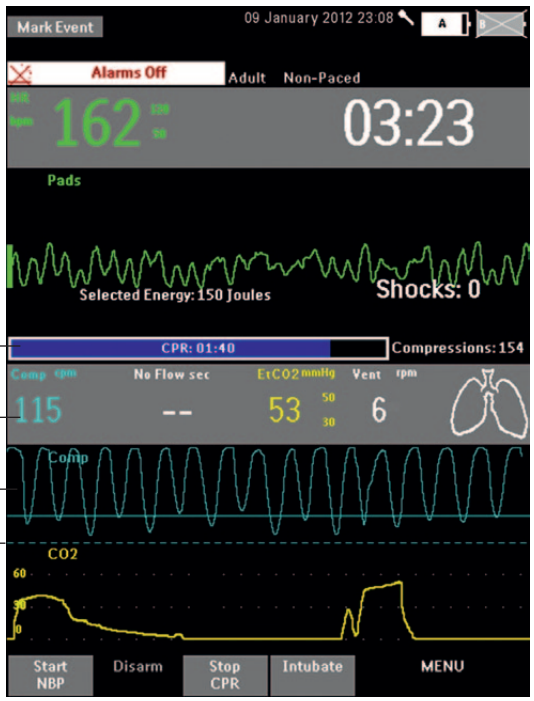
Ventilation rate	Yes
Ventilation feedback from bag valve mask (BVM) or intubation	Philips exclusive
Displays 2-minute progress bar	Philips exclusive
Chest compression depth – too shallow	Yes
Chest compression rate high	Philips exclusive
Chest compression rate low	Yes
Complete chest recoil	Yes
"Hands-off" time – provides audio feedback after 15 seconds if no compression activity	Yes
Compliant vs. non-compliant surface capability	Philips exclusive

CPR timer and compression counter.

Ventilation guidance.

Real-time feedback directly on monitor.

Delivering accurate compression depth on a compliant surface.

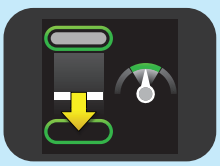


Q-CPR offers protocol management and enhanced visual feedback in code view or AED mode.

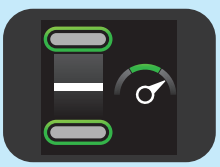
Turn voice prompts ON or OFF depending on your system's protocol.

Good compressions

Release pressure between compressions



Compress deeper



Compress slower

Data management

Our goal is operational efficiency, allowing you to focus more on patient care and less on moving data during treatment and transport. We do this through our open data management approach, which means timely transmission of data, interoperability with virtually any ePCR software to streamline information flow, and quality debriefing to help you and your medics continuously improve your emergency response services.

With Philips, you have many options to help enhance your operation:

- Whatever your workflow…print, display, fax, email, Wi-Fi, cellular broadband, Bluetooth, or Ethernet…we can accommodate it.
- Flexible, fast, and reliable solutions provide data to the intended recipients.
- The Wireless Link transmits 12-lead ECGs, periodic clinical data, and event summaries via Wi-Fi or cellular broadband much faster than Bluetooth, with increased reliability and fewer buttons to push.
- Reliable and trackable automated download and delivery solutions mean no files or data are left behind and medic involvement in administrative tasks is reduced so you can focus on more important activities.
- Move data at LAN speed, which enables rapid downloads and faster device return-to-service times.
- Automatic time setting when all events are transferred ensures the HeartStart MRx is in sync with the system of record from "911 call" to "device on."

Collaborate with hospital care teams by providing critical patient data en route using Periodic Clinical Data Transmission

- Communicate/collaborate on critical care patients – stroke, trauma, respiratory, pediatric, cardiac – to help hospital care teams better prepare for arrival.
- Press "start data transmit" to automatically document critical events and vitals en route.
- Using the Wireless Link, transmit data seamlessly at fast speeds via Wi-Fi or cellular broadband without any further user interaction — so you can focus on your patients.
- Uses same low-cost infrastructure as 12-lead transmission.

Capture and store the entire code, including Q-CPR data, with HeartStart Event Review Pro to help your team reach its full potential

- A breakthrough application for post-event review that provides a robust, insightful view of a resuscitation event.
- Built-in, easy-to-use navigation to pinpoint areas in specific patient's code event to reinforce effective techniques and motivate change where needed.

Wireless Link lets you transmit 12-lead ECGs, periodic clinical data, and event summaries via Wi-Fi or cellular broadband (2G /3G). Powered by your MRx, this small, lightweight device stores easily in the back or side pouch of your carrying case, and delivers a seamless data transmission experience that's faster than Bluetooth with fewer buttons to push.

MRx basic specifications and optional features

Physical	
Dimensions	Without external paddles: 12.4″ (W) x 8.3″ (D) x 11.7″ (H) (313 mm x 210 mm x 295 mm). With external paddles: 13.4″ (W) x 8.3″ (D) x 13.6″ (H) (340 mm x 210 mm x 345 mm).
Weight	13.2 lbs. (6 kg): base unit with 1 battery, pads, and pads cable. Carrying case adds 4.1 lbs. (1.86 kg). Paddle tray and external standard paddles add less than 2.5 lbs. (1.1 kg).
Environmental	
Water Resistance	Meets IEC 60601-2-4
Solids Resistance	Solids/Water Resistance – IP24
Temperature	Operating: 32° - 113° F (0° - 45° C) Storage: -4° - 158° F (-20° - 70° C)
Humidity	Operating: 0% to 95% relative
Safety	Meets EN 60601-1, UL 2601-1, CSA C22.2 No. 601-1-M90 CSA, EN 60601-2-4
Display	
Dimensions	8.4″ diagonal (128 mm x 171 mm)
Type	TFT color LCD
Resolution	640 x 480 pixels (VGA)
Wave Viewing Time	5 seconds (ECG)
Defibrillator	
Model	HeartStart MRx (M3536A)
Waveform	Biphasic Truncated Exponential. Waveform parameters adjusted as a function of patient impedance.
Output Energy	Manual (selected): 1-10, 15, 20, 30, 50, 70, 100, 120, 150, 170, 200 Joules maximum energy, limited to 50 Joules for internal defibrillation. AED Mode (single energy output): 150 Joules into a 50 ohm load.
Charge Time	Less than 5 seconds to 200 Joules with a new, fully charged lithium ion battery at 25° C
Shock Delivery	Via multifunction defib electrode pads or paddles
Quick Shock	Less than 10 seconds from cessation of CPR to shock delivery
Patient Impedance Range	Minimum: 15 ohm (internal defibrillation); 25 ohm (external defibrillation) Maximum: 180 ohm
AED Mode	Shock advisory sensitivity and specificity meet AAMI DF-39 guidelines
Strip chart printer	
Printer	Standard: 50mm (paper width) thermal array printer Optional: 75mm (paper width) thermal array printer
Continuous ECG Strip	Prints primary ECG lead with event annotations and measurements in real-time or with 10-second delay
Auto Printing	Printer can be configured to print marked events, charge, shock, and alarms
Reports	Event Summary, 12-lead, Vital Signs Trending, Operational Check, Configuration, Status Log, and Device Information
Paper Size	1.97″ (W) x 100 ft. (L) (50 mm x 30 m) 2.95″ (W) x 100 ft. (L) (75 mm x 30 m)

Battery	
Type	6.0 Ah, 14.8 V, rechargeable lithium ion
Dimensions	6.5″ (H) x 3.8″ (W) x 1.6″ (D) (165 mm x 95mm x 42mm)
Weight	1.6 lb. (0.73 kg)
Charge Time	Approximately 3 hours to 100%, 2 hours to 80%
Capacity	• Shocks: At least 50 200J charge/shocks or disarm cycles* • Monitoring only: 9 hours of continuous ECG monitoring • Monitoring and Shocks: At least 5 hours of monitoring ECG, SpO_2, CO_2, temperature, and 2 invasive pressures monitored continuously, NBP measured every 15 minutes, and 20 200J discharges* • Monitoring and Pacing: At lease 3.5 hours while pacing at 180ppm at 160mA and monitoring as described above
Battery Indicators	Battery gauge on battery, capacity indicator on display; flashing RFU indicator, chirp, and 'Low Battery' message appears on display for low battery condition, when 10 minutes of monitoring time and 6 maximum energy discharges remain (with a new battery at room temperature, 25° C)
Data storage	
Internal	12 hours of continuous ECG waveforms and events, maximum capacity of 55 event summaries
Data Card	60 event summary reports or 240 megabytes of patient data
ECG and arrhythmia monitoring	
Input	Up to 4 ECG waves displayed and up to 2 ECG waves print simultaneously. Lead I, II, or III obtained through 3-lead ECG cable and separate monitoring electrodes. With 5-lead cable, obtain leads aVR, aVL, aVF, or V. Pads ECG obtained through 2 multifunction defibrillation electrode pads.
Lead & Pads Fault	Automatically switches to a valid ECG source in wave sector 1 if existing signal becomes unavailable in Monitor or Manual Defibrillation Mode for software versions R.02 or above.
Heart Rate Display	Digital readout on display 15 to 300bpm, accuracy ±10%
Heart Rate/ Arrhythmia Alarms	HR, Asystole, VFIB/VTACH, VTACH, extreme tachycardia, extreme bradycardia, PVC rate, Pacer not capture, Pacer not pacing
ECG Size	2.5, 5, 10, 20, 40 mm/mV, autogain

Available options	
Noninvasive pacing	SpO_2 pulse oximetry
Noninvasive blood pressure	CO_2 monitoring
Invasive blood pressure (2 lines)	Continuous temperature monitoring
12-lead acquisition	12-lead transmission
Q-CPR measurement and feedback	Audio recording
ACI-TIPI & TPI predictive instruments	Periodic clinical data transmission
Batch LAN data transfer	HeartStart MRx is available in Tactical Grey or White

*With a new fully-charged battery at room temperature, 25° C.

For detailed specifications see the HeartStart MRx product description document. Application notes are also available to describe the advanced features of the HeartStart MRx.

Philips Healthcare is part of Royal Philips Electronics

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healthcare@philips.com

References:

1 Schneider T, Martens PR, Paschen H, et al. Multicenter, randomized, controlled trial of 150-J biphasic shocks compared with 200- to 360-J monophasic shocks in the resuscitation of out-of-hospital cardiac arrest victims. *Circulation*. 2000;102:1780-1787.

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3 White RD, Blackwell TH, Russell JK, et al. Body weight does not affect defibrillation, resuscitation or survival in patients with out-of-hospital biphasic waveform defibrillator. *Critical Care Medicine*. 2004;32(9) Supplement: S387-S392.

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5 Hess EP, Russell JK, Liu PY, et al. A high peak current 150-J fixed-energy defibrillation protocol treats recurrent ventricular fibrillation (VF) as effectively as initial VF. *Resuscitation*. 2008;79(1):28-33.

6 Edelson DP, Litzinger B, Arora V, et al. Improving in-hospital cardiac arrest process and outcomes with performance debriefing. *Archives of Internal Medicine*. 2008;168(10):1063-1069.

7 Yu T, Weil MH, Tang W, et al. Adverse outcomes of interrupted precordial compression during automated defibrillation. *Circulation*. 2002;106:368-372.

8 Eftestol T, Sunde K, Steen PA. Effects of interrupting precordial compressions on the calculated probability of defibrillation success during out-of-hospital cardiac arrest. *Circulation*. 2002;105:2270-2273.

*This program is valid only in the U.S.A.

Please visit www.philips.com/MRx

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ALS life support on the run

Philips M3536A HeartStart MRx Monitor/Defibrillator

PHILIPS

Leading the way with meaningful innovations in emergency care. Clinical decision support that positively impacts patient care. Predictive instruments designed to help support confident decision-making. Enhanced resuscitation therapies. Seamless wireless data transmission to reduce workflow complexity. Rugged, durable and reliable. Intuitive and easy to use. This is the HeartStart MRx M3536A ALS monitor/defibrillator for emergency care.

The first thing you'll notice about the HeartStart MRx M3536A monitor/defibrillator is its large, color display. Look further and you'll see that it has much more to offer today's EMS professionals.

Designed with the EMS market specifically in mind, the HeartStart MRx M3536A combines a multi-parameter monitor with 12-Lead ECG acquisition/transmission capability, manual and semi-automated defibrillation, pacing and EMS-specific configuration options in one device. The M3536A unites Philips' industry-leading monitoring technologies with superior diagnostic measurements, predictive instruments, Vital Signs Trending reports, Event Summaries, an open systems approach to data transmission, and our patented resuscitation therapies. With Wireless Link, the M3536A provides fast and seamless data transmission via WiFi or cellular broadband for increased reliability and ease in workflow.

Monitoring starts once a patient cable is connected to the device. The HeartStart MRx is equipped for 3- and 5-Lead ECG monitoring with arrhythmia detection. Options include the advanced DXL 12-Lead ECG algorithm, pulse oximetry, noninvasive blood pressure, invasive pressures, temperature, and end-tidal CO_2. The HeartStart MRx is prepared for today's needs and upgradeable to meet tomorrow's – as your needs evolve so does your HeartStart MRx.

Its therapies – manual and semi automatic defibrillation and synchronized cardioversion – feature Philips' patented low-energy SMART Biphasic waveform, which is effective in emergency resuscitation and for decreasing post-resuscitation heart dysfunction. This external defibrillation waveform is supported by peer-reviewed clinical data. Transcutaneous pacing can be added and the MRx will pace in either demand or fixed mode.

To help caregivers perform high quality CPR, the Q-CPR® option is available. It offers real-time measurement and corrective feedback on the rate, depth, and duration of compressions, as well as the frequency of ventilations and also provides notification of lack of CPR activity. Q-CPR supports AHA/ERC 2010 Guidelines and protocols. The CPR meter provides feedback on a graphical display right in the line of site of the caregiver performing CPR.

HeartStart MRx displays measurements and patient care data on an easy-to-read, backlit, 8.4-inch screen and also comes in your choice of colors – white or gray. Numerics and waveforms can be reconfigured, and the screen reorganized, enabling you to quickly locate the information you need most. With wide viewing angles, it displays an event timer, event markers, numeric vital signs, and up to four waves, as well as text prompts, alarms, and battery status indicators. On-screen menus simplify navigation for configuring data, setting and responding to alarms, and accessing additional functionality. Automated self-tests, straightforward ready-for-use checks, data collection, and two long-life batteries make the device easy to operate.

For whatever situation faced during the EMS work day, the HeartStart MRx is built to be tough and ready for action. The M3536A model was subjected to extensive testing for rigorous and demanding environments and has received an Airworthiness Certificate from the United States Army.

All of these features, measurements, and therapies, plus its compact size, low weight (13.9 lbs./6.3 kg), and balanced shape mean that HeartStart MRx has the capabilities you need and the performance you demand for rapid intervention, and quality patient care.

Features/Options/Upgrades

Standard Features

- ST/AR Basic algorithm for arrhythmia detection
- ECG monitoring through monitoring electrodes and defibrillation pads
- Synchronized cardioversion
- Adjustable ECG size and autogain
- Manual and AED operation
- SMART Biphasic waveform for defibrillation therapy
- Large 4-wave color display
- 50mm printer – white devices
- 75mm printer – gray devices
- Individual, adjustable volume of QRS beeper, voice prompts, and alerts
- Event summary
- Vital Signs Trending Report
- Configuration mode
- Service mode
- Operational checks
- Automated self-tests with "ready-for-use" indicator
- Lithium ion battery with fuel gauge
- One-Second Vitals
- Static IP address capability

Optional Features

- SpO_2 with Fourier Artifact Suppression Technology (FAST)
- Noninvasive Blood Pressure
- Invasive Pressures (2 channels)
- Temperature
- Microstream™ $EtCO_2$
- Noninvasive Pacing
- 12-Lead ECG with Philips DXL algorithm
- 12-Lead ECG Transmission
- 75mm printer – white devices only
- Q-CPR CPR measurement and feedback
- Q-CPR Data Capture
- ACI-TIPI and TPI analysis
- Periodic Clinical Data Transmission
- Batch LAN Data Transfer (via wired or wireless connection)
- Audio Recording
- Event Summary Transfer via FTP
- Wireless Link

Standard Accessories

- Lithium ion battery with fuel gauge
- Hands-free multifunction electrode cable
- 5-Lead ECG cable
- Disposable monitoring electrodes
- Printer paper
- Carrying case
- Defibrillator test load
- Documentation CD containing Instructions for Use, User Training Materials and Application Notes
- Quick reference cards

Some options, upgrades and accessories are not available in all countries. Contact your local Philips Sales Representative for specific information.

Option Ordering Information	
A01	SpO_2 – white
A02	SpO_2 and NBP – white
A03	SpO_2, NBP, and $EtCO_2$ – white
A04	$EtCO_2$ – white
A05	SpO_2, NBP, $EtCO_2$ and Temperature – white
A06	SpO_2, NBP, $EtCO_2$, Invasive Pressures and Temperature – white
A07	SpO_2, NBP, Invasive Pressures and Temperature – white
A11	$EtCO_2$ and SpO_2 – white
A20	Base Unit – gray
A21	SpO_2 – gray
A22	SpO_2 and NBP – gray
A23	SpO_2, NBP, and $EtCO_2$ – gray
A24	$EtCO_2$ – gray
A25	SpO_2, NBP, $EtCO_2$ and Temperature – gray
A26	SpO_2, NBP, $EtCO_2$, Invasive Pressures and Temperature – gray
A27	$EtCO_2$ and SpO_2 – gray
B01	External Pacing
B02	12-Lead ECG Acquisition
B04	75 mm Printer
B05	Asian 75mm Printer
B06	12-Lead ECG Transmission – Bluetooth® wireless technology
B08	Q-CPR
B09	Q-CPR Data Capture
B10	Event Summary – Bluetooth
B11	12-Lead Transmission, Rosetta-Lt™ Interface (Available in the U.S. only)
B12	Batch LAN Data Transfer
B14	Audio Recording (all modes)

Option Ordering Informatiozn	
B17	ACI-TIPI and TPI
B18	Periodic Clinical Data Transmission
C01	Standard External Paddles (water resistant for EMS use)
C03	Data Card
C05	Additional Battery
C06	AC Power Module
C07	Barrel style Pad Cable – (replacement for Standard Pad Cable)
C10	5/5 ECG lead set with grabbers
C11	Long (2.7m) ECG trunk cable
C12	3/7-Snap Lead set
C15	5-Lead ECG Cable
C16	Shielded 12-Lead ECG Cable set
C20	Red Carry Case – detachable pouches
C21	Black soft carry case – pads only
C22	Black carry case – detachable pouches
D01	Wireless Link – Generic
D02	Wireless Link – Verizon (available in US only)
D03	Wireless Link – AT&T (available in US only)
LP1	Instructions for Use (printed copy)
LP2	User Training Video (English only)
LP3	User Training DVD (English only)
LPK	Label for AED emphasis
SM1	Service Manual (English only)
SM3	Service Training DVD (English only)
W01	One-Year On-Site Warranty
W22	Two-Year Biomed Warranty (U.S. and Canada only)
WA2	Three-Year Bench Warranty with Loaner (U.S.,Canada and Australia only)

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Upgrades	
860376	Verizon Wireless Link (US only)
860377	AT&T Wireless Link (US only)
860378	Generic Wireless Link
860383	Generic Wireless Link for MRx with BT
860384	Verizon Wireless Link for MRx with BT (US only)
860385	AT&T Wireless Link for devices with BT (US only)
861325	Event Summary, Bluetooth
861326	12-Lead Transmission, Rosetta-Lt Interface (Available in the U.S. only)
861359	Invasive Pressures
861360	Temperature
861442	ACI-TIPI and TPI
861443	Periodic Clinical Data Transmission
861444	CPR meter
861447	Batch LAN Data Transfer
861485	EMS Software Upgrade
861492	Handle and Cap Plate (for Pads) – gray
989803153411	Internal Bluetooth Card
M3530A	SpO_2
M3531A	NBP
M3532A	$EtCO_2$
M3533A	Pacing
M3534A	12-Lead ECG Option B02 – Acquisition Option B04 – 75mm Printer
M3801A	12-Lead Transmission (Bluetooth)
M3802A	12-Lead Transmission (RS-232 and Bluetooth)
M3806A	Device Software
M3808A	Therapy PCA
M4760A	Handle and Cap Plate (for Pads) – white
M4765A	Option B02 - B-Level Hardware Upgrade
M4770A	Q-CPR CPR Measurement and Feedback
M4771A	Q-CPR Data Capture Upgrade
M4772A	Audio Recording Upgrade
M5527A	External Paddles with Paddle Tray Option CO_2 – Water Resistant Paddles

Some options, upgrades and accessories are not available in all countries. Contact your local Philips Sales Representative for specific information.

Supplies

Multifunction Electrode Pads

White Barrel Connector	
M3501A	Adult/Child Pads, barrel connector
M3504A	Infant Pads, barrel connector
Gray Plug Connector	
M3713A	HeartStart Adult/Child Plus Pads
M3716A	HeartStart Adult/Child Radiolucent Pads
M3717A	HeartStart Infant Plus Pads
M3718A	HeartStart Adult/Child Radiotransparent/Reduced Skin Irritation Pads
M3719A	HeartStart Infant Radiotransparent/ Reduced Skin Irritation Pads
989803166021	HeartStart Adult/Child Preconnect Pads

Hands-Free Pads Therapy Cables	
M3507A	Defibrillator Pads Hands-Free Cable, barrel style (2.2 m/7 ft.)
M3508A	Defibrillator Pads Hands-Free Cable, plug style (2.2 m/7 ft.)
05-10200	Pads Adapter (use with M3507A)
989803158661	Defibrillator Pads Hands-Free Cable, HeartStart pads, CPR meter cable and connector

Q-CPR Accessories	
989803162401	CPR meter
989803163291	CPR meter Adhesive Pads
989803158661	Pads/CPR meter Cable
M4761A	Compression Sensor
M4762A	Sensor Adhesive Pads (10 pack)
M4763A	Compression Sensor Pads/CPR cable

ECG Monitoring Electrodes	
M2202A	High-Tack Foam, 5 electrodes/pack (60 packs/case)
M4612A	Solid Gel Electrodes, 5 electrodes/pack (60 packs/case)
M4613A	Solid Gel Electrodes, 30 electrodes/pack (10 packs/case)

External Paddles	
M3543A	Water Resistant External Paddles

12-Lead ECG Cables	
M3525A	2.7 meter 10-Lead ECG trunk cable, 12-pin Connector (for 3-Lead, 5-Lead and 12-Lead use)
989803147691	1.3 meter 10-Lead ECG trunk cable, 12-pin Connector (for 3-Lead, 5-Lead and 12-Lead use)
M3526A	3-Lead ECG set and plug with snap (AAMI)
M3527A	Add 7-Lead ECG set for 12-Lead use (AAMI)
M3528A	3-Lead ECG set and plug with snap (IEC)
M3529A	Add 7-Lead ECG set for 12-Lead use (IEC)
M5530A	Combiner Plug for 3-wire lead set for use with M3526A/M3528A
M1663A	10-Lead ECG Patient trunk cable, 12-pin ECG Input Connector (for 5-Lead and 12-Lead use)
M1949A	10-Lead ECG Patient trunk cable, 12-pin ECG Input Connector (for 5-Lead and 12-Lead use)
M1968A	10-electrode cable set, extremities, grabber (use with M1976A) (AAMI)
M1971A	10-electrode cable set, extremities, grabber (use with M1978A) (IEC)
M1976A	10-electrode cable set, chest, grabber (use with M1968A) (AAMI)
M1978A	10-electrode cable set, chest, grabber (use with M1971A) (IEC)
989803158061	5-Lead ECG lead set; limb leads; snaps; shielded electrode (AAMI)
989803158071	5-Lead ECG lead set; chest leads; snaps; shielded electrode (AAMI)
989803158081	5-Lead ECG lead set; limb leads; snaps; shielded electrode (IEC)
989803158091	5-Lead ECG lead set; chest leads; snaps; shielded electrode (IEC)

Some options, upgrades and accessories are not available in all countries. Contact your local Philips Sales Representative for specific information.

3-Lead ECG Cables	
M1500A	3-Lead ECG trunk cable (AAMI)
M1510A	3-Lead ECG trunk cable (IEC)
M1605A	3-Lead ECG set with snaps (AAMI)
M1615A	3-Lead ECG set with snaps (IEC)
M1669A	3-Lead ECG trunk cable (AAMI/IEC)
M1671A	3-Lead ECG set grabber (AAMI/ICU)
M1672A	3-Lead ECG set ICU grabber (IEC)
M1673A	3-Lead ECG set with snaps (ICU)
M1674A	3-Lead ECG set with snaps (IEC, ICU)
M1675A	3-Lead ECG set with grabbers (OR)
M1678A	3-Lead ECG set, grabber (IEC, OR)
989803173121	3-Lead ECG disposable, bedside (AAMI)
989803173141	3-Lead ECG disposable, telemetry (AAMI)
989803174201	3-Lead ECG disposable, bedside (IEC)

5-Lead ECG Cables	
M1520A	5-Lead ECG trunk cable (AAMI)
M1530A	5-Lead ECG trunk cable (IEC)
M1602A	5-Lead chest ICU snaps (AAMI)
M1604A	5-Lead chest ICU snaps (IEC)
M1625A	5-Lead ECG set with snaps (AAMI)
M1635A	5-Lead ECG set with snaps (IEC)
M1644A	5-Lead ICU snaps (AAMI)
M1645A	5-Lead ICU snaps (IEC)
M1668A	5-Lead ECG trunk cable (AAMI/IEC)
M1949A	5 plus 5 ECG trunk cable (AAMI/IEC)
M1968A	5-Lead ICU grabber (AAMI)
M1971A	5-Lead ICU grabber (IEC)
M1973A	5-Lead OR grabber (AAMI)
M1974A	5-Lead OR grabber (IEC)
M1976A	5-Lead OR grabber (IEC)
M1978A	5-Lead chest ICU grabber (AAMI)
M1979A	5-Lead chest ICU grabber (IEC)
M1984A	5-Lead chest OR grabber (IEC)
989803173131	5-Lead ECG disposable, bedside (AAMI)
989803173151	5-Lead ECG disposable, telemetry (IEC)
989803174211	5-Lead ECG disposable, bedside (IEC)
989803176161	5-Lead shielded limb snap (AAMI)
989803176171	5-Lead shielded chest snap (AAMI)
989803176181	5-Lead shielded limb snap (IEC)
989803176191	5-Lead shielded chest snap (IEC)

SpO_2	
M1131A	Disposable SpO_2 Sensor – adult/pediatric finger
M1191A	Reusable SpO_2 Sensor – adult finger
M1191B	Reusable SpO_2 Sensor – adult finger
M1191AL	Reusable SpO_2 Sensor – adult finger (3m cable)
M1191BL	Reusable SpO_2 Sensor – adult finger (3m cable)
M1191T	Reusable SpO_2 Sensor – adult finger (9-pin connector)
M1192A	Reusable SpO_2 Sensor – pediatric/small adult
M1192T	Reusable SpO_2 Sensor – pediatric finger (9-pin connector)
M1193A	Reusable SpO_2 Sensor – neonatal hand/foot
M1194A	Reusable SpO_2 Sensor – adult/pediatric ear clip
M1195A	Reusable SpO_2 Sensor – infant
M1196A	Reusable SpO_2 Sensor – adult clip
M1196T	Reusable SpO_2 Sensor – adult clip (9-pin connector)
M1903B	Disposable SpO_2 Sensor – pediatric finger (available outside the U.S. only)
M1904B	Disposable SpO_2 Sensor – adult finger (available outside the U.S. only)
M1941A	SpO_2 Extension Cable (2m)
M1943A	Reusable SpO_2 Sensor Adapter Cable (1m) – use with M1903B/M1904B
989803164571	Cardinal Reusable SpO_2 Clip Sensor
989803164581	Cardinal Disposable Adult/Pediatric SpO_2 Sensor

NBP Interconnect Tubing	
M1598B	Adult Pressure Interconnect Cable (1.5m)
M1599B	Adult Pressure Interconnect Cable (3m)

Some options, upgrades and accessories are not available in all countries. Contact your local Philips Sales Representative for specific information.

