

## **SPECIFICATIONS - INFINITY XSTREAM BACKPACK ELECTROFISHING PACKAGE (440WATT GENERATOR POWER OPTION)**

The Department of Environmental Protection (DEP), Acid Mine Drainage (AMD) Development Division requires an Infinity Xstream Backpack Electrofishing Package, as detailed below. The Electrofishing Backpack shall be provided as requested in these Specifications and NO SUBSTITUTIONS TO THESE SPECIFICATIONS WILL BE ACCEPTED.

Any questions regarding the technical aspects of the Specifications shall be directed to Jon Smoyer at 814.472.1884. Questions regarding the contracting or bidding procedures shall be directed to Jeannine Estok at 814.472.1806.

Electrofishing is the most effective sampling technique for of riverine fishes. The Infinity Xstream gas generator backpack electrofishing unit has a Specific Conductivity range which makes it the most effective mobile sampling unit, particularly for AMD impaired waters. The operating range is conducive to AMD waters which is where the majority of sampling work for the Cambria Division is conducted. A low voltage battery backpack electrofisher is inadequate for sampling <50 Sp. Cond or>200 Sp. Cond. as it is unable to produce enough watts to overcome conductance outside its ideal range. The gas generator electrofishing unit's features allow staff to effectively collect and measure fishes within a defined parameter.

### **Xstream Backpack Electrofisher**

- 400 watt+ average power
  - 47,000 watts maximum peak output (achieved at 1% duty cycle)
  - 1200 volt max (1 volt increments)
  - 40 amp max
- Interchangeable power source capabilities
  - Custom 440w Honda powered 4-stroke backpack electrofishing generator power source.
  - 24v 22.2 amp-hr, lithium iron phosphate smart battery available
- DC (square wave)
  - Pulsed DC
  - Complete control of frequency (1 to 300Hz in 1Hz adjustments) and duty cycle (1-100% in 1% steps)
  - Smooth/Continuous DC
- Gated Burst DC- fully programmable
  - Complete control (1 hz adjustments) over fast frequency (1-1000Hz) and duty cycle (1-100%)
  - Complete control over slow frequency (1 Hz adjustments) (1-300Hz)
- AC Simple
  - Square wave AC with adjustable cycle duration (1-98% duty cycle in 1% steps)
  - Frequency adjustable from 1 to 300Hz in 1 Hz steps
- AC Nerve
  - Allows for independent control of positive pulse duty cycle in 1% steps (1-98%)
  - Allows for independent control of negative pulse duty cycle from 1-25.5% in 0.1% increments
- Peak Amp Display
- Peak Volt Display
- Peak Watt Display

- Dual Channel Capable
  - Allows user to switch between any two waveforms (including frequency, duty cycle and voltage) by toggling anode pole switch on-off-on within 1 second. Primarily used to target lampreys.
- Tilt sensor
  - Able to reset with cycling pole switch
  - Able to adjust sensitivity
- Water immersion sensor
- Anode out of water sensor
  - Adjustable
- Enunciator safety sound system
  - Unique tones for each waveform
  - Volume adjustable
- High visibility in-use safety lights on either side of unit
  - Unique flashing for each waveform
- Large Emergency Stop Button
- Toggle switch main breaker (off/on switch)
- Equipped with built-in megohmmeter to test waders and gloves
- General Menu and Information Display (scroll through)
  - Ability to save and recall up to nine (9) favorite settings (each setting with unique waveform type, frequency, duty cycle, and voltage)
  - Total time meter
  - Resettable fishing time meter
  - Battery voltage
  - Resettable battery amp usage
  - Generator voltage
  - Generator RPM
  - Built in Ohm meter to test safety switches
- General Specs
  - Powder coated aluminum housing
  - ¼” turn Bayonet style waterproof connectors
  - Composite military grade backpack frame used by special operations
  - Shoulder straps and waist belt custom made for comfort & durability includes quick release straps

Package Includes:

- One Xstream Electrofisher with pack frame
- One six-foot (6’) anode pole with a six-foot (6’) straight cord and eleven-inch (11”) stainless steel anode ring