Reusable Blood Pressure Cuffs	
40400A	Reusable Cuff Kit, 3 sizes (pediatric, adult, large adult)
40400B	Reusable Cuff Kit, 5 sizes (infant, pediatric, adult, large adult, thigh)
40401A	Traditional Reusable Cuff – infant
40401B	Traditional Reusable Cuff – pediatric
40401C	Traditional Reusable Cuff – adult
40401D	Traditional Reusable Cuff – large adult
40401E	Traditional Reusable Cuff – thigh
M4552B	Easy Care Reusable Cuff – infant
M4552B5	Easy Care Reusable Cuff – infant (5)
M4553B	Easy Care Reusable Cuff – pediatric
M4553B5	Easy Care Reusable Cuff – pediatric (5)
M4554B	Easy Care Reusable Cuff – small adult
M4554B5	Easy Care Reusable Cuff – small adult (5)
M4555B	Easy Care Reusable Cuff – adult
M4555B5	Easy Care Reusable Cuff – adult (5)
M4556B	Easy Care Reusable Cuff – adult long
M4556B5	Easy Care Reusable Cuff – adult long (5)
M4557B	Easy Care Reusable Cuff – large adult
M4557B5	Easy Care Reusable Cuff – large adult (5)
M4558B	Easy Care Reusable Cuff – large adult X-Long
M4558B5	Easy Care Reusable Cuff – large adult X-Long (5)
M4559B	Easy Care Reusable Cuff – thigh
M4559B5	Easy Care Reusable Cuff – thigh (5)
M1572A	Multi-Patient Comfort Cuffs – pediatric
M1573A	Multi-Patient Comfort Cuffs – small adult
M1574A	Multi-Patient Comfort Cuffs – adult
M1575A	Multi-Patient Comfort Cuffs – large adult

Disposable Blood Pressure Cuffs	
M4572B	Soft Single-Patient Disposable Cuff – infant
M4573B	Soft Single-Patient Disposable Cuff – pediatric
M4574B	Soft Single-Patient Disposable Cuff – small adult
M4575B	Soft Single-Patient Disposable Cuff – adult
M4576B	Soft Single-Patient Disposable Cuff – adult X-Long
M4577B	Soft Single-Patient Disposable Cuff – large adult
M4578B	Soft Single-Patient Disposable Cuff – large adult X-Long
M4579B	Soft Single-Patient Disposable Cuff – thigh

Invasive Pressures	
CPJ840J6	Reusable Pressure Transducer
CPJ84022	Sterile disposable pressure dome for use with CPJ840J6
CPJ84046	Transducer holder for CPJ840J6
M1567A	Single channel disposable blood pressure kit (available in Europe and Asia only)
M1568A	Dual Line blood pressure kit for measuring CVP, ABP and other pressure measurements (available in Europe and Asia only)
M1634A	Reusable adapter cable (available in Europe and Asia only)

Disposable Transducers*	
TransPac IV	ICU Medical, Inc.
TruWave PX212	Edwards Lifescience
DTX Plus DT-4812	Becton, Dickinson and Co.

*Available for purchase/service from the respective manufacturers.

Disposable Temperature Probes	
21090A	Esophageal/rectal
21091A	Skin surface
21093A	Esophageal stethoscope
21094A	Esophageal stethoscope
21095A	Esophageal stethoscope
21096A	Foley catheter
21097A	Foley catheter
M1837A	Esophageal/rectal
M2255A	Foley catheter

Reusable Temperature Probes	
21075A	Esophageal/rectal – adult
21076A	Esophageal/rectal – pediatric
21078A	Skin surface

Reusable Temperature Probe Extension Cables	
21082A	3.0m 2-pin plug extension cable for mini phone plug
21082B	1.5m 2-pin plug extension cable for mini phone plug

$EtCO_2$ Intubated Circuits	
M1920A	FilterLine Set – adult/pediatric (25 sets/ case)
M1921A	Filter H Set – humidified adult/pediatric (25 sets/case)
M1923A	Filter H Set – humidified infant/neonatal (yellow, 25 sets/case)

Non-Intubated Dual Purpose Circuits (CO_2 + O_2)	
M2520A	Smart CapnoLine – pediatric
M2522A	Smart CapnoLine – adult

Non-Intubated Single Purpose Circuits (CO_2)	
M2524A	Smart CapnoLine – pediatric
M2526A	Smart CapnoLine – adult

Power	
M3538A	Lithium Ion Battery with fuel gauge
M3539A	AC power module
M5528A	Vehicle wall mount
M5529A	DC power module
989803135301	2-Bay Battery Support System for Lithium Ion Batteries
989803135331	4-Bay Battery Support System for Lithium Ion Batteries
989803135341	4-Bay Battery Support System for Sealed Lead Acid and Lithium Ion Batteries

Paper	
40457C	50mm Chemical Thermal, Gray Grid (10 rolls)
40457D	50mm Chemical Thermal, Gray Grid (80 rolls)
989803138171	75mm Chemical Thermal, Red Grid (10 rolls)
989803138181	75mm Chemical Thermal, Red Grid (80 rolls)

Sync Cables	
M1783A	Sync Cable (2.5m/8ft)
M5526A	Sync Cable (7.6m/25ft)

Miscellaneous	
M1781A	Test Load for use with M3507A Pad Cable
M3537A	Bedrail Hook mount
M3541A	Red Carrying Case (includes 3 accessory pouches and shoulder strap)
M3549A	Wide Bedrail Hook mount
M3725A	Test Load for use with M3508A Pad Cable
M4737A	Display cover
M4759A	Replacement adult paddle
M5525A	Handle – light gray (for white M3536A)
453564063841	Calibration Kit – NBP
453564063851	Calibration Kit – $EtCO_2$
989803180111	Handle – dark gray (for gray M3536A)
M5528A	Vehicle wall mount
989803146981	Data card and tray
989803174901	Green Hard Transport Case (pads only)
989803176411	Paddle tray kit
989803176541	Quick Disconnect DC Power Cable
989803179151	Night-Vision Goggle Compatible Display Cover
989803176541	Quick Disconnect DC power cable
989803172501	Black Soft Carry Bag
989803174261	Black Soft Carry bag – straps only
989803180871	Black Carrying Case (includes 3 accessory pouches and shoulder strap)
989803184471	Wireless Link Hardware – Generic
989803184691	Wirelss Link Cable Kit

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Specifications

Delivered Energy Accuracy

Nominal Delivered Energy vs. Patient Impedance							
Energy	**Load Impedance (ohms) ± 2%**						
	25	50	75	100	125	150	175
1 J	1.2	1.3	1.2	1.1	1.0	0.9	0.8
2 J	1.8	2.0	2.0	1.9	1.7	1.6	1.5
3 J	2.8	3.0	3.0	3.1	3.0	2.9	2.7
4 J	3.7	4.0	4.0	4.1	4.2	4.2	4.0
5 J	4.6	5.0	5.1	5.1	5.2	5.2	5.0
6 J	5.5	6.0	6.1	6.2	6.3	6.3	6.1
7 J	6.4	7.0	7.1	7.2	7.3	7.3	7.1
8 J	7.4	8.0	8.1	8.2	8.4	8.3	8.1
9 J	8.3	9.0	9.1	9.3	9.4	9.4	9.1
10 J	9.2	10	10	10	10	10	10
15 J	14	15	15	15	16	16	15
20 J	18	20	20	21	21	21	20
30 J	28	30	30	31	31	31	30
50 J	46	50	51	51	52	52	50
70 J	64	70	71	72	73	73	71
100 J	92	100	101	103	104	104	101
120 J	110	120	121	123	125	125	121
150 J	138	150	152	154	157	156	151
170 J	156	170	172	175	177	177	172
200 J	184	200	202	206	209	209	202

Accuracy: ±2J for 1–10J energy levels; ±15% for all other energy levels.

Defibrillator	
Waveform:	Biphasic Truncated Exponential. Waveform parameters adjusted as a function of patient impedance
Shock Delivery:	Via multifunction electrode pads, or paddles
Charge Time:	Less than 5 seconds to 200 joules with a new, fully charged Lithium Ion battery pack at 25°C.

Patient Impedance Range	
Minimum:	15ohm (internal defibrillation); 25ohm (external defibrillation)
Maximum:	180ohm

Note: Actual functional range may exceed the above values.

General	
Dimensions with pads:	12.4in (W) x 8.3in (D) x 11.7in (H) (31.5cm x 21.0cm x 29.5cm)
Dimensions with paddles:	13.4in (W) x 8.3in (D) x 13.6in (H) (34.0cm x 21.0cm x 34.5cm)
Weight:	13.9lbs (6.3kg) including pads, pads cable, full roll of paper, and battery. Incremental weight of external standard paddles and paddle tray is 2.5lbs. (1.1kg). Additional battery weighs less than 1.8lbs. (0.82kg)

AED Mode	
AED Energy Profile:	150 joules nominal into a 50 ohm test load
Text and Voice Prompts:	Extensive text/audible messages guide user through configured protocol
AED Controls:	On/Off, Shock
Indicators:	Monitor display messages and prompts, voice prompts, battery status, Ready For Use, external power
Armed Indicators:	Charging tone, charged tone, flashing Shock button, energy level indicated on display, and voice prompts
ECG Analysis:	Evaluates patient ECG and signal quality to determine if a shock is appropriate and evaluates connection impedance for proper defibrillation pad contact
Shockable Rhythms:	Ventricular fibrillation and certain ventricular tachycardias, including ventricular flutter and polymorphic ventricular tachycardia
Shock Advisory Algorithm Sensitivity and Specificity:	Meets AAMI DF-80

ECG and Arrhythmia Monitoring	
Inputs:	Up to four ECG waves may be viewed on display and up to two waves printed simultaneously. Lead I, II, or III is obtained through the 3-Lead ECG cable and separate monitoring electrodes. With a 5-Lead cable, leads aVR, aVL, aVF, and V can also be obtained. Pads ECG is obtained through two multifunction pads.
Lead Fault:	Device automatically switches to a source that has a good signal when the current signal is unavailable. Target ECG waveform can be configured.
Pad Fault:	Dashed line appears on the display if a pad becomes disconnected.
Heart Rate Display:	Digital readout on display from 15 to 300bpm, with an accuracy of ±10%
Heart Rate/ Arrhythmia Alarms:	HR, Asystole, VFIB/VTACH, VTACH, Extreme Tachy, Extreme Brady, PVC rate, Pacer not capture, Pacer not pacing
Pacemaker Pulse Rejection Capability:	Amplitude from ±2 mV to ±700 mV, width from 0.1ms to 2.0ms as per ANSI/AAMI EC13:1992 3.1.4.1.
ECG Cable Length:	9ft (2.7m)
Common Mode Rejection:	Greater than 90 dB measured per AAMI standard for cardiac monitors (EC 13)
ECG Size:	2.5, 5, 10, 20, 40 mm/mV, autogain

Frequency Response Bandwidth	
AC Line Filter:	60Hz or 50Hz
3-Lead, 5-Lead, and Pads:	Pads ECG for Display: Monitor (0.15 – 40Hz) or EMS (1 – 30Hz); Pads ECG for Printer: Monitor (0.15 – 40Hz) or EMS (1 – 30Hz); Leads ECG for Display: Monitor (0.15 – 40Hz) or EMS (1 – 30Hz); Leads ECG for Printer: Diagnostic (0.05 – 150Hz) or Monitor (0.15 – 40Hz) or EMS (1 – 30Hz)
12-Lead:	ECG for Display: (0.05 – 150Hz), (0.05 – 40Hz), (0.15 – 40Hz); ECG for Report: (0.05 – 150Hz), (0.05 – 40Hz), (0.15 – 40Hz), (0.05 – 150Hz)

Patient Isolation (Defibrillation Proof)	
ECG:	Type CF
SpO_2:	Type CF
$EtCO_2$:	Type CF
NBP:	Type CF
Invasive Pressures:	Type CF
Temperature:	Type CF
External Defib:	Type BF
Internal Defib:	Type CF

Display	
Size:	8.4in diagonal (128mm x 171mm)
Type:	TFT Color LCD
Resolution:	640 x 480 pixels (VGA)
Wave Viewing Time:	5 seconds (ECG)
Sweep Speed:	25 mm/s nominal (stationary trace; sweeping erase bar) for ECG, Invasive Pressures and SpO_2; 6.25 mm/s for CO_2

Battery	
Type:	Rechargeable, Lithium Ion; minimum 6.30Ah, 14.4V, 91Wh
Dimensions:	6.5in (H) x 3.8in (W) x 1.6in (D) (165mm x 95mm x 42mm)
Weight:	Less than 1.8lb (0.82kg)
Charge Time:	Approximately 3 hours to 100%. Approximately 2 hours to 80%, indicated by battery fuel gauge. Charging the battery at temperatures above 45°C may degrade battery life.
Battery Indicators:	Fuel gauge on battery, capacity indicator on display; flashing RFU indicator, chirp, and LOW BATTERY message appears on display for low battery condition*
Storage:	Storing the battery for extended periods at temperatures above 40°C will reduce battery capacity and degrade battery life.

*Low battery condition triggered with at least 10 minutes of monitoring time and 6 maximum energy discharges remaining (with a new battery at room temperature, 25°C)

Battery Capacity*	
Shocks:	At least 50 200J charge/shock or disarm cycles
Monitoring only:	At least 9 hours of ECG monitoring with no other options installed
Monitoring and Shocks:	At least 5 hours of monitoring with ECG, SpO_2, CO_2, temperature, and 2 invasive pressures monitored continuously, NBP measured every 15 minutes, and 20 200-joule discharges
Monitoring and Pacing:	At least 3.5 hours while pacing at 180 ppm at 160 mA and monitoring as described above

*With a new, full-charged battery at 25°C (77°F).

Thermal Array Printer	
Continuous ECG Strip:	The Print key starts and stops the strip. The printer can be configured to run real time or with a 10-second delay. The strip prints the primary ECG lead with event annotations and measurements.
Auto Printing:	The printer can be configured to automatically print on Marked Events, Charge, Shock, and Alarm. When an alarm condition occurs, the unit prints the primary ECG wave and the alarming wave, if configured.
Reports:	The following reports can be printed: Event Summary, Vital Signs Trending, 12-Lead, Operational Check, Configuration, Status Log, and Device Information
Speed:	25 or 50mm/s with an accuracy of ± 5%
Amplitude Accuracy:	± 5% or ± 40uV, whichever is greater
Paper Size:	50mm (W) by 30m (100ft) (L) 75mm (W) by 30m (100 ft) (L)

Non-Invasive Pacing	
Waveform:	Monophasic Truncated Exponential
Current Pulse Amplitude:	10mA – 175mA (5mA increments); accuracy 10% or 5mA, whichever is greater
Pulse Width:	40ms with ± 10% accuracy
Rate:	30ppm – 180ppm (10ppm increments); accuracy ± 1.5%
Modes:	Demand or Fixed Rate
Refractory Period:	340msec (30 – 80ppm); 240msec (90 – 180ppm)

SpO_2 Pulse Oximetry	
SpO_2 Range:	0 – 100%
Pulse rate:	30 – 300bpm
Maximum Power Output:	< 15mW
Wavelength Range:	500 – 1000nm
Resolution:	1%
Display Update Period:	1 sec. typical numeric update rate
Accuracy with Sensor	
M1191A	1 standard deviation 70 – 100%, ± 2.0%
M1191AL	1 standard deviation 70 – 100%, ± 2.0%
M1191B	1 standard deviation 70 – 100%, ± 2.0%
M1191BL	1 standard deviation 70 – 100%, ± 2.0%
M1191T	1 standard deviation 70 – 100%, ± 2.0%
M1192A	1 standard deviation 70 – 100%, ± 2.0%
M1192T	1 standard deviation 70 – 100%, ± 2.0%
M1194A	1 standard deviation 70 – 100%, ± 3.0%
M1195A	1 standard deviation 70 – 100%, ± 3.0%
M1196A	1 standard deviation 70 – 100%, ± 3.0%
M1196T	1 standard deviation 70 – 100%, ± 3.0%
M1131A	1 standard deviation 70 – 100%, ± 3.0%
Pulse Rate Accuracy:	2% or 1bpm (whichever is greater)
Pulse Alarm Range:	Low limit: 30 – 195 (adults); 30 – 235 (pediatric) High limit: 35 – 200 (adult); 35 – 240 (pediatric)
SpO_2 Alarm Range:	Low limit: 50 – 99% (adult/pediatric) High limit: 51 – 100% (adult/pediatric)
SpO_2 and Pulse High/Low Alarm Signal Generation Delay:	10 seconds

Note: The above referenced sensors were validated for use with the HeartStart MRx using the Philips picoSAT II SpO_2 module with Fourier Artifact Suppression Technology (FAST). This module is not available as a stand-alone device.

Non-Invasive Blood Pressure

Pressure Range	
Systolic:	40 – 260mmHg
Diastolic:	20 – 200mmHg
Initial Pressure:	160mmHg (adult); 120mmHg (pediatric)
Maximum Pressure:	280mmHg
Overpressure Safety Limits:	Maximum of 300mmHg
Cuff Inflation Time:	75 second maximum (pediatric or adult)
Pressure Transducer Accuracy:	±3mmHg
Alarm Range	
Systolic high limit:	35 – 270 (adult), 35 – 180 (pediatric)
Systolic low limit:	30 – 265 (adult), 30 – 175 (pediatric)
Diastolic high limit:	15 – 245 (adult), 15 – 150 (pediatric)
Diastolic low limit:	10 – 240 (adult), 10 – 145 (pediatric)
Mean high limit:	25 – 255 (adult), 25 – 160 (pediatric)
Mean low limit:	20 – 250 (adult), 20 – 155 (pediatric)
Other	
Calibration Schedule:	Yearly or every 10,000 cycles
Auto Mode Repetition Time:	1, 2.5, 5, 10, 15, 30, 60, or 120 minutes
Measurement Time:	Auto/manual mode: 30 seconds (average) @ HR > 60bpm, 170 seconds (maximum)
Interconnect Tube Length:	M1598B Connect tubing 5ft (1.5m) M1599B Connect tubing 10ft (3m)

End-Tidal Carbon Dioxide	
Range:	0 – 99mmHg at sea level
Resolution:	1mmHg (0.1kPa)
Accuracy:	For values between 0 and 38mmHg: ±2mmHg. For values between 39 and 99mmHg: ±5% of reading + 0.08% for every 1mmHg (above 40mmHg). For breath rates above 80 and $EtCO_2$ values > 18mmHg: accuracy is 4mmHg or ±12% of reading, whichever is greater.
Alarm Range:	Low Limit: 10 – 94mmHg (adult/pediatric) High Limit: 20 – 95mmHg (adult/pediatric)
Calibration Schedule:	Yearly or every 4,000 hours
Sample Size:	50ml per min
Drift of Measurement Accuracy:	Over a 24-hour period, accuracy claims above are maintained.

Airway Respiration Rate	
Range:	0 – 150rpm
Resolution:	1 rpm
Accuracy:	0 – 40rpm ±1rpm 41 – 70rpm ±2rpm 71 – 100rpm ± 3rpm 101 – 150rpm ± 5rpm
Alarm Range:	Low Limit: 0 – 99rpm (adult/pediatric) High Limit: 10 – 100rpm (adult/pediatric)

Calibration Gas for CO_2	
Ingredients:	5% Carbon Dioxide, 21% Oxygen, 74% Nitrogen
Cylinder Size:	BD
Method of Preparation:	Gravimetric
Blend Tolerance:	0.03%
Accuracy:	0.03% absolute
Moisture:	10 PPM Maximum
Expiration Period:	2 years
Pressure:	144 PSIG
Volume:	10L

Invasive Pressures	
Transducer Sensitivity:	5µV/V mmHg (37.5µV/V/kPa)
Sensitivity Adjustment Range:	±10%
Transducer Load Resistance:	195 to 2200ohms
Transducer Output Resistance:	0 to 3000ohms
Frequency Response:	0 – 12Hz or 0 – 40Hz
Zero Adjustment Range:	±200mmHg (±26.7kPa)
Zero Adjustment Accuracy:	±1.0mmHg (±0.1kPa)
Zero Setting Drift:	< 0.1mmHg/°C (0.013kPa/°C)
Gain accuracy (excluding transducers):	±1% of reading or 1mmHg (0.1kPa) whichever is greater
Gain Drift:	less than 0.05%/°C
Overall Accuracy (included listed transducers):	±4% of reading or 4mmHg (0.5kPa) whichever is greater
Measurement Range:	-40 to 361mmHg (-5.3 to 48.1kPa)
Measurement Resolution:	1mmHg (0.1kPa)
Noise:	< 1mmHg (0.1kPa)
Transducer/Dome Volume Displacement:	Refer to the specific device's specifications.
Additional Noise from EMI if operating under conditions according to EMC standard EN60601-1-2 (Radiated Immunity 3 V/m or Conducted Immunity 3 VRMS):	≤ 3mmHg
Pulse Rate Range:	25 – 350bpm
Pulse Rate Accuracy:	1% of full range
Pulse Rate Resolution:	1bpm

Temperature	
Range:	0° – 45°C (32° – 113°F)
Resolution:	0.1°C (0.2°F)
Accuracy:	+0.1°C from 25°C to 45°C; +0.3°C from 0°C to 24.9°C (excluding any adapter cable)
Settling Time Constant:	< 10sec
Averaging Time:	1sec
Minimum Measurement Time:	See the probe's Instructions for Use to obtain minimum measurement times for accurate readings. The HeartStart MRx does not add any clinically significant time to obtain accurate readings.

12-Lead ECG	
Inputs:	With a 10-Lead cable, leads I, II, III, aVR, aVL, aVF, V/C1-V/C6 can be obtained. All 12-Lead ECG waves can be viewed on the display simultaneously. All 12 leads can be printed on the strip chart printer in 3x4 format.
ECG Bandwidth Filters:	0.15 – 40Hz, 0.05 – 40Hz, 0.05 – 150Hz
Cellular transmission via a device with Bluetooth® wireless technology or a cell phone with an RS-232 connection. 12-Lead ECGs are transmitted through an ISP to the 12-Lead Transfer Station.	
Bluetooth wireless transmission to an external computer which supports File Transfer Profile Server 1.1	
Two-way radio transmission of 12-Lead ECGs in conjunction with General Devices' Rosetta-Lt device.	
Destinations:	Once a 12-Lead reaches the Telemedicine System, it can be displayed, printed, faxed, emailed, or forwarded to another Telemedicine System. It can also be forwarded to the TraceMaster ECG Management System or other ECG management systems (via the DatamedFT).

Patient Data Storage	
Internal Event Summary:	The internal Event Summary stores up to 12 hours of 2 continuous ECG waves, 1 CO_2 wave and 2 invasive pressure waves, events and trending per event summary. There is a maximum capacity of 55 Event Summaries or 240 megabytes (62 megabytes if you have a 64 megabyte card installed) of patient data, whichever comes first.
Data Card Event Summary:	The Data Card has a maximum capacity of 60 Event Summaries or 240 megabytes (62 megabytes if you have a 64 megabyte card installed) of patient data, whichever comes first.

Q-CPR

Measurements	
Compressions:	Depth, rate, release (complete or incomplete), and duty cycle.
Ventilations:	Volume, rate, and inflation time.
Feedback Type	
Verbal:	Prioritized, corrective, verbal feedback for all measurements.
Numerical:	Measurement values for compression rate, ventilation rate, and no flow time.
Graphical:	Compression wave with correct depth target zone. Lung icon for ventilation volume.
User Interface:	Integrated into Code (ALS resuscitation) and AED (BLS resuscitation) views

CPR Meter	
Dimensions:	154mm x 64mm x 28mm with a .91m integrated cable.
Weight:	8.3oz. (235g)
Input Voltage:	4.0 – 6.0V at 170mA. The CPR meter is electrically and galvanically isolated from the defibrillator power and communication sources.
Storage Temperature:	-20° – 60°C (-4° – 140°F)
Operating Temperature:	0° – 50°C (32° – 122°F).
Storage Relative Humidity:	0 – 75%
Operating Relative Humidity:	0 – 95%
Solids/Water Resistance:	IP55. Meets ISO/IEC 60529.
EMC:	Meets IEC 60601-1-2 and RTCA/DO-160E.

CPR Meter Adhesive Pads	
Dimensions:	39mm x 90mm
Storage Temperature:	-20° – 60°C (-4° – 140°F).
Operating Temperature:	0° – 50°C (32° – 122°F).
Storage Relative Humidity:	0 – 75%
Operating Relative Humidity:	0 – 95%
Material:	Foam pad with biocompatible adhesive on both sides.
Shelf Life:	2 years when applied to the CPR meter or 4 years in an unopened package.

Bluetooth Wireless Technology Card	
Bluetooth Class I:	100 meters (approximately 300 feet) maximum transmission range. Dependent upon transmission range of lowest class Bluetooth device. Most Bluetooth devices are Class II, which transmit at maximum ranges of up to 10 meters (33 feet).
Bluetooth Stacks:	Tested with Toshiba™ 4.20.11, IVT™ 2.1.2.0 (Product)/05.04.11.20060301 (stack), Widcomm™ 4.0.1.2400.
Bluetooth Version:	1.1 or greater
Bluetooth devices used with the MRx must support the Bluetooth Dialup Networking Profile (DUN) or the File Transfer Profile (FTP). DUN devices must also have a data transfer plan that supports packet data transmission. Event summaries can only be transmitted via Bluetooth File Transfer Profile (not DUN).	

AC Power Module	
Input:	100 – 240VAC, 50-60Hz, 1-0.46A (Class 1)
Output:	18V, 5A, 90W
Battery:	Minimum 14.4V Rechargeable, Lithium Ion

DC Power Module	
Input:	10 – 32VDC, 11A
Output:	18V, 5A, 90W

Environmental	
Temperature:	0° – 45°C operating, -20° – 70°C storage
Humidity:	Up to 95% relative humidity
Atmospheric Pressure Range:	Operating and Storage – 1014hPa to 572hPa (0 to 15,000ft; 0 to 4,500m)
Shock – Operating Impact:	Half-sine waveform, duration < 3ms, acceleration > 145g, 1 time on all six faces.
Shock – Non-Operating:	Trapezoidal waveform, acceleration ≥30g, velocity change = 742cm/s ± 10% on all six faces.
Bump:	EN60068-2-29 Bump (Half-sine, 40g peak, 6msec duration, 1,000 bumps x 3 axes)
Free fall:	EC 68-2-32 Free fall. Drops on all faces onto a steel surface (excluding bed rail hook) – 30in (76.2cm) with carrying case – 16in (40.6cm) without carrying case
Vibration – Operating Impact:	Operating: MIL STD 810E 514.4 Category 6 Helicopter, General Storage, UH60
Vibration – Non-Operating:	– IEC 68-2-6 Vibration (sinusoidal) (10 – 57Hz, ± 0.15mm; 58 – 150Hz, 2g; 20 sweeps x 3 axes) – IEC 68-2-64 Vibration, broad-band random (10 – 20Hz, 0.05g^2/Hz; 20 – 150Hz, -3dB/octave; 150Hz, 0.0065g^2/Hz; 1.5 hours x 3 axes)
Solids/Water Resistance:	IP24. Water testing performed with cables connected to the device
EMC:	Complies with the requirements of standard EN 60601-1-2:2001
Safety:	Meets the UL 2601-1, CSA C22.2 No. 601-1, EN 60601-1 and 60601-2-4 standards
Other Considerations:	Device not suitable for use in the presence of concentrated oxygen or a flammable anesthetic mixture with air, oxygen, or nitrous oxide.
Mode of Operation:	Continuous

Wireless Link

Specifications	
Weight:	12.8oz (362.9g)
Dimensions:	120mm x 90mm x 45mm (4.72in x 3.54in x 1.77in)
Cable Length:	352mm (13.85in)
Operating Temperature:	0° – 45°C (32° – 113°F)
Storage Temperature:	-20° – 70°C (-4° – 158°F)
Humidity:	Up to 95% relative humidity
Cellular Transmission (2G and 3G)	
Supported Frequency Bands:	GSM/GPRS/EDGE: 850/900/1800/1900 MHz
	UMTS/HSDPS/HSUPA: 800-850/900/1900/2100 MHz and AWS band (1700/2100MHz) (B1, B2, B4, B5, B8)
	CDMA 1xRTT/EV-DO revA: 800/1900 (BC0, BC1)
Maximum RF output power:	Power Class 4 (2 W, 33dBm) for GSM/GPRS 850/900MHz bands
	Power Class 1 (1W, 30dBm) for GSM/GPRS 1800/1900MHz bands
	Power Class E2 (0.5W, 27dBm) for EDGE 850/900MHz bands
	Power Class E2 (0.4W, 26dBm) for EDGE 1800/1900MHz bands
	Power Class 3 (0.25W, 24dBm) for UMTS 850/900/1900/2100MHz bands
	Power Class 3 (0.25W, 24dBm) for 1xRTT and EV-DO
WiFi Transmission	
ISM Band:	802.11b and 802.11g use the 2.4GHz ISM band
Transmit Power:	±15dBm typical for both 802.11b and 802.11g
Baseline Modulation:	OFDM (802.11g); DSSS/CCK (802.11b)
Security and Encription:	WEP (64/128bit), WPA-PSK (TKIP/AES), WPA2-PSK (AES/TKIP)

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Please visit www.philips.com/mrx-ems

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Improving CPR quality – during and after an event

Philips HeartStart MRx with Q-CPR™

As an experienced professional responder, you want to be sure you're performing at your best – regardless of the chaos and urgency surrounding a cardiac emergency. Philips HeartStart MRx Monitor/Defibrillator with Q-CPR gives you that assurance. It displays dynamic, real-time CPR feedback on the MRx monitor and on a small, lightweight display you place right on a patient's chest. You have immediate visual proof of compression and ventilation performance without taking your eyes off your patient. That same CPR data can also be captured and used during follow-up debriefings – a primary recommendation of AHA/ERC 2010 Guidelines calling for an increased focus on continuous quality improvement. Discover the monitor/defibrillator that can help you raise the bar on CPR quality in the moment and after the event – Philips HeartStart MRx with Q-CPR.

Key advantages

- Supports AHA/ERC 2010 Guidelines recommending the assessment of CPR performance
- Delivers instant audiovisual confirmation of ventilation and chest compressions
- Stores data captured during actual cardiac events to help you fine-tune your technique

PHILIPS

sense and simplicity

Rugged, lightweight, and ready when you are

The more you know and the sooner you know it, the better your chances for performing effective CPR. The Q-CPR meter is a rugged, compact tool that works with our HeartStart MRx to automatically measure CPR performance the moment you place it on your patient's chest and begin compressions.

View real time feedback on the patient's chest from the Q-CPR meter display or directly on your HeartStart MRx monitor, so you can quickly adjust your performance based on what you see. Or choose to activate voice prompts and the HeartStart MRx with Q-CPR will coach you along the way.

Easy from the start

Q-CPR is simple to set up and easy to use. It complements your ALS skills with objective performance data you can use to fine-tune your CPR technique – to help you maximize the quality of CPR performed and minimize treatment variability. With Q-CPR, you know that you're pressing hard enough, deep enough, and fast enough, and that ventilation is sufficient to avoid hyperventilation, improve CPR, and increase the chances of a successful resuscitation.

One of a kind

The Q-CPR measurement and feedback tool provides corrective guidance on both the compression and ventilation components of CPR to help you reduce the likelihood of hyperventilation during resuscitation.

Q-CPR at a glance

Ventilation rate	Philips exclusive
Ventilation feedback from bag valve mask (BVM) or intubation	Philips exclusive
Chest compression depth – too shallow	Yes
Chest compression rate high	Philips exclusive
Chest compression rate low	Yes
Complete chest recoil	Philips exclusive
"Hands-off" time	Yes

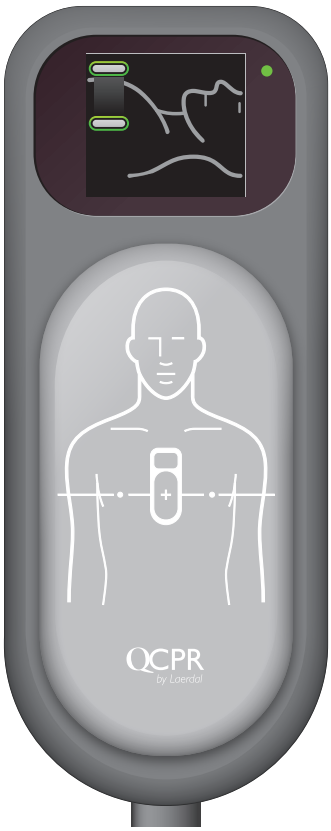
"The MRx with Q-CPR provides immediate, comprehensive and personalized feedback. It measures the depth of compressions, full expansion of the chest, and the number of respirations. It tells us if we're pressing too deep or not deep enough, fast enough but not too fast. Other vendors can only monitor the rate of compressions."

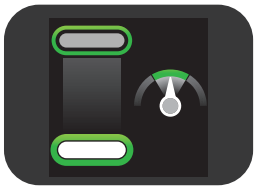
Scott Vivier
EMT-P, AGS, Division Chief of EMS
Henderson Fire Department
Henderson, Nevada

See it, hear it, do it

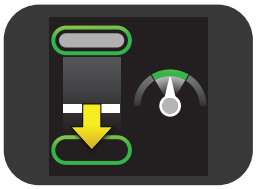
Q-CPR gives you the opportunity to respond instantly to visual feedback.

Better quality CPR is in your hands and right before your eyes

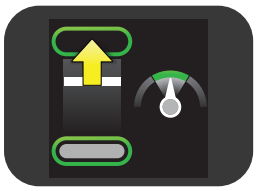




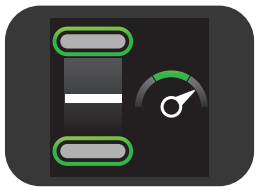
Good compressions



Compress deeper



Release pressure between compressions



Compress slower

Improve survival rates

The Q-CPR meter helps ensure that every compression meets depth, rate, and complete release targets to help improve the patient's chance of survival and increase the opportunity for a complete neurological recovery.[1]

"We've realized a significant increase in our overall success rate for return of spontaneous circulation in cardiac arrest patients."

TJ Smith,
NR EMT-P, Firefighter/Paramedic
Henderson Fire Department
Henderson, Nevada

CPR timer and compression counter.

Real-time feedback directly on monitor.

Take control

Q-CPR offers protocol management and enhanced visual feedback in code view or AED mode on the HeartStart MRx display. You can turn voice prompts ON or OFF depending on your protocol and the environment where you're delivering CPR.

Guidance on ventilation, only with Q-CPR.

A teaching tool, a learning experience

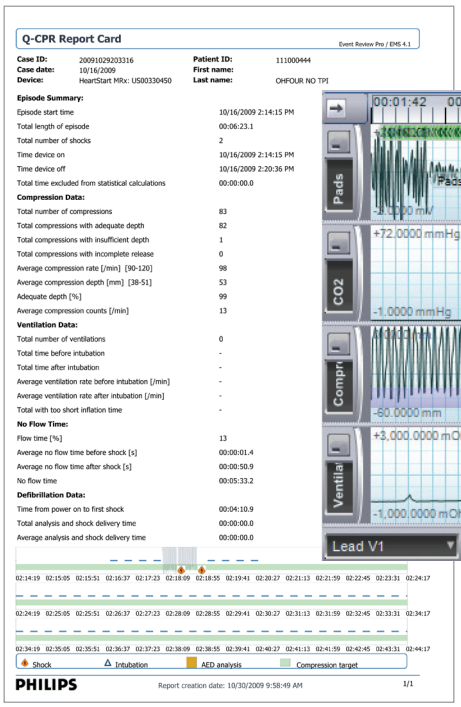
The Q-CPR measurement and feedback tool is the subject of numerous published research.

In one independent study, HeartStart MRx with Q-CPR was used to provide real-time measurement and feedback, and to capture CPR performance data during actual cardiac arrests. Medical professionals then participated in weekly debriefing sessions on CPR performance during those events. The study demonstrated a positive correlation between the use of Q-CPR with performance debriefing, resulting in an improvement in CPR quality and an increase in return of spontaneous circulation (ROSC).[2]

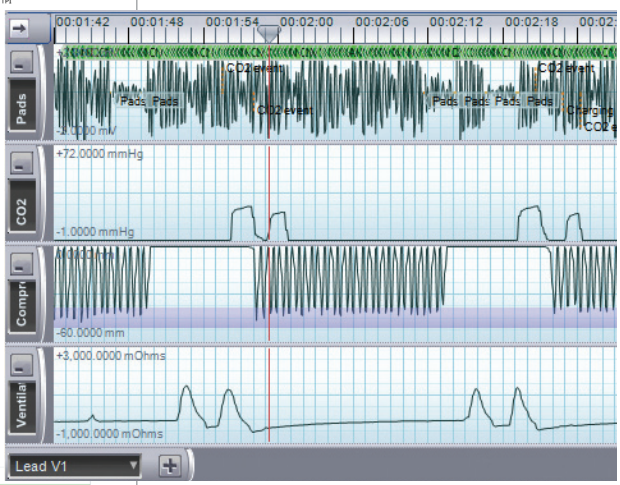
CPR quality improvement begins here

When used in combination with Philips HeartStart Event Review Pro clinical software, Q-CPR is a comprehensive and flexible retrospective data review tool for debriefing, training, and continuous improvement. Event Review Pro captures and stores an entire code – including Q-CPR data for post-event review.

Help your EMS team reach its full potential for quality improvement and saving lives with Q-CPR and Event Review Pro. Because you can't improve what you don't measure.



Q-CPR report card.



HeartStart Event Review Pro allows you to pinpoint key areas in a specific patient's code event for learning and improvement.

Q-CPR supports AHA/ERC 2010 Guidelines

"Improving care requires assessment of performance. Only when performance is evaluated can participants in a system effectively intervene to improve care."

AHA 2010 Guidelines, CPR Overview, page S679

Philips HeartStart monitor/defibrillators incorporate the American Heart Association/European Resuscitation Council 2010 Guidelines and we're committed to supporting the expert recommendations from these international thought leaders in resuscitation and emergency cardiac care.

The HeartStart MRx with next-generation Q-CPR, developed by Laerdal Medical Corporation, offers continued advances in objective CPR measurement and feedback based on the latest research and input from professional responders like you. Our goal is simple: to help you improve your chances of successful resuscitation.

References:

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PHILIPS
Cardiac Resuscitation
HeartStart OnSite
Lead the way
to save a life
Philips HeartStart OnSite defibrillator

For the **extraordinary** moment

With access to the right equipment and support, everyone can help save a life. Philips HeartStart OnSite defibrillator with Life Guidance acts as your personal coach to guide you through a cardiac emergency with a simple, step-by-step process. Adaptive instructions keep you on track, and intelligent sensors automatically deliver the right therapy, helping give you the confidence to lead the way to save a life.

Ready to act.
Ready to go.

Designed for the ordinary person in the extraordinary moment, OnSite is ready to act and ready to go. It allows virtually anyone to treat the most common cause of sudden cardiac arrest (SCA) by delivering a shock quickly and effectively, wherever SCA happens.

Guides you through every step

Just pull the green handle to activate your OnSite defibrillator, and Life Guidance voice instructions will calmly and clearly guide you through the entire process – from placing each pad on the patient to performing cardiopulmonary resuscitation (CPR) and delivering a defibrillation shock. It even guides you on the frequency and depth of chest compressions, as well as breaths.

Use OnSite to train

To give you confidence in your ability, you also can install a special pads cartridge that temporarily turns your OnSite defibrillator into a trainer, or watch our collection of videos that describe every aspect of the defibrillator.

Virtually ready to use out of the box

With OnSite's Ready-Pack, you can enjoy peace of mind knowing your OnSite is deployed correctly and is ready to go when needed.

- Arrives with the SMART Pads cartridge and battery already installed
- Is positioned inside the carry case with a spare SMART Pads cartridge in place
- Just pull the green tab to launch the initial self-test
- Conducts 85 automatic self-tests daily, weekly, and monthly, including testing the pads

A simple, step-by-step process with clear, adaptive voice instructions empowers even the most inexperienced responders.

What's the impact?

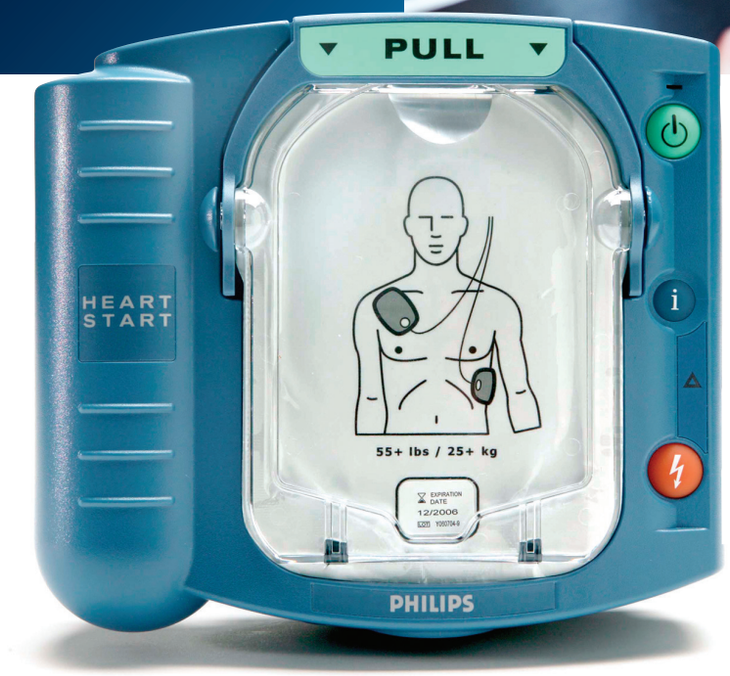
In the United States, it is estimated that SCA outpaces deaths from breast cancer, prostate cancer, house fires, traffic accidents, and HIV combined.[1-4] Yet there is hope. Over half the victims of the most common cause of SCA can survive when treated early with CPR and shock from a defibrillator.[5]

Save time. **Save lives.**

When someone experiences SCA, you should act quickly, but calmly. To help you remain calm and focused, we've equipped OnSite with integrated SMART Pads. Just place the SMART Pads on the person's bare skin, and they will provide feedback to the AED so it can adapt its voice instructions to your actions and your pace. The SMART Pads sense when they have been placed on the patient and when you've completed each step. The system won't announce the next step until you are ready. Prompts are repeated and rephrased, and include additional instruction to aid understanding. You don't need to worry about feeling rushed, overwhelmed, or slowed down.

Fast, confident shock delivery

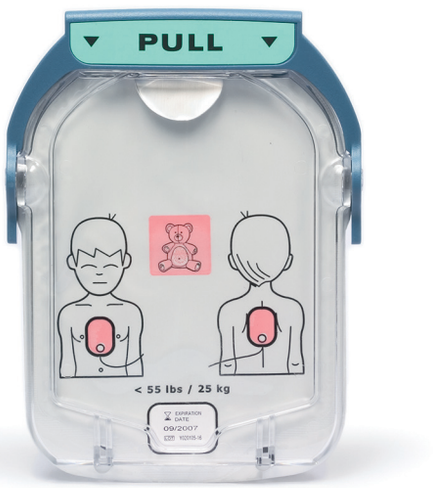
Studies show that minimizing time to shock after CPR may improve survival.[6-10] With patented Quick Shock, OnSite is among the fastest in its class at delivering shock treatment after CPR — typically in just eight seconds.



Weighing just 1.5 kg (3.3 lbs), the HeartStart OnSite defibrillator is small and lightweight.

Personalized therapy. **Enhanced** care.

OnSite is designed for use on anyone, with features that personalize therapy. SMART Analysis automatically assesses the person's heart rhythm and will only deliver a shock if it is needed — even if the Shock button is pressed. You don't need to worry about shocking someone unnecessarily.



When used on infants and children, the system senses when the special Infant/Child SMART Pads cartridge is installed and automatically adjusts to a lower energy level.* It also provides coaching for performing infant/child CPR.

How easy is it?

OnSite is made for people who have never used a defibrillator before. The first and only AED available without a prescription, it is designed to be the easiest to set up and use, and the most reliable defibrillator available. OnSite's ease-of-use was unsurpassed in four different published studies.[11-14]

Establishing a successful program

As the world leader in AEDs, we're also a leader in providing products and services designed to help you establish and maintain a successful AED program. Smart Track, our web-based AED and accessory management tool, helps you keep track of your devices, and can even send an automatic email when it is time to replace pads or batteries. You can also choose to use our medical direction services to provide advice on your AED program and write any necessary prescriptions for pediatric pads cartridges.* In addition, we offer access to training providers and post-event support.

* The Infant/Child SMART Pads cartridge is sold separately, and is available only under the order of a physician, by prescription only.

Answers for your questions

Sudden Cardiac Arrest

Q: What causes SCA?

A: SCA occurs when the electrical system of the heart becomes chaotic, causing it to stop beating effectively. Lacking proper blood flow, the person becomes unresponsive and stops breathing normally. CPR is important, but it alone cannot restore a normal heart rhythm. A shock from a defibrillator is the most effective way to restore the heart's normal pumping rhythm.

Technique

Q: What if I don't know the proper technique?

A: OnSite's Life Guidance will lead you through all the steps, and special sensors in the pads will provide feedback so that the instructions are tailored to you.

Q: How soon must the defibrillator shock be administered?

A: The person's best chance of survival is to receive that shock within five minutes of collapse. A defibrillator will not save every person who experiences SCA, but more lives could be saved if those affected were reached more quickly. Your quick response makes a real difference.

Q: How do I know if a shock is needed?

A: The defibrillator assesses the patient's heart rhythm. If a shock is advised, it directs you to press the flashing orange Shock button. If the defibrillator determines that a shock is not called for, you cannot deliver a shock, even if you press the Shock button.

Q: What if I don't know where to put the pads?

A: The SMART Pads cartridge contains two adhesive pads that have pictures on them to show you where to place the pads on the person's bare skin, and voice instructions will remind you to look at the pictures. The pads are "smart" because they sense when they have been removed from the cartridge, peeled from their liners, and applied to the patient, causing the voice instruction to adjust to your actions.

Q: What do I tell the professionals when they arrive?

A: They will know what questions to ask you. If an Emergency Medical Services (EMS) responder needs a summary of care, it can be retrieved from the defibrillator's internal memory. The EMS provider simply presses the i-button, and OnSite will verbally recount events from its last clinical use.

Technology

Q: How does OnSite assess heart rhythm?

A: OnSite includes highly proven Philips technology for heart rhythm assessment, called SMART Analysis. SMART Analysis is a sophisticated algorithm that simultaneously evaluates several attributes of a person's heart rhythm to determine if the rhythm is shockable.

Q: How does OnSite know how much energy to deliver?

A: A technology called SMART Biphasic Impedance Compensation helps OnSite deliver the right amount of current and energy. Smart Biphasic is the first biphasic therapy with sufficient evidence to be classed "standard of care" and "intervention of choice" by the American Heart Association. SMART Analysis and SMART Biphasic's effectiveness are backed by over 40 published, peer-reviewed studies.[15]

Training

Q: Is training available?

A: Yes. A special training SMART Pads cartridge can be installed in the defibrillator. It disables the defibrillator's ability to shock, while walking you through patient care scenarios. We also offer easily accessible, online training that discusses everything from setting up an AED program to replacing your defibrillator's battery.

Expertise

Q: What is Philips background in defibrillators?

A: We are the worldwide leader in automated external defibrillators (AEDs), having shipped over 1.25 million AED units. Our AEDs are on the job, having logged over 50 billion daily self-tests. We make defibrillators that are used by healthcare professionals every day. While OnSite is designed for anyone to use, it has the same ability to start a heart as our AEDs that are designed for expert use.

HeartStart OnSite defibrillator specifications

Defibrillator

Defibrillator family	HS1. Order M5066A
Standard configuration	Defibrillator, battery, adult SMART Pads cartridge (1 set), Setup and Maintenance Guides, Owner's Manual, Quick Reference Guide, date sticker
HeartStart OnSite Ready-Pack configuration	Order option R01. Defibrillator, battery, carry case, adult SMART Pads (1 pre-installed set, 1 spare set), Setup and Maintenance Guides, Owner's Manual, Quick Reference Guide, date sticker
Waveform	Truncated Exponential Biphasic; waveform parameters adjusted as a function of each patient's impedance
Therapy	Adult defibrillation: peak current 32 A (150 J nominal into a 50-ohm load) Pediatric defibrillation with optional Infant/Child SMART Pads cartridge installed: peak current 19 A (50 J nominal into 50-ohm load)
Shock-to-shock cycle time	Typically less than 20 seconds between shocks in a series
Quick Shock	Able to deliver a shock after the end of a CPR interval, typically in 8 seconds
Voice instructions	Detailed voice messages guide responder through use of the defibrillator
CPR coaching	Instructions for adult or infant/child CPR available at user's option
Shock delivery	Via adhesive pads placed on patient's bare skin as illustrated on pads
Controls	Green SMART Pads cartridge handle, green On/Off button, blue i-button, orange Shock button
Indicators	Ready light; blue i-button; caution light, Shock button lights up when shock is advised

Physical

Size	7 cm x 19 cm x 21 cm (2.8″ x 7.4″ x 8.3″) D x H x W
Weight	With battery and pads cartridge: 1.5 kg (3.3 lbs.) Without battery or pads cartridge: 1 kg (2.4 lbs.)

Environmental/physical requirements

Sealing	Solid objects per EN60529 class IP2X Drip-proof per EN60529 class IPX1
Temperature	Operating: 0° – 50° C (32° – 122° F) Standby: 10° – 43° C (50° – 109° F)
Humidity	Operating: 0% to 95% relative, non-condensing Standby: 0% to 75% relative, non-condensing
Altitude	Operating: 0 to 15,000 feet Standby: 0 to 8,500 feet > 48 hours and 8,500 to 15,000 feet < 48 hours
Shock/drop abuse	Withstands one-meter drop to any edge, corner or surface
Vibration	Meets EN1789 random and swept sine, road ambulance specification in operating and standby states
EMI (radiated/immunity)	Meets EN55011 Group 1 Level B Class B and EN61000-4-3

Data recording and transmission

Infrared	Wireless transmission of event data to a Smartphone or PC, using the IrDA protocol
Data stored	First 15 minutes of ECG and the entire incident's events and analysis decisions

Patient analysis system

Patient analysis	Evaluates patient ECG to determine if a rhythm is shockable. Rhythms considered shockable are ventricular fibrillation (VF) and certain ventricular tachycardias (VT) associated with lack of circulation. For safety reasons, some VT rhythms associated with circulation will not be interpreted as shockable, and some very low-amplitude or low-frequency rhythms will not be interpreted as shockable VF.
Quick Shock	Able to deliver a shock after the end of a CPR interval, typically in 8 seconds
Sensitivity/specificity	Meets AAMI DF80 guidelines and AHA recommendations for adult defibrillation (Circulation 1997;95:1677-1682)
Artifact detection	The effects of pacemaker artifact and electrical noise are minimized

Battery (M5070A)

Type	9 Volt DC, 4.2 Ah, composed of disposable long-life lithium manganese dioxide primary cells
Capacity	Minimum 200 shocks or 4 hours of operating time (EN 60601-2-4:2003)
Install-by date	Battery is labeled with an install-by date of at least 5 years from date of manufacture
Standby life	Four years typical when battery is installed by the install-by date (will power the AED in standby state within the specified standby temperature range, assuming 1 battery insertion test and no defibrillation uses)

SMART Pads

Adult SMART Pads cartridge	M5071A defibrillation pads for patients 8 years of age and older or 25 kg (55 lbs.) and over
Infant/Child SMART Pads cartridge	M5072A defibrillation pads for patients under 8 years of age or 25 kg (55 lbs.); by prescription only
Active surface area	85 cm^2 (13.2″^{2}) each
Cable length	Adult SMART Pads: 137.1 cm (54″) Infant/Child SMART Pads: 101.6 cm (40″)
Use-by date	Cartridge is labeled with a use-by date of at least 2 years from date of manufacture

Training SMART Pads

M5073A	Adult Training SMART Pads cartridge
M5074A	Infant/Child Training SMART Pads cartridge
Function	Training SMART Pads cartridges feature 8 real-world training scripts; used with training mat (included) or with adapters on manikins

Automated and user-activated self-tests

Daily automatic self-tests	Tests internal circuitry, waveform delivery system, pads cartridge, and battery capacity
Pads integrity test	Specifically tests readiness-for-use of pads (gel moisture)
Battery insertion test	Upon battery insertion, extensive automatic self-tests and user-interactive test check device readiness
Status Indicators	Blinking green "Ready" light indicates ready for use; audible "chirp" indicates need for maintenance

* Refer to the HeartStart OnSite Defibrillator Owner's Manual for detailed product instructions. All specifications based on 25° C unless otherwise noted. The defibrillator and its accessories are made of latex-free materials.

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PHILIPS

Cardiac Resuscitation

HeartStart FRx

Lead the way to save a life

Philips HeartStart FRx defibrillator with Life Guidance

For those who **get there first**

With access to the right equipment and support, everyone can help save a life. Philips HeartStart FRx defibrillator with Life Guidance acts as your personal coach to guide you through a cardiac emergency with a simple, step-by-step process. Adaptive instructions keep you on track and intelligent sensors automatically deliver the right therapy, helping give you the confidence to lead the way to save a life.

The HeartStart FRx defibrillator includes advanced Life Guidance features to help guide the treatment of sudden cardiac arrest. With easy set-up, clear voice prompts, and rugged design, HeartStart FRx is designed for all on-the-spot responders.

Power to **save a life**

In the United States, it is estimated that SCA outpaces deaths from prostate cancer, house fires, traffic accidents, and HIV combined.[1-4] Yet there is hope. Over half the victims of the most common cause of SCA can survive when treated early with CPR and shock from a defibrillator.[5]

When treating an infant or a child, simply insert the Infant/Child Key, and the FRx defibrillator adjusts instruction and shock energy. Pre-connected SMART Pads II can be used for both adults and children, so you don't waste a single second changing pads.

Ready to act.

Ready to go.

The FRx defibrillator features Life Guidance intuitive, step-by-step voice instructions, including CPR coaching, to help give responders the confidence that's needed when treating a cardiac arrest. A clear, calm voice and descriptive visual icons guide you through every step, from pad placement to cardiopulmonary resuscitation (CPR) and shock delivery. The voice prompts are paced to your actions, so that you don't need to worry about feeling rushed, overwhelmed, or slowed down.

CPR assistance

Just press the blue i-button for assistance with CPR, and Life Guidance provides instructions and audio cues for the appropriate number, rate, and depth of chest compressions, as well as for each breath. If the Infant/Child Key is inserted, the instructions adapt to CPR instructions that are appropriate for an infant or child.

Defibrillation guidance

To deliver a shock, simply place the pads on bare skin where indicated by the placement diagram, and press the orange Shock button when prompted. Flashing icons and a quick reference guide augment the voice instructions, so you'll know what to do even in a noisy setting.

EMS hand-off

The FRx even reminds you to be sure that emergency medical services (EMS) has been called. And once EMS arrives, hand-off is fast and easy because the FRx pads are compatible with advanced defibrillators from Philips and other manufacturers. Special adapters allow our pads to be plugged into advanced care devices to provide continuity of care.

Ready the moment it arrives
The HeartStart FRx Ready-Pack configuration arrives virtually ready to rescue. Just pull the green tab to initiate the FRx self-test that confirms its readiness for use, and put the device into service. The FRx Ready-Pack comes with the FRx already inside its carry case, with pads connected, battery inserted, and a set of spare pads in place. Set-up is easy, and you have the peace of mind of knowing the device is deployed correctly.

Ready the moment you need it
The FRx is designed as one of the most comprehensive self-testing devices on the market. It performs more than 85 automated daily, weekly, and monthly self-tests to check pad readiness and verify functionality and calibration of circuits and systems, and it can go up to four years between battery replacements.

Ready for any environment
On the scene with law enforcement, on the field with student-athletes or on the job with employees, the FRx is the solution for treating SCA in environments and conditions too demanding for other defibrillators. Lightweight, rugged, and reliable, it can withstand rough handling, extreme temperatures, or dusty or wet environments. Rigorous testing includes jetting water and withstanding loads up to 225 kg (500 lbs.).

Save time. **Save lives.**

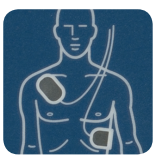
The FRx is ready for you when you arrive on the scene. Pre-connected SMART Pads II can be used for both adults and children, helping deliver therapy more quickly.

Patented Quick Shock typically administers a shock just eight seconds after CPR, making the FRx among the fastest in its class at delivering shock treatment after CPR. Studies show that minimizing time to shock after CPR may improve survival.[6-9] As American Heart Association Guidelines 2010 notes, “Reduction in the interval from compression to shock delivery by even a few seconds can increase the probability of shock success.”[10]

Easy as 1–2–3 in an emergency

1

Press the green On/Off button, which activates voice instruction and visual icons.



2

Place the pads on the patient as directed.

3

When advised by the device, press the orange Shock button.

Personalized therapy. **Enhanced** care.

The FRx contains remarkable technology that adapts to the situation at hand.

- Integrated SMART Pads II placed on the victim's bare skin sense and adapt the defibrillator's instructions to your actions every step of the way.
- SMART Analysis automatically assesses heart rhythm and will only deliver a shock if the rhythm is determined to be shockable – even if the Shock button is pressed.
- Sensors in the pad also immediately measure the resistance of the patient's body and adjust shock attributes accordingly, so that the right current is delivered to the heart on every needed shock.
- Artifact detection allows ECG analysis even in the presence of most pacemaker artifacts and many other electrical noise sources. When more challenging sources of artifact are detected, the voice prompts suggest corrective action.

For infants, children, and adults

SMART Pads II can be used for both adults and children. Simply insert the Infant/Child Key into the FRx to signal to the device that you're treating an infant or a child. The defibrillator adjusts its Life Guidance to provide special pads placement and CPR instructions. The pads icons also flash to show you the optimized pads placement, and the device reduces defibrillation therapy to a level more appropriate for an infant or a child.

Because you don't have to switch pads based on the person's age, you can deliver therapy quickly, and you don't have the extra expense of purchasing separate pads for adults and children.

Proven therapy

At the core of all HeartStart defibrillators are SMART Analysis and SMART Biphasic technologies. SMART Analysis determines if a shock is needed. And the SMART Biphasic shock waveform is highly effective at treating cardiac arrest, yet reduces side effects.[11] Effectiveness of these technologies is proven by more than 40 published, peer-reviewed studies.[12]

HeartStart FRx defibrillator specifications

Defibrillator

Defibrillator family	Order 861304. Defibrillator, battery, SMART Pads II (1 set), Setup and Maintenance Guides, Owner's Manual, Quick Reference Guide, date sticker
HeartStart FRx Ready-Pack configuration	Order Option R01. Defibrillator, battery, carry case, SMART Pads II (1 pre-connected set, 1 spare set), Setup and Maintenance Guides, Owner's Manual, Quick Reference Guide, date sticker
Waveform	Truncated Exponential Biphasic; waveform parameters adjusted as a function of each patient's impedance
Therapy	Adult defibrillation: peak current 32 A (150 J nominal into a 50-ohm load) Pediatric defibrillation with optional FRx Infant/Child Key installed: peak current 19 A (50 J nominal into 50-ohm load)
Protocol	Device follows preconfigured settings; defibrillation and CPR protocol can be customized using HeartStart Event Review software

User interface

Instructions	Detailed voice prompts and visual icons guide responder through use of the defibrillator
CPR coaching	Voice coaching for adult and infant/child CPR provides instructions and audio cues for the appropriate number, rate, and depth of chest compressions, as well as for each breath
Controls	Green On/Off button, blue i-button, orange Shock button, optional Infant/Child Key
Indicators	Ready light, blue i-button, caution light, illuminated pads, icons, Shock button lights up when shock is advised

Physical

Size	6 cm x 18 cm x 22 cm (2.4″ x 7.1″ x 8.9″) D x H x W
Weight	With battery and pads case: 1.5 kg (3.5 lbs.)

Environmental/physical requirements

Sealing	Waterjet-proof IPX5 per IEC60529 Dust-protected IP5X per IEC60529
Temperature	Operating/Standby: 32° – 122° F (0° – 50° C)
Altitude	0 to 15,000 feet
Aircraft	Device: RTCA/DO-160D;1997
Crush	500 pounds
Vibration	Operating: meets MILSTD 810F Fig.514.5C-17, random Standby: meets MILSTD 810F Fig.514.5C-18, swept sine
EMI (radiated/ immunity)	CISPR II Group I Class B, IEC 61000-4-3, and IEC 61000-4-8

Data recording and transmission

Infrared	Wireless transmission of event data to a Smartphone or PC, using the IrDA protocol
HeartStart Event Review software	Data management software (optional) for download and review of data retrieved through defibrillator's infrared data port
Data stored	First 15 minutes of ECG and the entire incident's events and analysis decisions

* Refer to the HeartStart FRx Defibrillator Owner's Manual for detailed product instructions. All specifications based on 25° C unless otherwise noted. The defibrillator and its accessories are made of latex-free materials.

Patient analysis system

Patient analysis	Evaluates patient ECG to determine if a rhythm is shockable. Rhythms considered shockable are ventricular fibrillation (VF) and certain ventricular tachycardias (VT) associated with lack of circulation. For safety reasons, some VT rhythms associated with circulation will not be interpreted as shockable, and some very low-amplitude or low-frequency rhythms will not be interpreted as shockable VF.
Sensitivity/ specificity	Meets AAMI DF80 guidelines and AHA recommendations for adult defibrillation
Shock advised	Able to deliver a shock as soon as the device indicates a shock is advised
Quick Shock	Able to deliver a shock after the end of a CPR interval, typically in 8 seconds
Shock-to-shock cycle time	Typically less than 20 seconds between shocks in a series
Artifact detection	Allows ECG analysis even in the presence of most pacemaker artifact and electrical noise sources; other artifacts are detected and corrective voice prompts issued

Battery (M5070A)

Item number(s)	Standard: M5070A Aviation: 989803139301 (TSO C-142-U.S. only)
Type	9 Volt DC, 4.2 Ah, lithium manganese dioxide, disposable long-life primary cell
Capacity	Minimum 200 shocks or 4 hours of operating time (EN 60601-2-4:2003)
Install-by date	Battery is labeled with an install-by date of at least 5 years from date of manufacture
Standby life	Four years typical when battery is installed by the install-by date (will power the AED in standby state within the specified standby temperature range, assuming 1 battery insertion test and no defibrillation uses)

SMART Pads II

Item number	989803139261
Active surface area	80 cm^2 (12.4″^{2}) each 85 cm^2 (13.2″^{2}) each
Cable length	121.9 cm (48″)
Use-by date	Pads case is labeled with a use-by date of at least 2 years from date of manufacture
Infant/Child Key	Item # 989803139311

Training SMART Pads II

Item number	989803139271
Function	Special pads place HeartStart FRx into training mode and disable its energy delivery capability; features eight real-world training scenarios

Automated and user-activated self-tests

Daily automatic self-tests	Tests internal circuitry, waveform delivery system, pads, and battery capacity
Pads integrity test	Specifically tests readiness-for-use of pads (gel moisture)
Battery insertion test	Upon battery insertion, extensive automatic self-tests and user-interactive test check device readiness
Status indicators	Blinking green "Ready" light indicates ready for use; audible "chirp" indicates need for maintenance

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Please visit **www.philips.com/FRx**

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Making lifesaving faster, easier, better

Philips HeartStart FR3 Defibrillator for professional responders

PHILIPS

Making lifesaving faster,

A sudden cardiac arrest (SCA) response is a stress test for a professional medical response team because time matters. You need your equipment to be rugged, ready to use, and to support you every step of the way.

As a global leader in defibrillation technology, Philips helped chart the course for widespread use of automated external defibrillators (AEDs) among professional responders starting with the innovative ForeRunner and HeartStart FR2 AEDs. Today, Philips continues to provide AED solutions specifically designed for the full spectrum of responders from lay people to clinicians.

Our best professional-grade AED yet, the HeartStart FR3 is designed to make lifesaving faster, easier, and better.

- **Faster** – helping you do your job faster as it significantly reduces deployment time. It eliminates steps to help you start the right therapy – CPR or defibrillation – on your patient faster. Responders can also quickly disconnect the pads and CPR meter from the HeartStart FR3 and connect them to the HeartStart MRx monitor/defibrillator, for fast patient hand-off.
- **Easier** – helping make your job easier because it is small, light, and easy to carry. The optional Q-CPR measurement and feedback technology is set up to help you perform guidelines-compliant CPR. Additionally, HeartStart FR3 is designed to be rugged, reliable, and ready to use.
- **Better** – helping you improve your response by supporting a culture of continuous improvement, including training opportunities to fine-tune SCA response.

The HeartStart FR3 is small and light, which makes it easy to carry and maneuver in tight places.

easier, better

Faster: Helping you provide therapy faster

When responding to a sudden cardiac arrest, you make every effort to reach the victim quickly. But the clock keeps ticking until your patient actually receives therapy. Philips HeartStart FR3 reduces deployment time by eliminating steps to help you start delivery of the right therapy – CPR or defibrillation – on your patient faster.

- **Automatically powers on**** with the Heart Start FR3 rigid system case so you can focus on pad placement from the start*
- **Peel & place SMART Pads III**. There's no foil pouch to open when the pads are pre-connected
- **Q-CPR** (optional) can help first response teams deliver high performance, high quality CPR right from the start, independently of pads placement
- **Receive patient-specific guidance** with Philips SMART CPR for the most appropriate initial therapy – CPR or defibrillation – even for shockable rhythms
- **Minimize CPR interruptions** and speed shock delivery with Philips Quick Shock

The HeartStart FR3 solution helps you respond to a pediatric cardiac arrest faster

- No need to change pads, just use the same SMART Pads III for adults and children
- Insert the Infant/Child Key to automatically decrease the defibrillation therapy and implement the configured infant/child CPR protocols

Philips Quick Shock technology reduces the time between hands-off and shock delivery to minimize CPR interruptions.

Minimize CPR interruptions with Quick Shock

The 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science and the 2010 European Resuscitation Council Guidelines for Resuscitation recommend that delays and interruptions to chest compressions be minimized throughout the entire resuscitation.[1,2] **Philips Quick Shock** technology reduces the time between hands-off and shock delivery to minimize CPR interruptions.

Easier: Helping make your job easier

Shown actual size

Easier to carry with your other equipment
- Small and light (3.5lbs / 1.6kg)
- Easy to use and maneuver in tight places
- A variety of carry case options to fit your needs

Confidence that your AED will stand up to your demanding work environment
- Holds IP55 rating for protection against dust and jetting water
- Tested to US Military standards
- Crush tested to 1,100lbs (499kg)

Confidence that your AED will be ready when needed
- Standard battery typically delivers 300 shocks or, if configured, up to 12 hours of monitoring
- Performs daily, weekly, and monthly automated self-tests, including pads integrity, with visual and attention-getting audible alerts
- Green ready light flashes to confirm the HeartStart FR3 is ready for use
- Philips AEDs have accumulated over 30 billion service hours*

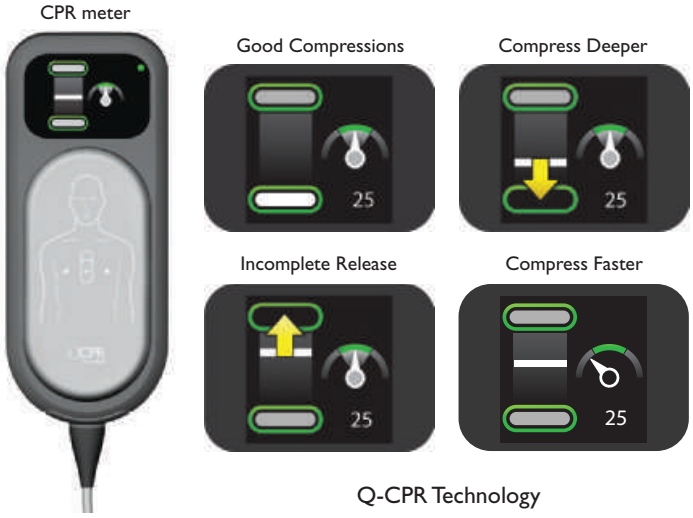
Confidence that you are delivering high-quality therapy to your patient
- Q-CPR helps responders perform high-quality CPR. It provides real-time measurement and feedback on compression depth, release, and rate right where you want it — on the patient's chest. It also provides notification of the lack of CPR activity and the presence of hyperventilation
- CPR Metronome keeps the beat for consistent chest compressions
- SMART CPR evaluates key characteristics of the presenting VF and determines the initial therapy — defibrillation first or CPR first quickly followed by a shock
- Quick Shock reduces the time between hands-off and shock delivery to minimize CPR interruptions
- Philips SMART biphasic waveform is evidence-based therapy that achieves consistently high efficacy for terminating ventricular fibrillation [3-16]

Easier to use in a noisy environment
- Bright, high-resolution color LCD that can show text or text with ECG

Easier to adapt to your specific organizational needs
- 3-Lead ECG cable for rhythm assessment and attended monitoring allows trained users to select Lead I, II or III for optimized viewing, and the Event Mark feature allows notable events to be captured for later review
- Rechargeable battery option provides up to 100 shocks and up to 3.5 hours hours of monitoring time as a cost-effective solution for frequent users
- Bilingual configurable so that voice and text prompts can be clearly understood
- Extensively upgradeable to take advantage of Philips advancements now and in the future

Easier to simulate real-world conditions when training
- Deliver more realistic traning with the actual HeartStart FR3 device, using the rechargeable training battery and training pads
- The AED Trainer 3 provides a cost-effective training solution without taking the HeartStart FR3 AED out of service

Easier to standardize on one pad set for your program
- SMART Pads III are compatible for use with the HeartStart FR2-Series
- SMART Pads III work with Philips monitor/defibrillators, including the HeartStart MRx monitor/defibrillator, for easy hand-off



Q-CPR Technology

Better: Helping you improve emergency response

The HeartStart FR3 and Philips Data Management Solutions are designed to help support **a culture of continuous improvement and excellence** among emergency response organizations.

The HeartStart FR3 can capture an entire code for retrospective review. And with the optional Q-CPR feature, administrators can review comprehensive CPR data all within the context of the event.

Philips tools help make it simple for emergency responders in the field to download and forward data to where it needs to be so they can focus on providing care. Responders can keep devices in service by downloading events via Bluetooth or a HeartStart FR3 data card.

Having data readily available can help facilitate retrospective review by medical directors and program managers so timely and consistent feedback can be provided to responders while the event is still fresh. Medical directors can also refine their protocols.

Philips Data Management Solutions

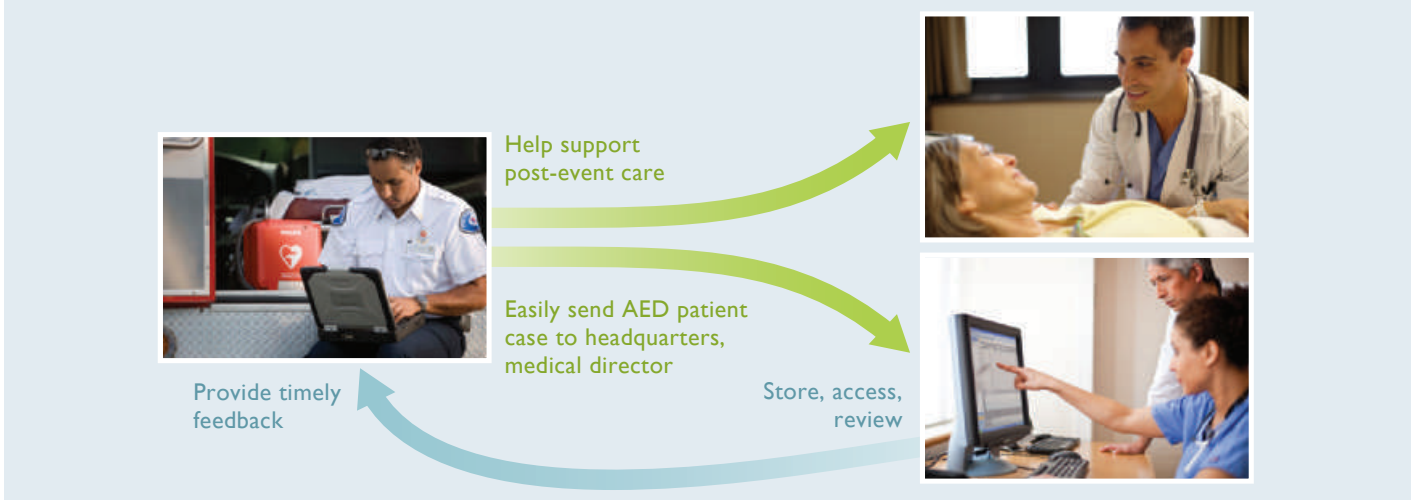
HeartStart Event Review (basic)
Review, annotate, print, and store AED cases in a database for responder debriefing.

HeartStart Event Review Pro (full featured)
Provide more in-depth assessment of responder intervention and patient response to evaluate individual and system-wide response performance.

HeartStart Data Messenger
Automatically route events from your responders' computers based on your desired workflow. Responders don't have to manipulate software to move data. So event data may arrive at its destination more promptly and consistently.

Philips Data Software Development Kit
Append a defibrillator patient event to any electronic patient care reporting (ePCR) enabled with the Philips Data Software Development Kit.

Patient data flows according to your desired workflow using your existing infrastructure



HeartStart FR3 Defibrillator specifications

Defibrillator	
Models	861388 text display 861389 ECG and text display Supplied with AED, primary battery (1), SMART Pads III (1 set), and user documentation
Waveform	SMART Biphasic Truncated Exponential waveform parameters adjust as a function of patient impedance. Adult nominal peak current 32A (150J into a 50 ohm load): pediatric nominal peak current 19A (50J into a 50 ohm load) using optional Infant/Child Key
Advanced mode	Configurable using optional HeartStart Configure software
ECG display	
Screen	LCD color display, 320 x 240 pixels. 2.8" x 2.1" (7.2cm x 5.4cm)
Bandwidth	1 Hz to 30 Hz (-3dB), nominal (non-diagnostic)
Monitored lead	Lead II using anterior-anterior adult pads placement
Physical	
Size	2.7" high x 5.3" wide x 8.7" deep (6.9cm x 13.5cm x 22.1cm)
Weight	3lbs 8oz (1.6kg) with FR3 primary battery installed
Environmental/physical requirements	
Sealing	Meets IEC529 class IP55 with battery installed
Temperature	Operating/standby: 32° – 122°F (0° – 50°C)
Altitude	Meets IEC 60601-1:5.3 (1013 to 572mbar (hPa), equivalent to air pressure from 0 to 15,000 feet; 0 to 4,572 meters)
Shock/drop abuse tolerance	Meets MIL-STD-810F 516.5, Procedure IV (after a one-meter drop to any edge, corner, or surface in standby mode)
Vibration	Meets MIL-STD-810F 514.5 C-17
Crush test	1,100lb (499kg)
Bluetooth 2.0 Class II Wireless Transceiver Module (optional)	
Function	Transmit retrospective event data wirelessly
Patient analysis system	
ECG analysis	Evaluates impedance of defibrillator pads for proper contact with patient skin, evaluates the ECG rhythm and signal quality to determine if a shock is appropriate
SMART CPR	Evaluates key characteristics of the presenting VF and determines the initial therapy: shock first, or CPR first quickly followed by a shock
Sensitivity/ specificity	Meets AAMI DF80 requirements and AHA recommendations for adult defibrillation
Quick Shock	Typically arms in <8 seconds from the end of the HeartStart "Stop CPR" prompt
FR3 primary battery	
Type	12VDC, 4.7Ah, lithium manganese dioxide Long-life primary cells
Capacity	Typically 300 shocks or up to 12 hours of operating time at 77°F (25°C) when configured for monitoring after No Shock Advised (NSA) 7.5 hours of operating time at 77°F (25°C) when configured for CPR after NSA
Standby life	3 years minimum when stored under standby environmental conditions (battery installed)
Shelf life	5 years
SMART Pads III	
Application	Disposable, multifunction defibrillation pads for adult or infant/child patients. Time-saving peel and place pads can be removed from packaging and stored in the FR3 carry case. Pads can be preconnected to FR3, which enables testing during the HeartStart's FR3's routine self-test.
Infant/Child Key (optional)	
Function	Selects therapy for infants or children under 55lbs (25kg) or 8 years old
HeartStart FR3 data card (optional)	
Function	Stores a minimum of 8 hours of event data including voice recording, (if configured)
Automated and user-activated self-tests	
Automated self-test	Daily, weekly, monthly. Power on and runtime tests during all modes of operation.
HeartStart FR3 training battery and training pads (optional)	
Function	Places FR3 into a scenario-based training mode and simulates shock therapy
Type	Lithium ion rechargeable battery
Q-CPR (optional)	
Application	For use with the HeartStart FR3 Text 861388 and ECG 861389 models with PR2.0 or higher software
Function	CPR meter provides real-time measurement and feedback on CPR performance in accordance to the 2010 AHA/ERC Guidelines. Displays CPR feedback indicators for depth, release, and rate of chest compressions. Provides notification for lack of expected CPR activity. The HeartStart FR3 prompts the responder when it detects hyperventilation of the patient
Compression rate	100 to 120/min
CPR Inactivity Indicator	Visual icon
Hyperventilation	Prompts responders when detected
Compression counter	Registers up to 999 compressions or, automatically resets with timed CPR intervals
Sealing	Meets ISO/IEC 60529 class IP55
3-Lead ECG Cable (optional)	
Application	For use with the HeartStart FR3 with ECG, model 861389 with PR2.0 or higher software
Function	Lead vectors I, II, or III are selectable Event Marker feature using option button
Rechargeable Clinical Use Battery (optional)	
Application	For use with the HeartStart FR3 Text 861388 and ECG 861389 models with PR2.0 or higher software
Function	Lithium ion rechargeable for use with the Philips 861394 charger • 10.8 VDC, 4.5 Ah, typical • When new and fully charged, provides 3.5 hours of operating time or 3 hours with the CPR meter connected

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* Data on file with Philips Healthcare.

** If you do not use the HeartStart FR3 rigid system case with the auto-on feature, press the green On/Off button to turn on the FR3.

*** ECG is intended only for basic rhythm identifications. It is not intended for diagnostic and ST segment interpretation.

Not all items are available worldwide. Check with Philips for availability of optional software and accessories.

The HeartStart FR3 requires a prescription for use in the United States, and must be used under medical direction.

Please visit www.philips.com/fr3

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Products and services, maximizing defibrillator performance

Philips HeartStart OnSite Defibrillator supplies and accessories

PHILIPS

sense and simplicity

Carry cases

There are three carry cases available for the HeartStart OnSite Defibrillator : the Standard Carry Case, the Slim Carry Case and the Hard-shell waterproof case. The Standard and Slim cases are constructed with semi-rigid materials and covered in durable red Cordura.® A window pocket inside both cases, the Standard and Slim, holds the OnSite Quick Reference Guide.

Standard Carry Case

Item # M5075A

In addition to the OnSite Defibrillator, the Standard Carry Case can accommodate one spare pads cartridge and a spare battery. It also comes equipped with a pair of paramedic scissors.

Dimensions:

9.5″ (24 cm) w, 8.5″ (21 cm) h, 4.8″ (12 cm) d

Slim Carry Case

Item # M5076A

The Slim Carry Case (M5076A) holds the OnSite Defibrillator and a pair of paramedic scissors.

Dimensions:

9.5″ (24 cm) w, 8.5″ (21 cm) h, 3.5″ (9 cm) d

Hard-Shell Carry Case

Item # YC

Our waterproof carry case made of hard-shell plastic is suited for more rigorous use, particularly in wet outdoor settings. It can also accommodate a spare battery, spare pads cartridge, and the contents of the Fast Response Kit.

Dimensions:

13.5″ (34 cm) w, 12″ (30 cm) h, 6″ (15 cm) d

Wall mounting solutions

Philips Wall Mount Bracket and Defibrillator Cabinets let you strategically place defibrillators for fast access and response.

Wall Mount Bracket

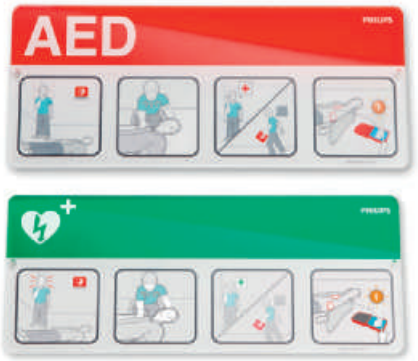
Item # 989803170891

The Wall Mount Bracket is designed specifically for housing a Philips HeartStart defibrillator and its accessories. The defibrillator's carry case can be tethered to the Wall Mount Bracket with a breakaway Secure-Pull Seal (M3859A) to discourage tampering. A broken seal indicates that the defibrillator has been removed from the Wall Mount and accessories may need to be replenished. The Fast Response Kit (68-PCHAT) tucks neatly behind the Defibrillator Case.

Dimensions:

10.5″ (27 cm) w, 8″ (20 cm) h, 6.9″ (17 cm) d

Weight: 18.4 ounces (0.52 kg)



AED Awareness Placard

Item # 989803170901 (Red)

Item # 989803170911 (Green)

Raise AED awareness by putting an AED Awareness Placard above every AED located in a public area. Easy-to-understand graphics raise awareness of passers-by about how to use an AED in an emergency. Great for office settings, sports clubs, public facilities, school settings and more.

Dimensions:

10.25″ (26 cm) w, 4.5″ (11 cm) h

AED Awareness Poster Pack

Item # 861476 Opt. ABA (English)

Opt. ABE (Spanish)

Opt. ABF (French)

Place these posters away from the AED, in break areas, copy rooms or locker rooms – anywhere that employees or members of the public can take a moment to raise their awareness about AEDs. Includes space for the AED coordinator to write-in the location of the nearest AED. Pack of four posters.

Dimensions:

11″ (28 cm) w, 17″ (43 cm) h

Secure-Pull Seal

Item # M3859A

AED Wall Sign

Item # 989803170921 (Red)

Item # 989803170931 (Green)

An AED Wall Sign hanging above a Wall Mount Bracket or Defibrillator Cabinet gives even greater visibility to the defibrillator. Can be mounted three different ways to maximize visibility: T-mount, V-mount or Corner Mount.

Face dimensions:

9″ (23 cm) h, 6.1″ (15 cm) d

Wall mounting solutions

To help mobilize an emergency medical response or deter AED theft, Philips offers three different battery-operated, alarmed wall cabinets. The basic cabinet has a simple audible alarm. Also available are two premium cabinets: a wall surface mounted cabinet and a semi-recessed cabinet that is inserted into a wall cut-out for a less obtrusive look.* The premium cabinets feature combination audible and flashing light alarms. They are made of sturdy heavy-gauge steel, and are large enough to accommodate additional medical supplies, such as oxygen. You can also connect the premium cabinets' alarms to your internal security system so that a more coordinated emergency response can be mobilized centrally.

Basic Surface Mounted Cabinet
Item # 989803136531

Dimensions:
16.5″ (42 cm) w, 15″ (38 cm) h, 6″ (15 cm) d

Premium Surface Mounted Cabinet
Item # PFE7024D

Dimensions:
16″ (41 cm) w, 22.5″ (57 cm) h, 6″ (15 cm) d

Premium Semi-recessed Cabinet
Item # PFE7023D

Dimensions:
Recessed Compartment
14″ (36 cm) w, 22″ (56 cm) h, 6″ (15 cm) d

Footprint on wall
16.5″ (42 cm) w, 24.5″ (62 cm) h, 2.5″ (6 cm) d

* The Americans with Disabilities Act requires that objects not protrude more than 4″ into foot traffic areas of open aisles and walkways unless the object's bottom edge is no higher than 27″ from the ground.

SMART Pads Cartridges

Adult SMART Pads Cartridge

Item # M5071A

HeartStart Adult SMART Pads are appropriate for cardiac arrest victims weighing 55 pounds (25 kg) or more.

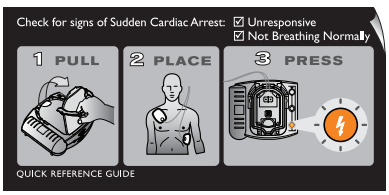
Infant/Child SMART Pads Cartridge

Item # M5072A

Children under 8 years of age or weighing less than 55 pounds (25 kg), including infants, should be treated using HeartStart Infant/Child SMART Pads, if available. These pads instruct the defibrillator to provide voice instructions appropriate for a pediatric patient, and to reduce the energy of its shock from 150 to 50 Joules (J), a more appropriate dosage.[1,2] The Infant/Child Pads cartridge is marked with an indication of patient weight and with a teddy bear icon for easy identification. Purchase of this product requires a prescription.

1. Tang, et al. Pediatric Fixed Energy Biphasic Waveform Defibrillation Using a Standard AED and Special Pediatric Electrodes. Supplement to Circulation, Vol 102, No 18, October 31, 2000, II-437.
2. Cecchin, et al. Is Arrhythmia Detection by Automatic External Defibrillator Accurate for Children? Sensitivity and Specificity of an AED Algorithm in 696 Pediatric Arrhythmias. Circulation 2001; 103:2483-2488, May 22, 2001.

Additional accessories



Quick Reference Guide

Item # M5066-97800

The Quick Reference Guide provides a brief overview of defibrillator operation. Its short captions and straightforward drawings break down each step of the defibrillation process.

Fast Response Kit

Item # 68-PCHAT

The Fast Response Kit contains tools and supplies typically needed for patient care and personal protection: two pairs of hypoallergenic nitrile gloves, a pocket breathing mask, paramedic scissors, a chest hair razor, and a large extra-absorbent paper towel. These items are housed in a zippered pouch which attaches securely to the handle of the carry case.

Dimensions:

9.5″ (24 cm) w, 5.5″ (14 cm) h

Long-life Battery

Item # M5070A

The OnSite Defibrillator uses a disposable, lithium manganese dioxide, long-life battery with a five-year shelf life plus a (typical) four-year installed life. A spare battery should be stored with the defibrillator. Additional batteries should be purchased for defibrillators used frequently for training and/or demonstrations.

Training tools

Training Cartridges

Item # M5073A (Adult)
Item # M5074A (Infant/Child)

To facilitate training on the OnSite Defibrillator, Adult and Infant/Child Training Pads Cartridges are available. These special purpose pads are installed in the HeartStart OnSite and the HeartStart Trainer. When installed in the OnSite, they suspend the defibrillator's ability to deliver a shock and activate its training mode, enabling the user to run any of eight emergency scenarios. Depending on which cartridge is used – Adult or Infant/Child – the defibrillator's voice instructions, including cardiopulmonary resuscitation (CPR) coaching, will be appropriate for treating the simulated victim.

Each training pads cartridge consists of a removable clear protective lid with a handle, a resealable film cover, and a pair of reusable adhesive pads.* It is packaged with a Pads Placement Guide (either Adult or Infant/Child) and illustrated instructions for installing the cartridge, using the Pads Placement Guide, and repackaging the cartridge after using it. A training pads cartridge can also be used on a manikin, connected with an internal (M5088A) or external (M5089A) manikin adapter.

HeartStart Trainer

Item # M5085A

For training many responders simultaneously, the Philips HeartStart Trainer is a flexible and economical solution. The HeartStart Trainer helps your responders learn to use the OnSite Defibrillator. With voice instructions matching those of the OnSite Defibrillator and eight preconfigured scenarios, the Trainer simulates how the defibrillator would operate during real-life situations the responders might encounter.

The HeartStart Trainer comes with a nylon carrying case, one reusable Adult Training Pads Cartridge (M5073A) and one External Manikin Adapter. Optional accessories include the Internal Manikin Adapter (M5088A) for use on selected manikins, the External Manikin Adapter 10-pack (M5089A) for use on all manikins, the Adult Pad Placement Guide (M5090A), and the Infant/Child Training Pads Cartridge (M5074A).

Instructor's Training Toolkit

Item # M5066-89100

The training toolkit includes instructional aids such as videos on DVD and presentations on CD for teaching groups of people to operate the HeartStart OnSite defibrillator.

* Replacement pads are available for training cartridges: Adult, M5093A and Infant/Child, M5094A.

Data management

Philips provides a broad range of tools to help you efficiently and effectively configure your HeartStart Defibrillators and then download, transmit, share, analyze, and report resuscitation data, so you and your medical director can fine tune your response to cardiac emergencies. Whether you manage a community public access program, a school AED program, a corporate emergency response team, an EMS system, or your hospital's resuscitation committee, the Event Review software suite has the tools you need to manage your defibrillator data.

HeartStart Review Express

Our simplest data management product for a quick look at defibrillator data, Review Express lets you download an ECG from your defibrillator, view it and print it. The program can be downloaded from the Philips data management website at no charge. (www.medical.philips.com/goto/eventreview)

Data Messenger

Item # PN 861451 Opt A01

HeartStart Data Messenger helps you move defibrillator cases to where they need to be. Its ideal for fire departments and EMS organizations who want to download defibrillator cases from their AEDs and forward them on to a central data administrator or medical director for retrospective review on Event Review or Event Review Pro. You can configure it to operate automatically in the background. Alternatively, you can configure it to be an easy-to-use wizard that guides you step by step in downloading, viewing and forwarding cases. Runs on a PC or Smartphone.

Event Review

Item # M3834A (single PC)
or 989803141811 (organization-wide)

Event Review allows you to download patient data from your defibrillator, and view it on your PC screen, annotate it with your comments, and add basic response and patient status information. You can save the case to a file or to a database, allowing ad hoc case queries, and case reports. You can also configure your OnSite with Event Review.* It is available with single PC pricing or unlimited organization-wide pricing.

Event Review Pro

Item # 861431 Option A01 – Single PC
Item # 861431 Option A03 – Site license

Event Review Pro is our comprehensive case management tool for the most demanding data managers and medical directors, with even more detailed data entry screens to record every aspect of the response, including detailed response times, interventions, and patient observations. In addition to the individual case reports, you get Utstein reporting and graphical summaries of your system's overall response times to help you manage your service levels more efficiently.

The Infrared Data Cable

Item # ACT-IR

Connected to a PC running HeartStart Review Express, Review Express Connect, Event Review or Event Review Pro, the Infrared Data Cable allows you to retrieve patient data from your OnSite Defibrillator for permanent storage as well as for viewing and reporting.

HeartStart Configure

Item #989803143041

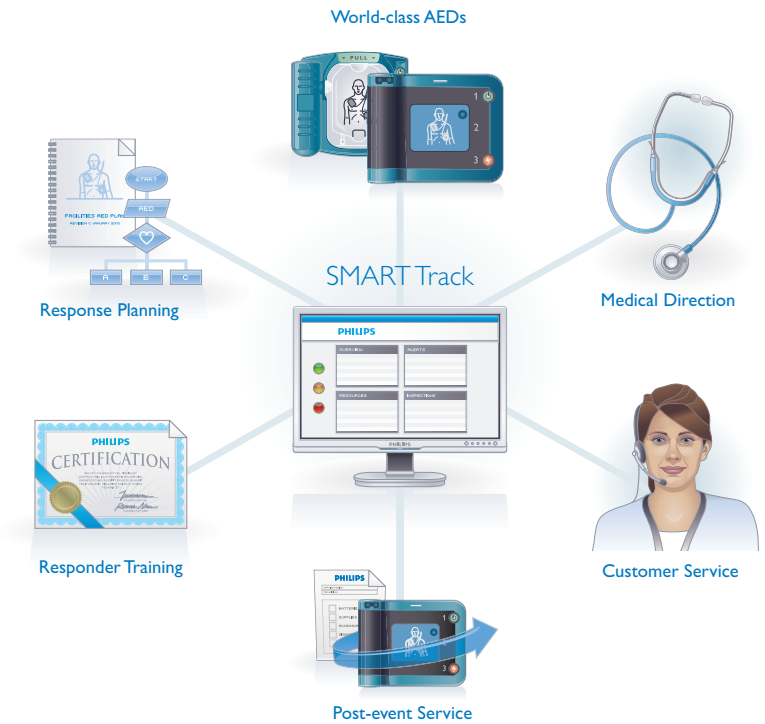
HeartStart Configure enables you to review and change the configuration of your FRx or HS1 using your Pocket PC.* You can retrieve the current configuration from your defibrillator, reset the configuration to default values or revise individual settings according to your medical director's preferences, and transmit them to the defibrillator. To more efficiently manage configuration for your defibrillator program, you can save values to a file on your Smartphone. This lets you transmit the same configuration to all your AEDs as well as maintain a record of allowable settings.

* Changes to default values should be done only by authorized personnel under the oversight of a medical professional. Purchase of this product requires a prescription.

HeartStart AED Services*

We provide management tools and resources to support the needs of your AED program. Whatever your needs, we will work with you to find the services that are right for your situation. We can help you seamlessly manage important components of your AED program, including:

- SMART Track online program management
- Medical direction
- Training
- Maintenance
- Regulatory support
- Post-event support
- Customer service



Philips can help you implement a successful AED program at a single site or at multiple sites globally.

*Where available.

Please visit www.philips.com/OnSite

Philips Healthcare is part of Royal Philips Electronics

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healthcare@philips.com

HeartStart Defibrillators
+1 978 659 3332
800 263 3342 (toll free, US only)

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Rugged and ready to use

Philips HeartStart FRx Defibrillator supplies and accessories

PHILIPS

Carry cases

The HeartStart FRx Defibrillator is designed for use with a carry case. Two carry cases are available: the standard FRx Carrying Case and the Hard Case.

FRx Carrying Case

Item # 989803139251

Constructed with easy-to-clean urethane, this case is durable enough to withstand bumps and drops, and provides easy access with a VELCRO® closure. The FRx case holds and protects your FRx Defibrillator and optional accessories, including a spare battery, two pads sets, the Infant/Child Key and Quick Reference Guide (989803138601). Includes strap.

Dimensions:

9.5″ (24.1 cm) w, 8.0″ (20.3 cm) h,
5.0″ (12.7 cm) d

Hard-Shell Carry Case

Item # YC

Our waterproof carry case made of hard-shell plastic is suited for more rigorous use, particularly in wet outdoor settings. It can also accommodate a spare battery, spare pads cartridge, and the contents of the Fast Response Kit.

Dimensions:

13.5″ (34 cm) w, 12″ (30 cm) h, 6″ (15 cm) d

Wall mounting solutions

Philips Wall Mount Bracket and Defibrillator Cabinets let you strategically place defibrillators for fast access and response.

Wall Mount Bracket

Item # 989803170891

The Wall Mount Bracket is designed specifically for housing a Philips HeartStart defibrillator and its accessories. The defibrillator's carry case can be tethered to the Wall Mount Bracket with a breakaway Secure-Pull Seal (M3859A) to discourage tampering. A broken seal indicates that the defibrillator has been removed from the Wall Mount and accessories may need to be replenished. The Fast Response Kit (68-PCHAT) tucks neatly behind the Defibrillator Case.

Dimensions:

10.5″ (27 cm) w, 8″ (20 cm) h, 6.9″ (17 cm) d

Weight: 18.4 ounces (0.52 kg)

Secure-Pull Seal

Item # M3859A

AED Awareness Placard

Item # 989803170901 (Red)

Item # 989803170911 (Green)

Raise AED awareness by putting an AED Awareness Placard above every AED located in a public area. Easy-to-understand graphics raise awareness of passers-by about how to use an AED in an emergency. Great for office settings, sports clubs, public facilities, school settings and more.

Dimensions:

10.25″ (26 cm) w, 4.5″ (11 cm) h

AED Awareness Poster Pack

Item # 861476 Opt. ABA (English)

Opt. ABE (Spanish)

Opt. ABF (French)

Place these posters away from the AED, in break areas, copy rooms or locker rooms – anywhere that employees or members of the public can take a moment to raise their awareness about AEDs. Includes space for the AED coordinator to write-in the location of the nearest AED. Pack of four posters.

Dimensions:

11″ (28 cm) w, 17″ (43 cm) h

AED Wall Sign

Item # 989803170921 (Red)

Item # 989803170931 (Green)

An AED Wall Sign hanging above a Wall Mount Bracket or Defibrillator Cabinet gives even greater visibility to the defibrillator. Can be mounted three different ways to maximize visibility: T-mount, V-mount or Corner Mount.

Face dimensions:

9″ (23 cm) h, 6.1″ (15 cm) d

To help mobilize an emergency medical response or deter AED theft, Philips offers three different battery-operated, alarmed wall cabinets. The basic cabinet has a simple audible alarm. Also available are two premium cabinets: a wall surface mounted cabinet and a semi-recessed cabinet that is inserted into a wall cut-out for a less obtrusive look.* The premium cabinets feature combination audible and flashing light alarms. They are made of sturdy heavy-gauge steel, and are large enough to accommodate additional medical supplies, such as oxygen. You can also connect the premium cabinets' alarms to your internal security system so that a more coordinated emergency response can be mobilized centrally.

Basic Surface Mounted Cabinet
Item # 989803136531

Dimensions:
16.5″ (42 cm) w, 15″ (38 cm) h, 6″ (15 cm) d

Premium Surface Mounted Cabinet
Item # PFE7024D

Dimensions:
16″ (41 cm) w, 22.5″ (57 cm) h, 6″ (15 cm) d

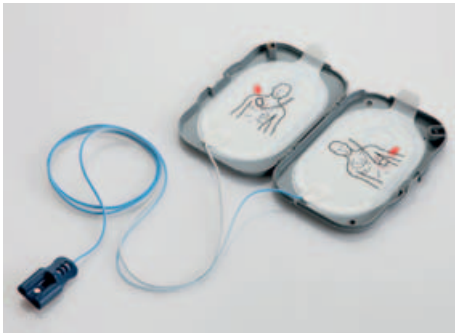
Premium Semi-recessed Cabinet
Item # PFE7023D

Dimensions:
Recessed Compartment
14″ (36 cm) w, 22″ (56 cm) h, 6″ (15 cm) d

Footprint on wall
16.5″ (42 cm) w, 24.5″ (62 cm) h, 2.5″ (6 cm) d

* The Americans with Disabilities Act requires that objects not protrude more than 4″ into foot traffic areas of open aisles and walkways unless the object's bottom edge is no higher than 27″ from the ground.

Additional accessories



SMART Pads II

Item # 989803139261

Save valuable time in an emergency with pads that can be used on adults, children and infants. SMART Pads II eliminate the expense of having to purchase different pads sets for different patient types. These pre-connected pads are packaged in a semi-rigid pads case for added protection, and are equipped with a HeartStart-compatible plug for easy hand-off to Philips ALS defibrillators and to competitive defibrillators with adapters. For patients less than 8 years old or 55 lbs (25 kg), use the infant/child key, if available.

Long-life Battery

Item # M5070A

The FRx Defibrillator uses a disposable, lithium manganese dioxide, long-life battery with a five-year shelf life plus a (typical) four-year installed life. A spare battery should be stored with the defibrillator. Additional batteries should be purchased for defibrillators used frequently for training and/or demonstrations.

Aviation Battery, FRx Defibrillator

Item # 989803139301 (U.S. only)

The Aviation Battery meets the specifications of the four-Year Battery and the FAA TSO C-142 regulation for use on commercial aircraft.

Fast Response Kit

Item # 68-PCHAT

The Fast Response Kit contains tools and supplies typically needed for patient care and personal protection: two pairs of hypoallergenic nitrile gloves, a pocket breathing mask, paramedic scissors, a chest hair razor, and a large extra-absorbent paper towel. These items are housed in a zippered pouch which attaches securely to the handle of the FRx carry case.

Dimensions:

9.5″ (24 cm) w, 5.5″ (14 cm) h

Infant/Child Key

Item # 989803139311

The unique Infant/Child Key is used only with the FRx Defibrillator when treating an infant or child who is under 55 lbs or 8 years old. Once the Infant/Child Key is inserted, the FRx automatically reduces the defibrillation energy and provides voice and visual instructions and CPR coaching specifically geared for treatment of infants/children. Graphics on the key show proper pad placement for infants and children.

HeartStart adapters

Smart Pads II can also be used with defibrillators from other manufacturers, when equipped with Philips HeartStart Adapters.

Permanent configuration

Removable configuration

Adapter Model 05-10200

Fits Philips hands-free cables M3507A or M1750A/B for connection to Hewlett-Packard CodeMaster 100, XE, XL, and XL+; Philips Heartstream/HeartStart XL and XLT; HeartStart MRx and Laerdal HeartStart 4000 defibrillator/monitors.

Adapter Model 05-10000

Removable adapter for Medtronic Physio-Control Quik-Combo LifePak 9, 10C, 11, 12, 20, and 500 defibrillators.

Adapter Model 05-10100

Removable adapter for Zoll 1200, 1400, 1600 and M-Series defibrillators.

Training tools

Training Pads II

Item # 989803139271

Training Pads II can be used with the HeartStart FRx or the HeartStart FRx Trainer on a manikin connected with an external manikin adapter (M5089A) or on a pads placement guide (M5090A for adults; 989803139281 for infants and children). When training on the HeartStart FRx Defibrillator, simply plug in the Training Pads II to activate the FRx's training mode and suspend the defibrillator's ability to deliver a shock.

Users can run eight different training scenarios. Plus, one set of Training Pads II can be used to train for adult and infant/child* resuscitation. The defibrillator's voice instructions, including CPR Coaching, will be appropriate for treating the simulated victim.

Each training pads case contains a pair of reusable adhesive pads with integrated cable and connector. The case is packaged with an adult pads placement guide, an illustrated guide for using the pads, and Instructions for Use. Replacement Training Pads II (989803139291) are also available, consisting of just a set of pads/wire/plug. An infant/child pads placement guide is also available (989803139281).

HeartStart FRx Trainer

Item # 861306

This training version of HeartStart FRx Defibrillator includes Trainer, Training Pads II, Carry Case, Instructions for Use, Quick Reference, and an external manikin adapter. This product can be used on a manikin equipped with an internal manikin adapter(M5088A) or an external manikin adapter (M5089A).

Instructor Training Toolkit

Item # 989803139321

DVD only Item # 989803139341

The Training Toolkit includes a DVD and a CD with instructional aids and presentations for teaching groups of people to operate the HeartStart FRx Defibrillator. A DVD training disc can also be purchased separately from the toolkit.

Infant/Child Key

Item # 989803139311

The Infant/Child Key may be used to simulate infant/child therapy during training with the HeartStart FRx Trainer or with the HeartStart FRx AED with Training Pads II installed.

* To facilitate training on an infant or child, the Infant/Child Key (98980339311) must be engaged.

Data management

Philips provides a broad range of tools to help you efficiently and effectively configure your HeartStart Defibrillators and then download, transmit, share, analyze, and report resuscitation data, so you and your medical director can fine tune your response to cardiac emergencies. Whether you manage a community public access program, a school AED program, a corporate emergency response team, an EMS system, or your hospital's resuscitation committee, the Event Review software suite has the tools you need to manage your defibrillator data.

HeartStart Review Express

Our simplest data management product for a quick look at defibrillator data, Review Express lets you download an ECG from your defibrillator, view it and print it. The program can be downloaded from the Philips data management website at no charge. (www.medical.philips.com/goto/eventreview). If you need to store or augment cases with annotations, we suggest one of the other software products in the Event Review family: Data Messenger, Event Review, or Event Review Pro.

Data Messenger

Item # PN 861451 Opt A01

HeartStart Data Messenger helps you move defibrillator cases to where they need to be. It's ideal for fire departments and EMS organizations who want to download defibrillator cases from their AEDs and forward them on to a central data administrator or medical director for retrospective review on Event Review or Event Review Pro. You can configure it to operate automatically in the background. Alternatively, you can configure it to be an easy-to-use wizard that guides you step by step in downloading, viewing and forwarding cases. Runs on a PC or Smartphone.

Event Review

Item # M3834A (single PC)
or 989803141811 (organization-wide)

Event Review allows you to download patient data from your defibrillator, and view it on your PC screen, annotate it with your comments, and add basic response and patient status information. You can save the case to a file or to a database, allowing ad hoc case queries, and case reports. You can also configure your FRx or HS1 with Event Review.* It is available with single PC pricing or unlimited organization-wide pricing.

Event Review Pro

Item # 861431 Option A01 – Single PC
Item # 861431 Option A03 – Site license

Event Review Pro is our comprehensive case management tool for the most demanding data managers and medical directors, with even more detailed data entry screens to record every aspect of the response, including detailed response times, interventions, and patient observations. In addition to the individual case reports, you get Utstein reporting and graphical summaries of your system's overall response times to help you manage your service levels more efficiently.

* Changes to default values should be done only by authorized personnel under the oversight of a medical professional. Purchase of this product requires a prescription.

The Infrared Data Cable

Item # ACT-IR

Connected to a PC running HeartStart Review Express, Review Express Connect, Event Review or Event Review Pro, the Infrared Data Cable allows you to retrieve patient data from your FRx Defibrillator for permanent storage as well as for viewing and reporting.

HeartStart Configure

Item #989803143041

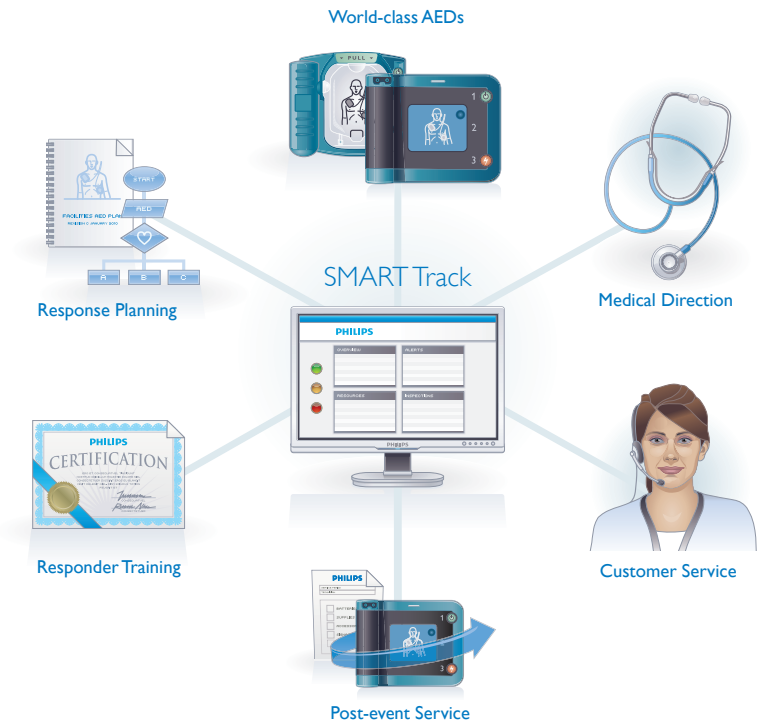
HeartStart Configure enables you to review and change the configuration of your FRx or HS1 using your Pocket PC. You can retrieve the current configuration from your defibrillator, reset the configuration to default values or revise individual settings according to your medical director's preferences, and transmit them to the defibrillator. To more efficiently manage configuration for your defibrillator program, you can save values to a file on your Smartphone. This lets you transmit the same configuration to all your AEDs as well as maintain a record of allowable settings.

Note: ECG viewing with this product is intended only for basic rhythm identification, and is not for diagnostic or ST segment interpretation. ECG viewing requires a high-resolution handheld screen and Palm OS® version 5.0 or later.

HeartStart AED Services*

We provide management tools and resources to support the needs of your AED program. Whatever your needs, we will work with you to find the services that are right for your situation. We can help you seamlessly manage important components of your AED program, including:

- SMART Track online program management
- Medical direction
- Training
- Maintenance
- Regulatory support
- Post-event support
- Customer service



Philips can help you implement a successful AED program at a single site or at multiple sites globally.

*Where available.
The HeartStart FRx requires a prescription.

Please visit www.philips.com/frx

Philips Healthcare is part of Royal Philips Electronics

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HeartStart Defibrillators
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800 263 3342 (toll free, US only)

Printed in The Netherlands
4522 962 61631 * APR 2010

Making lifesaving faster, easier, better for professional responders

Philips HeartStart FR3 Defibrillator supplies and accessories

PHILIPS

sense and simplicity

Carry cases

The HearStart FR3 Defibrillator is designed for use with a Philips carry case.
Three carry cases are available:

Philips Rigid System Case

Item # 989803149971

The Philips Rigid System Case is designed for environments like Fire, EMS, military and heavy industry, or anywhere aggressive use is expected. It's made of very durable plastic, and will protect FR3 and its accessories in demanding applications. A Pads Sentry (989803150011) is included so SMART Pads III can be tested and stored for fast deployment. The Auto-on feature enables FR3 to power up when the carry case lid is opened. The FR3 Fast Response Kit (989803150111) fits conveniently in the lid of the case. There are specific storage places for spare pads, a spare battery, and the optional Infant/Child key. The FR3's flashing Green Ready Light can be easily seen through the clear window without having to open the case.

Dimensions:
13.2″ (33.5 cm) w, 10.3″ (26.2 cm) h,
5.2″ (13.2 cm) d, including handle

Philips Soft System Case

Item # 989803179161

The Philips Soft System Case is lightweight and medium sized, and allows room for a spare battery, spare pads, and an optional Infant/Child Key. This case is intended for environments where the defibrillator is protected from excessive moisture and harsh treatment. A Pads Sentry (989803150011) is included so SMART Pads III can be tested and stored for fast deployment. The FR3's flashing Green Ready Light can be easily seen through the clear window without having to open the case.

Dimensions:
10.15″ (28.8 cm) w, 9.1″ (23.1 cm) h,
4.86″ (12.3 cm) d

Philips Small Soft Case

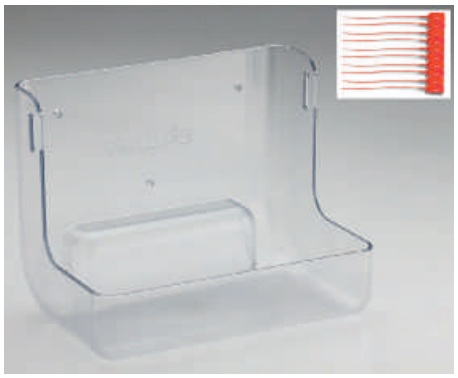
Item # 989803179181

The Philips Small Soft Case for the HeartStart FR3 is for when ultimate portability is essential. It's small, lightweight design makes it ideal for applications where size and weight attributes are among the top criteria for decision makers. This case is intended for environments where the defibrillator is protected from excessive moisture and harsh treatment. A Pads Sentry (989803150011) is included so SMART Pads III can be tested and stored for fast deployment. The FR3 carry case has room for a spare set of pads and a place for the optional Infant/Child Key. The FR3's flashing Green Ready Light can be easily seen through the clear window without having to open the case.

Dimensions:
4.8″ (12.2 cm) w, 9.9″ (25.1 cm) h,
7.7″ (19.5 cm) d

Wall mounting solutions and signage

Philips Wall Mount Bracket and Defibrillator Cabinets let you strategically place defibrillators for fast access and response. Philips offers three different battery-operated, alarmed wall cabinets.

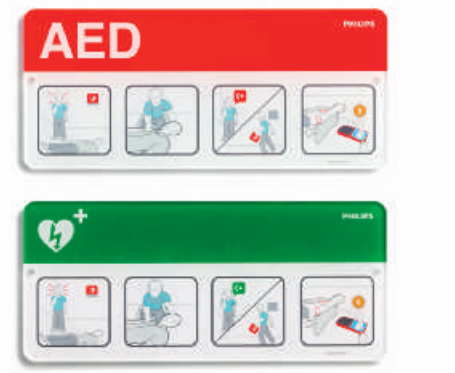


Wall Mount Bracket

Item # 989803170891

The Wall Mount Bracket is designed specifically for housing a Philips HeartStart defibrillator and its accessories. The defibrillator's carry case can be tethered to the Wall Mount Bracket with a breakaway Secure-Pull Seal (M3859A) to discourage tampering. A broken seal indicates that the defibrillator has been removed from the Wall Mount and accessories may need to be replenished. The Fast Response Kit (68-PCHAT) tucks neatly behind the Defibrillator Case.

Dimensions:
10.5″ (27 cm) w, 8″ (20 cm) h, 6.9″ (17 cm) d
Weight: 18.4 ounces (0.52 kg)



AED Awareness Placard

Item # 989803170901 (Red)
Item # 989803170911 (Green)

Raise AED awareness by putting an AED Awareness Placard above every AED located in a public area. Easy-to-understand graphics raise awareness of passers-by about how to use an AED in an emergency. Great for office settings, sports clubs, public facilities, school settings and more.

Dimensions:
10.25″ (26 cm) w, 4.5″ (11 cm) h

AED Wall Sign

Item # 989803170921 (Red)
Item # 989803170931 (Green)

An AED Wall Sign hanging above a Wall Mount Bracket or Defibrillator Cabinet gives even greater visibility to the defibrillator. Can be mounted three different ways to maximize visibility: T-mount, V-mount or Corner Mount.

Face dimensions:
9″ (23 cm) h, 6.1″ (15 cm) d

Basic Surface Mounted Cabinet

Item # 989803136531

Dimensions:
16.5″ (42 cm) w, 15″ (38 cm) h, 6″ (15 cm) d

Premium Surface Mounted Cabinet

Item # PFE7024D

Dimensions:
16″ (41 cm) w, 22.5″ (57 cm) h, 6″ (15 cm) d

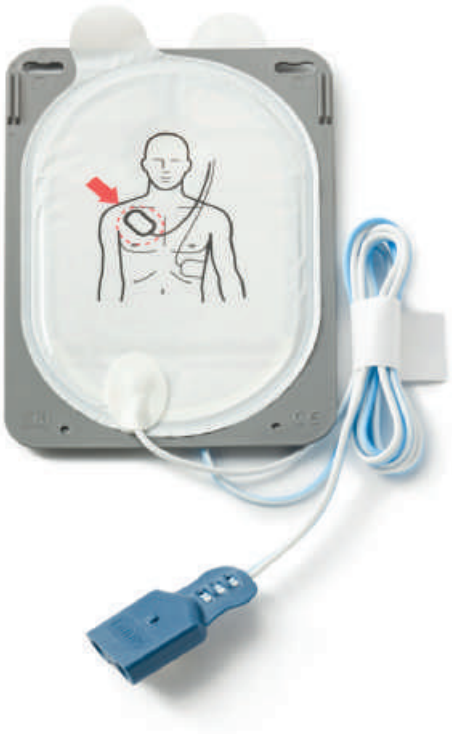
Premium Semi-recessed Cabinet

Item # PFE7023D

Dimensions:
Recessed Compartment
14″ (36 cm) w, 22″ (56 cm) h, 6″ (15 cm) d

Footprint on wall
16.5″ (42 cm) w, 24.5″ (62 cm) h, 2.5″ (6 cm) d

Pads

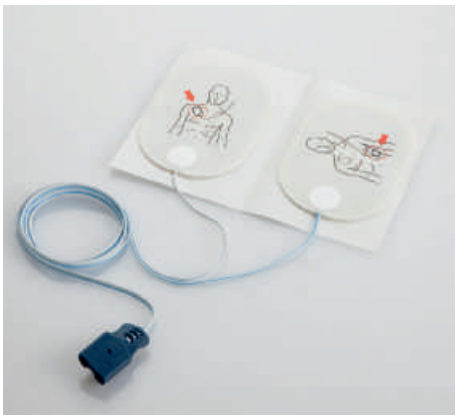


SMART Pads III

1 set item # 989803149981

5 sets item # 989803149991

SMART Pads III have been streamlined for fast deployment. The time-consuming steps of removing the pads packaging during the initial stages of the response has been eliminated. Also, they can be used on both adults and children (with optional Infant/Child key) so there's no time wasted changing pad sets. Off-set tabs enable a peel-and-place workflow that is easier and faster to use. When used with a Philips FR3 carrying case equipped with a Pads Sentry, SMART Pads III can be pre connected and they will be tested during FR3's routine self-tests. The multifunction SMART Pads III connector is compatible with HeartStart manual defibrillators, and can be used for ECG monitoring, external pacing, and synchronized cardioversion as well as defibrillation.



HeartStart Adult Pads (FR2 style pads)

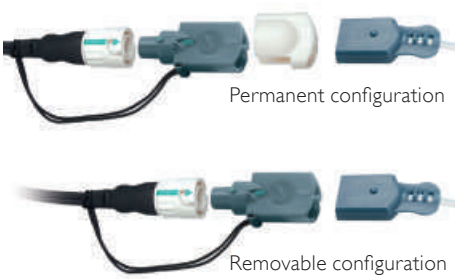
1 set item # 989803158211

5 sets item # 989803158221

Designed for use with HeartStart FR2 but can be used with HeartStart FR3. **Not pre-connectable. Pads must remain in packaging until needed.**

FR3-series cross-product compatibility

HeartStart SMART Pads III may also be used with defibrillators from other manufacturers using Philips HeartStart Adapters. The adapters allow ALS caregivers to connect the pads to their manual defibrillator.



Adapter Model 05-10200

Fits Philips hands-free cables M3507A or M1750A/B for connection to Hewlett-Packard CodeMaster 100, XE, XL, and XL+; Philips Heartstream/HeartStart XL and XLT; HeartStart MRx and Laerdal HeartStart 4000 defibrillator/monitors.

Adapter Model 05-10000

Removable adapter for Medtronic Physio-Control Quik-Combo LifePak 9, 10C, 11, 12, 20, and 500 defibrillators.

Adapter Model 05-10100

Removable adapter for Zoll 1200, 1400, 1600 and M-Series defibrillators.

Additional accessories

Infant/Child Key

Item # 989803150031

The FR3 Infant/Child Key with tether is designed for use with the HeartStart FR3 Defibrillator when treating an infant or child who is under 55 lbs (25kgs) or 8 years old. Once the Infant/Child Key is inserted, the FR3 automatically reduces the defibrillation therapy to an appropriate level for children. Prescription required.

Bluetooth® transceiver module

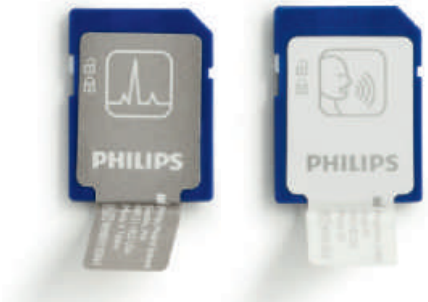
Item # 989803150081

Enables the Philips HeartStart FR3 to transmit event data to a computer equipped with HeartStart Data Messenger and HeartStart Event Review, Event Review Pro or HeartStart Configure. FR3 protocol configurations settings can be changed and FR3's internal clock can be synchronized with another clock.

Battery Charger

Item # 861394

Charger for use with FR3 rechargeable (989803150191) training battery. Includes power cord.



Data card

Item # 989803150061

Stores 8 hours of ECG, patient event data, and including 8 hours of voice recording (if desired) for download and retrospective review. Shown above left.

Language configuration card

Item # 989803150101

Enables any one of HeartStart FR3 AEDs supported languages to be loaded into FR3. Shown above right.

Primary battery

Item # 989803150161

FR3 primary battery is a Lithium manganese dioxide disposable battery. 5 year shelf-life, Typically 300 shocks, or 12 hours of monitoring time.

Fast Response Kit

Item # 989803150111

The FR3 Fast Response Kit includes 2 pairs of gloves, an adult pocket mask, paramedic scissors, prep razor, and a large paper towel. These items are enclosed in a durable plastic housing that's been designed to fit conveniently inside the lid of the Philips Rigid System Case (989803149971).

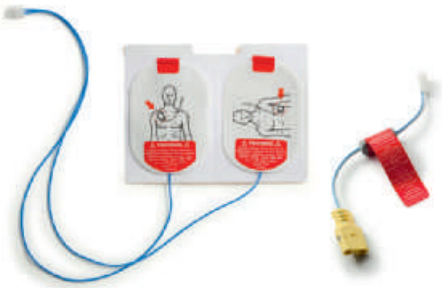
Dimensions:
4.8″ (12.1 cm) w, 7.75″ (19.7 cm) h,
1.6″ (4.0 cm) d

Pads Sentry

Item # 989803150011

The Pads Sentry is designed for use in the Philips FR3 carry cases, and provides support for the fast response features available on the Philips SMART Pads III. Once the pouch has been removed from SMART Pads III, they can be inserted into the Pads Sentry making them ready for fast deployment. The Pads Sentry also enables SMART Pads III to be tested when FR3 does its routine self-tests.

Training tools



Replacement Training Pads III
Item # 989803150181

Interconnect cable, Training Pads III
Item # 989803150201

Training Pads III are a combination of two parts, each available separately: Replacement Training Pads III (989803150181), shown above left, typically provide 100 uses. They require the Interconnect cable for Replacement Training Pads III (989803150201), shown above right, and are designed to outlast several Replacement Training pads III.

HeartStart FR3 Training Pack
Item # 989803150191

Provides 3 simulation scenarios designed to help responders become familiar with operating the FR3. The Training Pack includes the training battery, a set of Replacement Training Pads III, an Interconnect cable for Replacement Training Pads III, and an external manikin adapter. These reusable, optional accessories are designed for use with the FR3 for demonstration and training applications. The FR3 training battery is rechargeable using the 861394 battery charger only. Replacement training pads can be ordered separately. The interconnect cable is intended for indefinite reuse, but can be ordered separately.

AED Trainer 3
Item # 861467 A01

Designed to help prepare emergency responders to use the HeartStart FR3 and other AEDs. Together with appropriate manikins and other training tools, the AED Trainer 3 is intended to help provide realistic training on delivering correct treatment, including shock delivery and CPR, to a cardiac arrest victim.

The AED Trainer 3 provides 8 training scenarios that simulate realistic episodes of sudden cardiac arrest (SCA) and help responders become familiar with use of the HeartStart FR3 AED.

Like the HeartStart FR3 AED, the AED Trainer 3 can be prepared with its training pads pre-connected and out of their packaging ready for fast deployment. Includes Training Pads III and a reuseable interconnect cable.

There's no need to change the pads for children. The AED Trainer 3 comes with a Training Infant/Child Key to replicate the infant/child mode of the FR3 AED.

The AED Trainer 3 guides you through each step of the training scenario with the same voice prompts as the FR3 AED.

Like the FR3 AED, the AED Trainer 3 configuration can be customized and its operation easily updated.

Training Tool Kit
Item # 989803173661

The HeartStart FR3 Training Tools include a set of online modules and downloadable materials designed to support FR3 users and owners in their efforts to learn and train on the various aspects of device use, set-up, maintenance and administration. It is ideal for professional responders, training officers, resuscitation officers, nurse training managers, biomedical and health physics professionals, medical emergency response team members and instructors, and others with similar job responsibilities.

Remote Control, AED Trainer 3 (optional)
Item # 989803171631

Gives instructors the ability to quickly override the AED Trainer 3 at any moment providing the means to test how students respond to a variety of situations.

External Manikin Adapter (box of 5)
Item # M5089A

A manikin adapter is used for training purposes with the Philips HeartStart FR3 AED and training battery and training pads or with Philips AED Trainer 3. A manikin adapter enables the AED training electrode pads to function properly during training simulations.

Data management

The HeartStart FR3 and Philips Data Management Solutions are designed to help support a culture of continuous improvement and excellence among emergency response organizations. Having data readily available can help facilitate retrospective review by medical directors and training managers so that timely and consistent feedback can be provided to responders while the event is still fresh. Medical directors can also use the data to refine their cardiac arrest response protocols.

HeartStart Configure

Item # 861487

HeartStart Configure software lets you review and change the configuration of your HeartStart FR3, FRx, and HS1 defibrillators on a personal computer. With a few single-click commands, you can retrieve the current configuration from your defibrillator, reset the configuration to default values or revise individual settings according to your medical director's preferred response protocol, and update your AED.

You can save the configuration settings to a file within HeartStart Configure. This makes it easy to use the same configuration on all your AEDs and maintain a record of selected settings.

With FR3, you can set the language, including bilingual primary and secondary languages. You can set the device internal clock setting via FR3 Bluetooth module.

Note: a defibrillator's configuration determines its behavior during a medical emergency.

HeartStart Data Messenger

Item # PN 861451 Opt A01 (single PC)
or PN 861451 Opt A03 (site-wide license)

HeartStart Data Messenger software lets you download, view, report, store, and send Philips defibrillator data where it needs to go.

You can forward patient data for retrospective analysis by your medical director or data administrator. Forward the event report as a PDF, or forward the case to any electronic patient care reporting system enabled with Philips Data Software Developer's Kit.

Data Messenger can run automatically on your responder's computer so that your responders can process completed cases without having to manipulate software.

HeartStart Event Review

Item # 861489 Option A01 (single PC)
or 861489 Option A02 (site-wide license)

Review, annotate, print, and store AED cases in a database for retrospective review and responder debriefing.

HeartStart Event Review Pro

Item # 861431 Option A01 (single PC)
or 861431 Option A03 (site-wide license)

Event Review Pro is our comprehensive case management tool for the most demanding data managers and medical directors. It includes even more detailed data entry screens to record every aspect of the response, including detailed response times, interventions, and patient observations. In addition to the individual case reports, you get Utstein reporting and graphical summaries of your system's overall response times to help you manage your service levels more efficiently.

Philips Data Software Development Kit

Item # 989803144651

Append a defibrillator patient event to any electronic patient care reporting system (ePCR) enabled with the Philips Data Software Development Kit.

Changes to default values should be done only by authorized personnel under the oversight of a medical professional. Purchase requires a prescription.

ECG viewing is intended only for basic rhythm identification. It is not for diagnostic or ST segment interpretation.

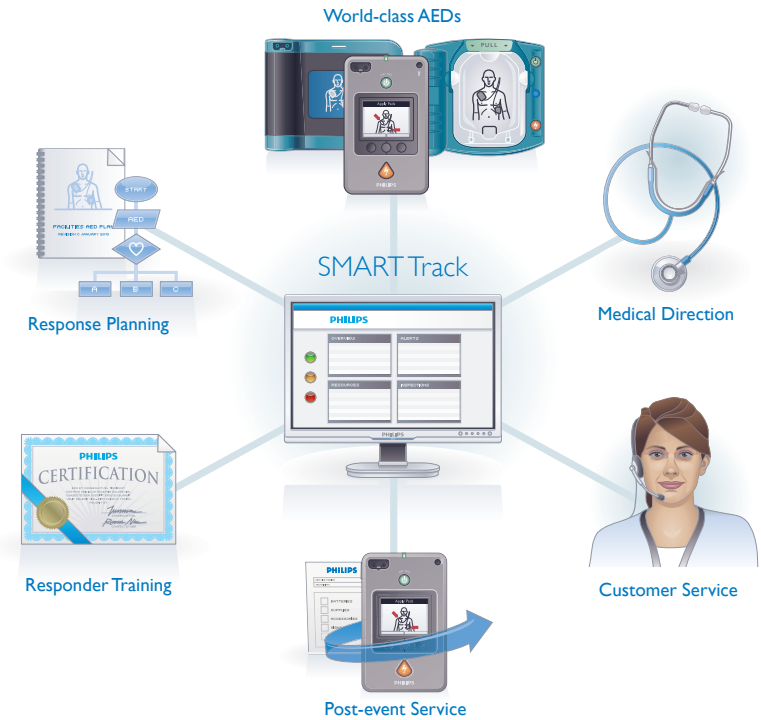
Not all items are available worldwide. Check with Philips for availability of optional software and accessories.

Philips HeartStart FR3 requires a prescription in the United States and medical direction.

HeartStart AED Services*

We provide management tools and resources to support the needs of your AED program. Whatever your needs, we will work with you to find the services that are right for your situation. We can help you seamlessly manage important components of your AED program, including:

- SMART Track online program management
- Medical direction
- Training
- Maintenance
- Regulatory support
- Post-event support
- Customer service



Please visit www.philips.com/fr3

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PHILIPS

Philips HeartStart MRx Monitor/Defibrillator

Education and training solutions

Meeting a variety of training and implementation needs

Learning to use the HeartStart MRx Monitor/Defibrillator is an integral part of device implementation. So Philips has created a variety of education and training material, including interactive web-based training, an instructional video, and instructor-based training tools to meet your needs. All were developed using sound instructional design principles, leading to competent operation and enhancing your experience with the HeartStart MRx.

HEARTSTART
DEFIBRILLATORS

Standard Solutions

Your HeartStart MRx comes with valuable educational and reference material. The following are provided with the MRx at no additional cost:

Interactive Multimedia

Just as we utilize cutting-edge technology in our medical devices, we do the same with the HeartStart MRx web-based training. Developed to run on either a broadband or 56k Internet connection and accessible 24/7 365 days a year, this solution covers the features, functions, and operation of the device, and requires only 2 to 3 hours to complete.

Lesson material is presented in an interactive, multimedia format, designed to handle a variety of learning styles. There is access to informative clinical application notes, as well as a final exam that checks your understanding of the material. Students who successfully complete the exam are eligible for continuing education credit.

Training administrators will appreciate:

- the ease of conducting self-paced, new employee training
- the version control and consistency of lesson material
- the ability to update existing lesson content or add new material quickly
- the benefits of a student database that tracks lesson completion history and final exam results.

If Internet access is not available, the training is available on CD.

Instructor's Toolkit

If you are responsible for training in your organization, we have material to help facilitate the education process. There is an Instructor's Guide designed to help you deliver end-user training on the MRx. You can have students follow along with your instruction using the User Training Workbook. Then, to ensure competency on device operation, students complete the Skills Checklist provided.

Quick Reference Cards

The pocket-size, laminated card set highlights key HeartStart MRx functionality and operation, as well as each available monitoring parameter: ECG, 12-Lead, SpO_2 , NBP, and CO_2. They can be banded together and tethered to the MRx or stored with your crash cart.

Application Notes

Application notes explain the theory behind our therapeutic and monitoring technologies, as well as support for their clinical efficacy and intended interpretation. Application notes are offered for arrhythmia, SpO_2, NBP and $EtCO_2$ monitoring, as well as our AED algorithm, 12-lead analysis, patented SMART Biphasic waveform, noninvasive pacing, and battery maintenance.

Instructions for Use

The user's guide provides the most extensive details on MRx features and functions, clinical explanations of available therapies and monitoring parameters, and directions on the configuration and maintenance of the device.

Optional Solutions

If your training and educational needs require more than what comes standard with the MRx, consider the following options:

Instructor-based Training

On-site, instructor-based training is perhaps the most thorough learning experience for MRx users. Delivered by experienced clinical educators such as critical care nurses and paramedics, this solution can be customized and includes hands-on procedural labs, reviews of therapeutic and monitoring technologies, and tests for lesson comprehension and retention. Students get the benefit of learning device operation in realistic critical care context, thanks to the knowledge and real world experience that the educators possess.

Our instructors are equipped with lesson plans, presentations, and skills checklists for classroom use. User training workbooks are available to students for reference, note taking, and independent study. Classes are arranged through your Philips representative, and cost is dependent on the number of training days required to meet your needs.

Video

Featuring realistic pre-hospital and hospital scenarios, *Using the HeartStart MRx Monitor/Defibrillator* illustrates the intended use of the MRx, showing important device features and functions through interactions with controls, buttons, menus, and accessory ports associated with standard and optional parameters.

At just over 35 minutes, it's both a standalone solution and an effective prerequisite to either the multimedia or instructor-based training. The video is available on the web, VHS tape, and DVD. The tape and DVD can be ordered through your Philips representative.

Electronic copies of the instructor-based training materals, Instructions for Use, Quick Reference Cards, and application notes are found on the HeartStart MRx Documentation CD, which comes packaged with your MRx. Hard copy and/or duplicates of some material can be ordered or reproduced for your organization's use from electronic versions.

Philips is committed to supporting users of the HeartStart MRx with high-quality, effective solutions, so that they can safely, quickly, and effectively treat patients and save lives. As we continually seek opportunities to improve your experience with our products, we encourage you to talk to us about your educational needs, present and future.

Philips — The trusted choice

- One of the world's largest medical products companies with annual revenue of over $6 billion
- History of innovation. Philips introduced the medical X-ray tube in 1918, the audiocassette in 1963, and the first VCR; the company also created CD-ROM technology
- With over 200,000 automated external defibrillators installed, Philips has more AEDs on the job, in the air, in the classroom and in your neighborhood than anyone else
- Over 4.5 billion HeartStart Defibrillator service hours logged, with an additional 2.7 million hours added every day
- Over 17 % of Fortune 1000 companies, 8 out of 10 major airlines and 43 professional sports teams rely on Philips HeartStart Defibrillators
- The first defibrillator cleared for over-the-counter use—HeartStart Home Defibrillator

To learn more about the education and training solutions for HeartStart MRx, visit www.philips.com/heartstart or call 1-800-934-7372.

Philips Medical Systems is part of Royal Philips Electronics

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MAY 2005

PHILIPS

Confidential Proprietary Information

ADDENDUM EXHIBIT ONE

Philips Product	Legacy Product	Product Description	List Price	Discount	Net Price	Product Status
AEDs						
FR3 (FR3 AED is temporarily Unavailable in the US by Philips)						
861388	861388	HeartStart FR3 Defibrillator, Text	2799.00	35.00	1819.35	Temorarily unavailable in the US by Philips
861388	861388_A01	A01 FAA Compliant Battery	25.00	35.00	16.25	Temorarily unavailable in the US by Philips
861389	861389	HeartStart FR3 Defibrillator, ECG	3320.00	35.00	2158.00	Temorarily unavailable in the US by Philips
861389	861389_A01	A01 FAA Compliant Battery	25.00	35.00	16.25	Temorarily unavailable in the US by Philips
FRx (FRx AED is temporarily Unavailable in the US by Philips)						
861304	861304	HeartStart FRx Defibrillator	1952.00	35.00	1268.80	Temorarily unavailable in the US by Philips
861304	861304_A01	A01 FRx Aviation Bundle	170.00	35.00	110.50	Temorarily unavailable in the US by Philips
861304	861304_A04	A04 FRx Aviation SWA, No Case	23.00	35.00	14.95	Temorarily unavailable in the US by Philips
861304	861304_C01	C01 Standard Carry Case	147.00	35.00	95.55	Temorarily unavailable in the US by Philips
861304	861304_C03	C03 Hard Case	227.00	35.00	147.55	Temorarily unavailable in the US by Philips
861304	861304_C04	C04 No Carry Case	0.00	35.00	0.00	Temorarily unavailable in the US by Philips
861304	861304_R01	R01 FRx Ready-Pack	180.00	35.00	117.00	Temorarily unavailable in the US by Philips
861304	861304_R02	R02 FRx Ready-Pack Aviation	204.00	35.00	132.60	Temorarily unavailable in the US by Philips
HS1 Onsite						
861282	M5066A	HeartStart Defibrillator, HS1	1354.00	38.00	839.48	Available
861282	M5066A_C01	C01 HS1 Standard Carry Case	101.00	38.00	62.62	Available
861282	M5066A_C02	C02 HS1 Slim Carry Case	35.00	38.00	21.70	Available
861282	M5066A_C03	C03 Hard Case	227.00	38.00	140.74	Available
861282	M5066A_R01	R01 Ready-Pack	158.00	38.00	97.96	Available
AED Supples						
FR3 Accessories						
861394	861394	Battery Charger, FR3 Training Battery	310.00	35.00	201.50	Available
989803149941	989803149941	QCPR METER, BUNDLE ASSY	1295.00	35.00	841.75	Available
989803149951	989803149951	Cable Link, FR3 to Q-CPR Meter	155.00	35.00	100.75	Available
989803149981	989803149981	SMART Pads III, 1 set	46.00	35.00	29.90	Available
989803149991	989803149991	SMART Pads III, 5 sets	208.00	35.00	135.20	Available
989803150011	989803150011	Pad Sentry, FR3	39.00	35.00	25.35	Available
989803150031	989803150031	Infant/Child Key, FR3	97.00	35.00	63.05	Available
989803150041	989803150041	3-Lead ECG Cable, FR3, AAMI	305.00	35.00	198.25	Available
989803150111	989803150111	Fast Response Kit, FR3	51.00	35.00	33.15	Available
989803150161	989803150161	Primary Battery, FR3	270.00	35.00	175.50	Available
989803150171	989803150171	FAA Compliant Battery, FR3	261.00	35.00	169.65	Available
989803150211	989803150211	Bottom Case Insert for FR3 Case	37.00	35.00	24.05	Available
989803150241	989803150241	Rechargeable clinical use battery, FR3	500.00	35.00	325.00	Available
989803162231	989803162231	CPR Meter Cradle, FR3	23.00	35.00	14.95	Available
FR3 Training Materials						
861467	861467	AED Trainer 3	451.00	35.00	293.15	Available
861467	861467_A01	A01 Case, Pads, Cable, Key	0.00	35.00	0.00	Available
989803150181	989803150181	Replacement Training Pads III	26.00	35.00	16.90	Available
989803150191	989803150191	FR3 Training Pack	305.00	35.00	198.25	Available
989803150201	989803150201	Interconnect Cable, Training Pads III	19.00	35.00	12.35	Available
989803171631	989803171631	Remote Control for AED Trainer 3	48.00	35.00	31.20	Available
FRx Accessories						
989803139261	989803139261	HeartStart SMART Pads II	56.00	35.00	36.40	Available
989803139301	989803139301	Aviation Battery, FRx Defibrillator	176.00	35.00	114.40	Available
989803139311	989803139311	Infant/Child Key, FRx Defibrillator	105.00	35.00	68.25	Available
FRx Training Materials						
861306	861306	HeartStart FRx Trainer	369.00	35.00	239.85	Available
9898031386O1	989803138601	Quick Reference Guide, FRx, English	5.00	35.00	3.25	Available
989803138731	989803138731	Owner Manual, FRx, English	23.00	35.00	14.95	Available
989803139271	989803139271	HeartStart Adult Training Pads II Kit	84.00	35.00	54.60	Available
989803139291	989803139291	Replacement Training Pads II	34.00	35.00	22.10	Available
989803139321	989803139321	Training Toolkit, FRx Defib, US Eng NTSC	34.00	35.00	22.10	Available
989803139341	989803139341	Training Video, FRx Defib, US Engl NTSC	16.00	35.00	10.40	Available
FRx/Onsite Accessories						
989803121381	M5070A	HS1 Battery Pack	169.00	35.00	109.85	Available
FRx/Onsite Training Materials						
989803129851	M5089A	External Manikin Adapter	58.00	35.00	37.70	Available
989803130441	M5088A	Internal Manikin Adapter	34.00	35.00	22.10	Available
989803136471	M5090A	Adult Pad Placement Guide	29.00	35.00	18.85	Available
989803139281	989803139281	HeartStart Inf./Ch. Pad Placement Guide	29.00	35.00	18.85	Available
HeartStart Cabinets, Cases & Wall Mounts						
989803108521	M3859A	Secure Pull Seal for Wall Mount, 10 pack	11.00	35.00	7.15	Available
989803110031	PFE7023D	AED Cabinet, Semi-recessed	469.00	35.00	304.85	Available
989803110041	PFE7024D	AED Cabinet, Wall Surface Mounted	440.00	35.00	286.00	Available
989803110251	YC	Carrying Case, Plastic Waterproof Shell	227.00	35.00	147.55	Available
989803121431	M5075A	Standard Carry Case for HeartStart HS1	133.00	35.00	86.45	Available
989803121441	M5076A	Slim Carry Case for HeartStart HS1	112.00	35.00	72.80	Available
989803136531	989803136531	Defibrillator Cabinet - Basic	253.00	35.00	164.45	Available
989803139251	989803139251	Carrying Case, FRx Defibrillator	147.00	35.00	95.55	Available
989803139531	989803139531	HeartStart FRx Trainer Carry Case	29.00	35.00	18.85	Available
989803149971	989803149971	Philips System Case, Rigid, FR3	243.00	35.00	157.95	Available
989803169181	989803169181	Defibrillator Cabinet, BLANK, Basic	250.00	35.00	162.50	Available
989803170891	989803170891	AED Wall Mount	98.00	35.00	63.70	Available
989803179161	989803179161	Philips Soft System Case w/o Auto-On FR3	164.00	35.00	106.60	Available
989803179181	989803179181	Philips Small Soft Case w/o Auto-On, FR3	160.00	35.00	104.00	Available
HeartStart Data Management						
861431	861431	Event Review Pro 5	0.00	35.00	0.00	Available
861431	861431_A01	A01 Single-PC License	2570.00	35.00	1670.50	Available
861431	861431_A03	A03 Sitewide License	6175.00	35.00	4013.75	Available
861431	861431_A05	A05 ERPro Limited Distribution	2.00	35.00	1.30	Available
861431	861431_A06	A06 Multi-download License	6165.00	35.00	4007.25	Available
861436	861436	ER Pro 5 Upgrade from 4.x	0.00	35.00	0.00	Available
861436	861436_A01	A01 Single-PC License	1025.00	35.00	666.25	Available
861436	861436_A03	A03 Site-Wide License	2055.00	35.00	1335.75	Available
861436	861436_A05	A05 ERPro Upgrade Limited Dist	2.00	35.00	1.30	Available
861451	861451	HeartStart Data Messenger	0.00	35.00	0.00	Available
861451	861451_A01	A01 - Single PC License	215.00	35.00	139.75	Available
861451	861451_A03	A03 - Site License	4100.00	35.00	2665.00	Available
861451	861451_A05	A05 DM Limited Distribution	2.00	35.00	1.30	Available
861487	861487	HeartStart Configure Software	67.00	35.00	43.55	Available
861487	861487_A01	A01 Configure - United States	0.00	35.00	0.00	Available
861487	861487_A05	A05 Config Limited Distributn	2.00	35.00	1.30	Available
989803150061	989803150061	Data Card, FR3	92.00	35.00	59.80	Available
989803150081	989803150081	Bluetooth transceiver module, FR3	139.00	35.00	90.35	Available
HeartStart Wall Signs, Awareness Placards,Posters						
861476	861476	AED Awareness Posters	22.00	35.00	14.30	Available
861477	861477	AED Wall Mount and Signage Bundle	143.00	35.00	92.95	Available
861478	861478	AED Signage Bundle	66.00	35.00	42.90	Available
989803170901	989803170901	AED Awareness Placard, red	27.00	35.00	17.55	Available
989803170911	989803170911	AED Awareness Placard, green	26.00	35.00	16.90	Available
989803170921	989803170921	AED Wall Sign, red	36.00	35.00	23.40	Available
989803170931	989803170931	AED Wall Sign, green	35.00	35.00	22.75	Available
Onsite Accessories						
861291	M5071A	HS1 Adult SMART Pads Cartridge	67.00	35.00	43.55	Available
861292	M5072A	HS1 Infant/Child SMART Pads Cartridge	108.00	35.00	70.20	Available
Onsite Training Materials						
861293	M5073A	HS1 Adult Training Pads Cartridge	84.00	35.00	54.60	Available
861294	M5074A	HS1 Infant/Child Training Pads Cartridge	91.00	35.00	59.15	Available
989803130431	M5087A	HeartStart Trainer Replacem. Carry Case	29.00	35.00	18.85	Available
MRx Supplies						
Multifunction Electrode Pads						
989803106921	M3501A	Adult/Child Pads AAMI Barrel Conn.	271.00	23.00	208.67	Available
989803106951	M3504A	Infant Pads AAMI Barrel Conn.	143.00	23.00	110.11	Available
989803107781	M3713A	HeartStart Adult/Child Plus Pads	290.00	23.00	223.30	Available
989803107811	M3716A	HS Adult/Child Radiolucent Pads	310.00	23.00	238.70	Available
989803107821	M3717A	HeartStart Infant Plus Pads	155.00	23.00	119.35	Available
989803125401	M3718A	HS Adult Radiotransparent Pads	420.00	23.00	323.40	Available
989803125411	M3719A	HS Pedi Radiotransparent Pads	180.00	23.00	138.60	Available
989803166021	989803166021	Adult/Child Pre-Connect Defib Pad	315.00	23.00	242.55	Available
External Multifunction Cables and Test Loads						
989803105231	M1781A	CM 50 ohm Test Load	129.00	23.00	99.33	Available
989803106971	M3507A	Hands-free Cable Barrel Conn.	142.00	23.00	109.34	Available
989803106981	M3508A	HeartStart Hands-free Cable	132.00	23.00	101.64	Available
989803107831	M3725A	HeartStart 50 ohm Test Load	125.00	23.00	96.25	Available
989803158661	989803158661	Replacement Pads/CPR Meter Cable	180.00	35.00	117.00	Available
External Paddles						
989803129041	M3543A	External Paddles - Water Resistant	731.00	23.00	562.87	Removed 201710
ECG Monitoring Electrodes						
989803105971	M2202A	Adult Radiotranslucent Foam Electrode	116.00	23.00	89.32	Available

989803148801	989803148801	Adult Solid Gel Snap Electrode (Foam)	194.00	23.00	149.38	Available	
989803148821	989803148821	Adult Radiolucent Electrode (Foam)	185.00	23.00	142.45	Available	
12 Lead ECG Cables & Lead Sets							
989803144911	M1602A	CBL 5 Lead Snap Chest AAMI, ICU	116.00	23.00	89.32	Available	
989803144991	M1644A	CBL 5 Leadset, Snap, AAMI, ICU	104.00	23.00	80.08	Available	
989803144791	M1663A	CBL 10 Lead ECG Trunk AAMI/IEC 2m	268.00	23.00	206.36	Available	
989803125841	M1968A	CBL 5 Leadset, Grabber, AAMI, ICU	113.00	23.00	87.01	Available	
989803125881	M1976A	CBL 5 Leadset, Grabber,Chest, AAMI,ICU	104.00	23.00	80.08	Available	
989803176161	989803176161	CBL 5 Lead, Snap, Shld, AAMI, Limb, Rgd	120.00	23.00	92.40	Available	
989803176171	989803176171	CBL 5 Lead, Snap, Shld, AAMI, Chest, Rgd	140.00	23.00	107.80	Available	
3 Lead Cable Set							
989803103811	M1500A	CBL 3 Lead ECG Patient Trunk, AAMI	150.15	23.00	115.62	Available	
989803104381	M1605A	CBL Shielded 3-Ld, Snaps, Safety, AAMI	116.55	23.00	89.74	Available	
5 Lead Cables Set							
989803103941	M1520A	CBL 5 Lead ECG Patient Trunk, AAMI	198.45	23.00	152.81	Available	
989803104521	M1625A	CBL Shielded 5-Ld, Snaps, Safety, AAMI	127.05	23.00	97.83	Available	
SpO2							
989803103251	M1194A	Pediatric/Adult Ear Clip Sp02 Sensor	264.00	23.00	203.28	Available	
989803103261	M1195A	SPO2 INFANT SENSOR	264.00	23.00	203.28	Available	
989803128631	M1196A	Reusable Clip Adult SpO2 Sensor	113.00	23.00	87.01	Available	
989803128641	M1196T	Reusable Clip Adult SpO2 Sensor	92.00	23.00	70.84	Available	
989803105681	M1941A	CBL SpO2 Extension Cable, 2m	120.00	23.00	92.40	Available	
989803105691	M1943A	Sp02 9-pin D-sub Adapter cbl 1.1m(8-pin)	180.00	23.00	138.60	Available	
989803128651	M1943AL	Sp02 8-pin D-sub Adapter cable 3m (8pin)	210.00	23.00	161.70	Available	
989803128531	M1131A	Disposable Adult/Pedi SpO2 Sensor	244.00	23.00	187.88	Available	
989803128541	M1132A	Infant Disposable SpO2 Sensor	297.00	23.00	228.69	Available	
989803144371	M1191B	Reusable Adult SpO2 Sensor	264.00	23.00	203.28	Available	
989803144381	M1191BL	Reusable Adult SpO2 Sensor	276.00	23.00	212.52	Available	
989803128591	M1191T	Reusable SpO2 Sensor Adult	225.00	23.00	173.25	Available	
989803103231	M1192A	SNSR SpO2 Pedi/Small adult finger	264.00	23.00	203.28	Available	
989803128611	M1192T	Reusable SpO2 Sensor Pediatric	225.00	23.00	173.25	Available	
989803103241	M1193A	SNSR Neonatal Hand/Foot Sp02	264.00	23.00	203.28	Available	
NIBP Interconnect Tubing							
989803104331	M1598B	Adult NIBP Air Hose 1.5m	73.00	23.00	56.21	Available	
989803104341	M1599B	Adult NIBP Air Hose 3.0m	69.00	23.00	53.13	Available	
Reusable Blood Pressure Cuffs							
989803101151	40400A	Traditional Reusable NIBP Cuff Kit	169.05	23.00	130.17	Available	
989803101161	40400B	Traditional Reusable NIBP Cuff Kit	297.15	23.00	228.81	Available	
989803101171	40401A	Traditional Reusable NIBP Cuff/Infant	38.85	23.00	29.91	Discontinued	
989803101181	40401B	Traditional Reusable NIBP cuff/pediatric	42.00	23.00	32.34	Discontinued	
989803101191	40401C	Traditional reusable NIBP cuff/adult.	47.25	23.00	36.38	Available	
989803101201	40401D	Traditional reusable NIBP cuff/lg. adult	57.75	23.00	44.47	Discontinued	
989803101211	40401E	Traditional reusable NIBP cuff/thigh.	81.90	23.00	63.06	Discontinued	
989803104151	M1572A	Comfort Care Cuff, Pediatric	36.00	23.00	27.72	Available	
989803104161	M1573A	Comfort Care Cuff, Small Adult	42.00	23.00	32.34	Available	
989803104171	M1574A	Comfort Care Cuff, Adult	42.00	23.00	32.34	Available	
989803104181	M1575A	Comfort Care Cuff, Large Adult	51.00	23.00	39.27	Available	
989803104191	M1576A	Comfort Care Cuff, Thigh	66.00	23.00	50.82	Available	
989803147841	M4552B	Easy Care Cuff, 1 Hose, Infant (1)	27.00	23.00	20.79	Available	
989803147851	M4553B	Easy Care Cuff, 1 Hose, Pediatric (1)	29.00	23.00	22.33	Available	
989803147861	M4554B	Easy Care Cuff, 1 Hose, Small Adult (1)	34.00	23.00	26.18	Available	
989803147871	M4555B	Easy Care Cuff, 1 Hose, Adult (1)	32.00	23.00	24.64	Available	
989803147881	M4556B	Easy Care Cuff, 1 Hose, Adult XL (1)	40.00	23.00	30.80	Available	
989803147891	M4557B	Easy Care Cuff, 1 Hose, Lrg Adult (1)	33.00	23.00	25.41	Available	
989803147901	M4558B	Easy Care Cuff,1 Hose,Lrg Adult XL (1)	45.00	23.00	34.65	Available	
989803147911	M4559B	Easy Care Cuff, 1 Hose, Thigh (1)	52.00	23.00	40.04	Available	
Disposable Blood Pressure Cuffs							
989803148001	M4572B	Gentle Care Cuff, Infant 1-tube	84.00	23.00	64.68	Available	
989803148011	M4573B	Gentle Care Cuff, Pediatric, 1-tube	65.00	23.00	50.05	Available	
989803148021	M4574B	Gentle Care Cuff, Small Adult, 1-tube	67.00	23.00	51.59	Available	
989803148031	M4575B	Gentle Care Cuff, Adult, 1-tube	72.00	23.00	55.44	Available	
989803148041	M4576B	Gentle Care Cuff, Adult XL, 1-tube	88.00	23.00	67.76	Available	
989803148051	M4577B	Gentle Care Cuff, Large Adult, 1-tube	72.00	23.00	55.44	Available	
989803148061	M4578B	Gentle Care Cuff, Large Adult XL, 1-tube	98.00	23.00	75.46	Available	
989803148071	M4579B	Gentle Care Cuff, Thigh, 1-tube	85.00	23.00	65.45	Available	
EtCO2 Intubated Circuits							
989803105531	M1920A	FilterLine Set Adult/Pedi	343.40	23.00	264.42	Available	
989803105541	M1921A	FilterLine H Set Adult/Pedi	534.29	23.00	411.40	Available	
989803105561	M1923A	FilterLine H Set Infant/Neonatal	686.80	23.00	528.84	Available	
Non-Intubated Dual Purpose Circuits (CO2/O2)							
989803129731	M2520A	SMART CAPNOLINE O2, PEDIATRIC	539.34	23.00	415.29	Available	
989803129751	M2522A	SMART CAPNOLINE O2 plus, ADULT, intermed	539.34	23.00	415.29	Available	
989803129761	M2524A	SMART CAPNOLINE, PEDIATRIC	493.89	23.00	380.30	Available	
989803129781	M2526A	SMART CAPNOLINE plus, ADULT, intermed	493.89	23.00	380.30	Available	
Disposable Temperature Supplies							
989803100941	21090A	Esophageal/Rectal Temperature Probe	161.00	23.00	123.97	Available	
989803100951	21091A	Skin Surface Temperature Probe	150.00	23.00	115.50	Available	
989803100961	21093A	Esophageal/Stethoscope Temperature Probe	206.00	23.00	158.62	Available	
989803100971	21094A	Esophageal/Stethoscope Temperature Probe	216.00	23.00	166.32	Available	
989803100981	21095A	Esophageal/Stethoscope Temperature Probe	207.00	23.00	159.39	Available	
989803100991	21096A	Foley Catheter Temperature Probe	214.00	23.00	164.78	Available	
989803101001	21097A	Foley Catheter Temperature Probe	211.00	23.00	162.47	Available	
989803105321	M1837A	Esophageal/Rectal Temperature Probe	161.00	23.00	123.97	Available	
Reusable Temperature Supplies							
989803100881	21075A	Esophageal/Rectal Temperature Probe	98.00	23.00	75.46	Available	
989803100891	21076A	Esophageal/Rectal Temperature Probe	139.00	23.00	107.03	Available	
989803100901	21078A	Skin Surface Temperature Probe	198.00	23.00	152.46	Available	
989803100921	21082A	Long Extension Cable	52.00	23.00	40.04	Available	
989803100931	21082B	Short Extension Cable	60.00	23.00	46.20	Available	
Batteries & Chargers							
989803129011	M3538A	Lithium Ion Battery Module	415.00	23.00	319.55	Available	
Paper							
989803101501	40457C	1-Channel Chemical Thermal Paper, Gray	36.00	23.00	27.72	Available	
989803101511	40457D	1-Channel Chem/Thermal Paper,40 mm grid	191.00	23.00	147.07	Available	
989803138171	989803138171	Defibrillator Chemical/Thermal Paper	62.00	23.00	47.74	Available	
989803138181	989803138181	Defibrillator Chemical/Thermal Paper	487.00	23.00	374.99	Available	
Cases							
989803129021	M3541A	Carrying Case for Fusion	355.00	23.00	273.35	Available	
989803185181	989803185181	MRx Black Soft Carry Bag Universal	345.00	23.00	265.65	Available	
989803174261	989803174261	MRx Black Soft Carry Case Straps	30.00	35.00	19.50	Available	
Color Handles							
989803131691	M5521A	Color Handle - Green	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
989803131701	M5522A	Color Handle - Blue	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
989803131711	M5523A	Color Handle - Yellow	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
989803131721	M5524A	Color Handle - Rose	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
989803131731	M5525A	Color Handle - Grey	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
Miscellaneous							
989803129071	M3537A	Bed Rail Hook	26.00	23.00	20.02	Available	
989803139961	M4762A	Q-CPR Compression Sensor Adhesive Pads	54.00	23.00	41.58	Available	
989803143341	M4759A	Rect. Pdl Electrode Repl. M3535A - Gray	75.00	23.00	57.75	Available	
989803145361	M3549A	MRx Wide Bed Rail Hook	64.00	23.00	49.28	Available	
989803145571	M4737A	MRx Display Cover	88.00	23.00	67.76	Available	
989803146981	989803146981	MRx Data Card and Tray	108.00	23.00	83.16	Available	
989803163291	989803163291	CPR Meter Patient Adhesive Pads	50.00	23.00	38.50	Available	

State of Oklahoma

Office of Management and Enterprise Services

ADDENDUM 1 TO

STATE OF OKLAHOMA NASPO VALUEPOINT MASTER AGREEMENT AWARD WITH PHILIPS HEALTHCARE

This Addendum 1 modifies the Master Agreement Award OK-SW-300 ("Master Agreement") awarded to Philips Healthcare ("Contractor') by the Lead State in connection with Solicitation No. SW17300 and is effective as of the date of the last signature below. All terms of the Master Agreement not modified in this Addendum remain in full force and effect.

Addendum Purpose.

This Addendum amends Section 2. Categories of Product Offered, and provides a corrected price list.

Modification of Master Agreement.

A. Section 2 of the Master Agreement is hereby deleted in its entirety and replaced with the following:

2. Categories of Product Offered: This Master Agreement will offer the following categories of products: Category I, Public Access and all class 1 devices; Category II, Infrequent User AEDs and all class 2 devices; and Category III, First Responder AEDs and all class 3 devices.

B. The price schedule attached to the Master Agreement as part of Exhibit C is hereby deleted in its entirety and replaced with Addendum Exhibit A attached hereto and incorporated herein.

NOW, THEREFORE, in consideration of the foregoing and mutual promises set forth herein, the receipt and sufficiency of which are hereby acknowledged the parties agree as follows:

STATE OF OKLAHOMA **Ferris J. Barger, State Purchasing Director**	**CONTRACTOR** **Philips Healthcare**
By:	By: Margaret Messelaar Digitally signed by Margaret Messelaar DN: cn=Margaret Messelaar, o=Philips Healthcare a division of Philips North America LLC, ou=Director Commercial Contracts, email=margaret.messelaar@philips.com, c=US Date: 2018.01.23 15:57:17 -05'00'
Date: 1/24/18	Date:
	Title:

**The person signing for Contractor hereby swears and affirms that he or she is authorized to act on Contractor's behalf and acknowledges that the Lead State is relying on his or her representation to that effect.*

PHILIPS

Confidential Proprietary Information

ADDENDUM EXHIBIT ONE

Philips Product	Legacy Product	Product Description	List Price	Discount	Net Price	Product Status
AEDs						
FR3 (FR3 AED is temporarily Unavailable in the US by Philips)						
861388	861388	HeartStart FR3 Defibrillator, Text	2799.00	35.00	1819.35	Temorarily unavailable in the US by Philips
861388	861388_A01	A01 FAA Compliant Battery	25.00	35.00	16.25	Temorarily unavailable in the US by Philips
861389	861389	HeartStart FR3 Defibrillator, ECG	3320.00	35.00	2158.00	Temorarily unavailable in the US by Philips
861389	861389_A01	A01 FAA Compliant Battery	25.00	35.00	16.25	Temorarily unavailable in the US by Philips
FRx (FRx AED is temporarily Unavailable in the US by Philips)						
861304	861304	HeartStart FRx Defibrillator	1952.00	35.00	1268.80	Temorarily unavailable in the US by Philips
861304	861304_A01	A01 FRx Aviation Bundle	170.00	35.00	110.50	Temorarily unavailable in the US by Philips
861304	861304_A04	A04 FRx Aviation SWA, No Case	23.00	35.00	14.95	Temorarily unavailable in the US by Philips
861304	861304_C01	C01 Standard Carry Case	147.00	35.00	95.55	Temorarily unavailable in the US by Philips
861304	861304_C03	C03 Hard Case	227.00	35.00	147.55	Temorarily unavailable in the US by Philips
861304	861304_C04	C04 No Carry Case	0.00	35.00	0.00	Temorarily unavailable in the US by Philips
861304	861304_R01	R01 FRx Ready-Pack	180.00	35.00	117.00	Temorarily unavailable in the US by Philips
861304	861304_R02	R02 FRx Ready-Pack Aviation	204.00	35.00	132.60	Temorarily unavailable in the US by Philips
HS1 Onsite						
861282	M5066A	HeartStart Defibrillator, HS1	1354.00	38.00	839.48	Available
861282	M5066A_C01	C01 HS1 Standard Carry Case	101.00	38.00	62.62	Available
861282	M5066A_C02	C02 HS1 Slim Carry Case	35.00	38.00	21.70	Available
861282	M5066A_C03	C03 Hard Case	227.00	38.00	140.74	Available
861282	M5066A_R01	R01 Ready-Pack	158.00	38.00	97.96	Available
AED Supples						
FR3 Accessories						
861394	861394	Battery Charger, FR3 Training Battery	310.00	35.00	201.50	Available
989803149941	989803149941	QCPR METER, BUNDLE ASSY	1295.00	35.00	841.75	Available
989803149951	989803149951	Cable Link, FR3 to Q-CPR Meter	155.00	35.00	100.75	Available
989803149981	989803149981	SMART Pads III, 1 set	46.00	35.00	29.90	Available
989803149991	989803149991	SMART Pads III, 5 sets	208.00	35.00	135.20	Available
989803150011	989803150011	Pad Sentry, FR3	39.00	35.00	25.35	Available
989803150031	989803150031	Infant/Child Key, FR3	97.00	35.00	63.05	Available
989803150041	989803150041	3-Lead ECG Cable, FR3, AAMI	305.00	35.00	198.25	Available
989803150111	989803150111	Fast Response Kit, FR3	51.00	35.00	33.15	Available
989803150161	989803150161	Primary Battery, FR3	270.00	35.00	175.50	Available
989803150171	989803150171	FAA Compliant Battery, FR3	261.00	35.00	169.65	Available
989803150211	989803150211	Bottom Case Insert for FR3 Case	37.00	35.00	24.05	Available
989803150241	989803150241	Rechargeable clinical use battery, FR3	500.00	35.00	325.00	Available
989803162231	989803162231	CPR Meter Cradle, FR3	23.00	35.00	14.95	Available
FR3 Training Materials						
861467	861467	AED Trainer 3	451.00	35.00	293.15	Available
861467	861467_A01	A01 Case, Pads, Cable, Key	0.00	35.00	0.00	Available
989803150181	989803150181	Replacement Training Pads III	26.00	35.00	16.90	Available
989803150191	989803150191	FR3 Training Pack	305.00	35.00	198.25	Available
989803150201	989803150201	Interconnect Cable, Training Pads III	19.00	35.00	12.35	Available
989803171631	989803171631	Remote Control for AED Trainer 3	48.00	35.00	31.20	Available
FRx Accessories						
989803139261	989803139261	HeartStart SMART Pads II	56.00	35.00	36.40	Available
989803139301	989803139301	Aviation Battery, FRx Defibrillator	176.00	35.00	114.40	Available
989803139311	989803139311	Infant/Child Key, FRx Defibrillator	105.00	35.00	68.25	Available
FRx Training Materials						
861306	861306	HeartStart FRx Trainer	369.00	35.00	239.85	Available
9898031386O1	989803138601	Quick Reference Guide, FRx, English	5.00	35.00	3.25	Available
989803138731	989803138731	Owner Manual, FRx, English	23.00	35.00	14.95	Available
989803139271	989803139271	HeartStart Adult Training Pads II Kit	84.00	35.00	54.60	Available
989803139291	989803139291	Replacement Training Pads II	34.00	35.00	22.10	Available
989803139321	989803139321	Training Toolkit, FRx Defib, US Eng NTSC	34.00	35.00	22.10	Available
989803139341	989803139341	Training Video, FRx Defib, US Engl NTSC	16.00	35.00	10.40	Available
FRx/Onsite Accessories						
989803121381	M5070A	HS1 Battery Pack	169.00	35.00	109.85	Available
FRx/Onsite Training Materials						
989803129851	M5089A	External Manikin Adapter	58.00	35.00	37.70	Available
989803130441	M5088A	Internal Manikin Adapter	34.00	35.00	22.10	Available
989803136471	M5090A	Adult Pad Placement Guide	29.00	35.00	18.85	Available
989803139281	989803139281	HeartStart Inf./Ch. Pad Placement Guide	29.00	35.00	18.85	Available
HeartStart Cabinets, Cases & Wall Mounts						
989803108521	M3859A	Secure Pull Seal for Wall Mount, 10 pack	11.00	35.00	7.15	Available
989803110031	PFE7023D	AED Cabinet, Semi-recessed	469.00	35.00	304.85	Available
989803110041	PFE7024D	AED Cabinet, Wall Surface Mounted	440.00	35.00	286.00	Available
989803110251	YC	Carrying Case, Plastic Waterproof Shell	227.00	35.00	147.55	Available
989803121431	M5075A	Standard Carry Case for HeartStart HS1	133.00	35.00	86.45	Available
989803121441	M5076A	Slim Carry Case for HeartStart HS1	112.00	35.00	72.80	Available
989803136531	989803136531	Defibrillator Cabinet - Basic	253.00	35.00	164.45	Available
989803139251	989803139251	Carrying Case, FRx Defibrillator	147.00	35.00	95.55	Available
989803139531	989803139531	HeartStart FRx Trainer Carry Case	29.00	35.00	18.85	Available
989803149971	989803149971	Philips System Case, Rigid, FR3	243.00	35.00	157.95	Available
989803169181	989803169181	Defibrillator Cabinet, BLANK, Basic	250.00	35.00	162.50	Available
989803170891	989803170891	AED Wall Mount	98.00	35.00	63.70	Available
989803179161	989803179161	Philips Soft System Case w/o Auto-On FR3	164.00	35.00	106.60	Available
989803179181	989803179181	Philips Small Soft Case w/o Auto-On, FR3	160.00	35.00	104.00	Available
HeartStart Data Management						
861431	861431	Event Review Pro 5	0.00	35.00	0.00	Available
861431	861431_A01	A01 Single-PC License	2570.00	35.00	1670.50	Available
861431	861431_A03	A03 Sitewide License	6175.00	35.00	4013.75	Available
861431	861431_A05	A05 ERPro Limited Distribution	2.00	35.00	1.30	Available
861431	861431_A06	A06 Multi-download License	6165.00	35.00	4007.25	Available
861436	861436	ER Pro 5 Upgrade from 4.x	0.00	35.00	0.00	Available
861436	861436_A01	A01 Single-PC License	1025.00	35.00	666.25	Available
861436	861436_A03	A03 Site-Wide License	2055.00	35.00	1335.75	Available
861436	861436_A05	A05 ERPro Upgrade Limited Dist	2.00	35.00	1.30	Available
861451	861451	HeartStart Data Messenger	0.00	35.00	0.00	Available
861451	861451_A01	A01 - Single PC License	215.00	35.00	139.75	Available
861451	861451_A03	A03 - Site License	4100.00	35.00	2665.00	Available
861451	861451_A05	A05 DM Limited Distribution	2.00	35.00	1.30	Available
861487	861487	HeartStart Configure Software	67.00	35.00	43.55	Available
861487	861487_A01	A01 Configure - United States	0.00	35.00	0.00	Available
861487	861487_A05	A05 Config Limited Distributn	2.00	35.00	1.30	Available
989803150061	989803150061	Data Card, FR3	92.00	35.00	59.80	Available
989803150081	989803150081	Bluetooth transceiver module, FR3	139.00	35.00	90.35	Available
HeartStart Wall Signs, Awareness Placards,Posters						
861476	861476	AED Awareness Posters	22.00	35.00	14.30	Available
861477	861477	AED Wall Mount and Signage Bundle	143.00	35.00	92.95	Available
861478	861478	AED Signage Bundle	66.00	35.00	42.90	Available
989803170901	989803170901	AED Awareness Placard, red	27.00	35.00	17.55	Available
989803170911	989803170911	AED Awareness Placard, green	26.00	35.00	16.90	Available
989803170921	989803170921	AED Wall Sign, red	36.00	35.00	23.40	Available
989803170931	989803170931	AED Wall Sign, green	35.00	35.00	22.75	Available
Onsite Accessories						
861291	M5071A	HS1 Adult SMART Pads Cartridge	67.00	35.00	43.55	Available
861292	M5072A	HS1 Infant/Child SMART Pads Cartridge	108.00	35.00	70.20	Available
Onsite Training Materials						
861293	M5073A	HS1 Adult Training Pads Cartridge	84.00	35.00	54.60	Available
861294	M5074A	HS1 Infant/Child Training Pads Cartridge	91.00	35.00	59.15	Available
989803130431	M5087A	HeartStart Trainer Replacem. Carry Case	29.00	35.00	18.85	Available
MRx Supplies						
Multifunction Electrode Pads						
989803106921	M3501A	Adult/Child Pads AAMI Barrel Conn.	271.00	23.00	208.67	Available
989803106951	M3504A	Infant Pads AAMI Barrel Conn.	143.00	23.00	110.11	Available
989803107781	M3713A	HeartStart Adult/Child Plus Pads	290.00	23.00	223.30	Available
989803107811	M3716A	HS Adult/Child Radiolucent Pads	310.00	23.00	238.70	Available
989803107821	M3717A	HeartStart Infant Plus Pads	155.00	23.00	119.35	Available
989803125401	M3718A	HS Adult Radiotransparent Pads	420.00	23.00	323.40	Available
989803125411	M3719A	HS Pedi Radiotransparent Pads	180.00	23.00	138.60	Available
989803166021	989803166021	Adult/Child Pre-Connect Defib Pad	315.00	23.00	242.55	Available
External Multifunction Cables and Test Loads						
989803105231	M1781A	CM 50 ohm Test Load	129.00	23.00	99.33	Available
989803106971	M3507A	Hands-free Cable Barrel Conn.	142.00	23.00	109.34	Available
989803106981	M3508A	HeartStart Hands-free Cable	132.00	23.00	101.64	Available
989803107831	M3725A	HeartStart 50 ohm Test Load	125.00	23.00	96.25	Available
989803158661	989803158661	Replacement Pads/CPR Meter Cable	180.00	35.00	117.00	Available
External Paddles						
989803129041	M3543A	External Paddles - Water Resistant	731.00	23.00	562.87	Removed 201710
ECG Monitoring Electrodes						
989803105971	M2202A	Adult Radiotranslucent Foam Electrode	116.00	23.00	89.32	Available

989803148801	989803148801	Adult Solid Gel Snap Electrode (Foam)	194.00	23.00	149.38	Available	
989803148821	989803148821	Adult Radiolucent Electrode (Foam)	185.00	23.00	142.45	Available	
12 Lead ECG Cables & Lead Sets							
989803144911	M1602A	CBL 5 Lead Snap Chest AAMI, ICU	116.00	23.00	89.32	Available	
989803144991	M1644A	CBL 5 Leadset, Snap, AAMI, ICU	104.00	23.00	80.08	Available	
989803144791	M1663A	CBL 10 Lead ECG Trunk AAMI/IEC 2m	268.00	23.00	206.36	Available	
989803125841	M1968A	CBL 5 Leadset, Grabber, AAMI, ICU	113.00	23.00	87.01	Available	
989803125881	M1976A	CBL 5 Leadset, Grabber,Chest, AAMI,ICU	104.00	23.00	80.08	Available	
989803176161	989803176161	CBL 5 Lead, Snap, Shld, AAMI, Limb, Rgd	120.00	23.00	92.40	Available	
989803176171	989803176171	CBL 5 Lead, Snap, Shld, AAMI, Chest, Rgd	140.00	23.00	107.80	Available	
3 Lead Cable Set							
989803103811	M1500A	CBL 3 Lead ECG Patient Trunk, AAMI	150.15	23.00	115.62	Available	
989803104381	M1605A	CBL Shielded 3-Ld, Snaps, Safety, AAMI	116.55	23.00	89.74	Available	
5 Lead Cables Set							
989803103941	M1520A	CBL 5 Lead ECG Patient Trunk, AAMI	198.45	23.00	152.81	Available	
989803104521	M1625A	CBL Shielded 5-Ld, Snaps, Safety, AAMI	127.05	23.00	97.83	Available	
SpO2							
989803103251	M1194A	Pediatric/Adult Ear Clip Sp02 Sensor	264.00	23.00	203.28	Available	
989803103261	M1195A	SPO2 INFANT SENSOR	264.00	23.00	203.28	Available	
989803128631	M1196A	Reusable Clip Adult SpO2 Sensor	113.00	23.00	87.01	Available	
989803128641	M1196T	Reusable Clip Adult SpO2 Sensor	92.00	23.00	70.84	Available	
989803105681	M1941A	CBL SpO2 Extension Cable, 2m	120.00	23.00	92.40	Available	
989803105691	M1943A	Sp02 9-pin D-sub Adapter cbl 1.1m(8-pin)	180.00	23.00	138.60	Available	
989803128651	M1943AL	Sp02 8-pin D-sub Adapter cable 3m (8pin)	210.00	23.00	161.70	Available	
989803128531	M1131A	Disposable Adult/Pedi SpO2 Sensor	244.00	23.00	187.88	Available	
989803128541	M1132A	Infant Disposable SpO2 Sensor	297.00	23.00	228.69	Available	
989803144371	M1191B	Reusable Adult SpO2 Sensor	264.00	23.00	203.28	Available	
989803144381	M1191BL	Reusable Adult SpO2 Sensor	276.00	23.00	212.52	Available	
989803128591	M1191T	Reusable SpO2 Sensor Adult	225.00	23.00	173.25	Available	
989803103231	M1192A	SNSR SpO2 Pedi/Small adult finger	264.00	23.00	203.28	Available	
989803128611	M1192T	Reusable SpO2 Sensor Pediatric	225.00	23.00	173.25	Available	
989803103241	M1193A	SNSR Neonatal Hand/Foot Sp02	264.00	23.00	203.28	Available	
NIBP Interconnect Tubing							
989803104331	M1598B	Adult NIBP Air Hose 1.5m	73.00	23.00	56.21	Available	
989803104341	M1599B	Adult NIBP Air Hose 3.0m	69.00	23.00	53.13	Available	
Reusable Blood Pressure Cuffs							
989803101151	40400A	Traditional Reusable NIBP Cuff Kit	169.05	23.00	130.17	Available	
989803101161	40400B	Traditional Reusable NIBP Cuff Kit	297.15	23.00	228.81	Available	
989803101171	40401A	Traditional Reusable NIBP Cuff/Infant	38.85	23.00	29.91	Discontinued	
989803101181	40401B	Traditional Reusable NIBP cuff/pediatric	42.00	23.00	32.34	Discontinued	
989803101191	40401C	Traditional reusable NIBP cuff/adult.	47.25	23.00	36.38	Available	
989803101201	40401D	Traditional reusable NIBP cuff/lg. adult	57.75	23.00	44.47	Discontinued	
989803101211	40401E	Traditional reusable NIBP cuff/thigh.	81.90	23.00	63.06	Discontinued	
989803104151	M1572A	Comfort Care Cuff, Pediatric	36.00	23.00	27.72	Available	
989803104161	M1573A	Comfort Care Cuff, Small Adult	42.00	23.00	32.34	Available	
989803104171	M1574A	Comfort Care Cuff, Adult	42.00	23.00	32.34	Available	
989803104181	M1575A	Comfort Care Cuff, Large Adult	51.00	23.00	39.27	Available	
989803104191	M1576A	Comfort Care Cuff, Thigh	66.00	23.00	50.82	Available	
989803147841	M4552B	Easy Care Cuff, 1 Hose, Infant (1)	27.00	23.00	20.79	Available	
989803147851	M4553B	Easy Care Cuff, 1 Hose, Pediatric (1)	29.00	23.00	22.33	Available	
989803147861	M4554B	Easy Care Cuff, 1 Hose, Small Adult (1)	34.00	23.00	26.18	Available	
989803147871	M4555B	Easy Care Cuff, 1 Hose, Adult (1)	32.00	23.00	24.64	Available	
989803147881	M4556B	Easy Care Cuff, 1 Hose, Adult XL (1)	40.00	23.00	30.80	Available	
989803147891	M4557B	Easy Care Cuff, 1 Hose, Lrg Adult (1)	33.00	23.00	25.41	Available	
989803147901	M4558B	Easy Care Cuff,1 Hose,Lrg Adult XL (1)	45.00	23.00	34.65	Available	
989803147911	M4559B	Easy Care Cuff, 1 Hose, Thigh (1)	52.00	23.00	40.04	Available	
Disposable Blood Pressure Cuffs							
989803148001	M4572B	Gentle Care Cuff, Infant 1-tube	84.00	23.00	64.68	Available	
989803148011	M4573B	Gentle Care Cuff, Pediatric, 1-tube	65.00	23.00	50.05	Available	
989803148021	M4574B	Gentle Care Cuff, Small Adult, 1-tube	67.00	23.00	51.59	Available	
989803148031	M4575B	Gentle Care Cuff, Adult, 1-tube	72.00	23.00	55.44	Available	
989803148041	M4576B	Gentle Care Cuff, Adult XL, 1-tube	88.00	23.00	67.76	Available	
989803148051	M4577B	Gentle Care Cuff, Large Adult, 1-tube	72.00	23.00	55.44	Available	
989803148061	M4578B	Gentle Care Cuff, Large Adult XL, 1-tube	98.00	23.00	75.46	Available	
989803148071	M4579B	Gentle Care Cuff, Thigh, 1-tube	85.00	23.00	65.45	Available	
EtCO2 Intubated Circuits							
989803105531	M1920A	FilterLine Set Adult/Pedi	343.40	23.00	264.42	Available	
989803105541	M1921A	FilterLine H Set Adult/Pedi	534.29	23.00	411.40	Available	
989803105561	M1923A	FilterLine H Set Infant/Neonatal	686.80	23.00	528.84	Available	
Non-Intubated Dual Purpose Circuits (CO2/O2)							
989803129731	M2520A	SMART CAPNOLINE O2, PEDIATRIC	539.34	23.00	415.29	Available	
989803129751	M2522A	SMART CAPNOLINE O2 plus, ADULT, intermed	539.34	23.00	415.29	Available	
989803129761	M2524A	SMART CAPNOLINE, PEDIATRIC	493.89	23.00	380.30	Available	
989803129781	M2526A	SMART CAPNOLINE plus, ADULT, intermed	493.89	23.00	380.30	Available	
Disposable Temperature Supplies							
989803100941	21090A	Esophageal/Rectal Temperature Probe	161.00	23.00	123.97	Available	
989803100951	21091A	Skin Surface Temperature Probe	150.00	23.00	115.50	Available	
989803100961	21093A	Esophageal/Stethoscope Temperature Probe	206.00	23.00	158.62	Available	
989803100971	21094A	Esophageal/Stethoscope Temperature Probe	216.00	23.00	166.32	Available	
989803100981	21095A	Esophageal/Stethoscope Temperature Probe	207.00	23.00	159.39	Available	
989803100991	21096A	Foley Catheter Temperature Probe	214.00	23.00	164.78	Available	
989803101001	21097A	Foley Catheter Temperature Probe	211.00	23.00	162.47	Available	
989803105321	M1837A	Esophageal/Rectal Temperature Probe	161.00	23.00	123.97	Available	
Reusable Temperature Supplies							
989803100881	21075A	Esophageal/Rectal Temperature Probe	98.00	23.00	75.46	Available	
989803100891	21076A	Esophageal/Rectal Temperature Probe	139.00	23.00	107.03	Available	
989803100901	21078A	Skin Surface Temperature Probe	198.00	23.00	152.46	Available	
989803100921	21082A	Long Extension Cable	52.00	23.00	40.04	Available	
989803100931	21082B	Short Extension Cable	60.00	23.00	46.20	Available	
Batteries & Chargers							
989803129011	M3538A	Lithium Ion Battery Module	415.00	23.00	319.55	Available	
Paper							
989803101501	40457C	1-Channel Chemical Thermal Paper, Gray	36.00	23.00	27.72	Available	
989803101511	40457D	1-Channel Chem/Thermal Paper,40 mm grid	191.00	23.00	147.07	Available	
989803138171	989803138171	Defibrillator Chemical/Thermal Paper	62.00	23.00	47.74	Available	
989803138181	989803138181	Defibrillator Chemical/Thermal Paper	487.00	23.00	374.99	Available	
Cases							
989803129021	M3541A	Carrying Case for Fusion	355.00	23.00	273.35	Available	
989803185181	989803185181	MRx Black Soft Carry Bag Universal	345.00	23.00	265.65	Available	
989803174261	989803174261	MRx Black Soft Carry Case Straps	30.00	35.00	19.50	Available	
Color Handles							
989803131691	M5521A	Color Handle - Green	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
989803131701	M5522A	Color Handle - Blue	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
989803131711	M5523A	Color Handle - Yellow	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
989803131721	M5524A	Color Handle - Rose	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
989803131731	M5525A	Color Handle - Grey	16.00	23.00	12.32	Material Discontinued as part of MRx shutdown effective 5/10/2017	
Miscellaneous							
989803129071	M3537A	Bed Rail Hook	26.00	23.00	20.02	Available	
989803139961	M4762A	Q-CPR Compression Sensor Adhesive Pads	54.00	23.00	41.58	Available	
989803143341	M4759A	Rect. Pdl Electrode Repl. M3535A - Gray	75.00	23.00	57.75	Available	
989803145361	M3549A	MRx Wide Bed Rail Hook	64.00	23.00	49.28	Available	
989803145571	M4737A	MRx Display Cover	88.00	23.00	67.76	Available	
989803146981	989803146981	MRx Data Card and Tray	108.00	23.00	83.16	Available	
989803163291	989803163291	CPR Meter Patient Adhesive Pads	50.00	23.00	38.50	Available	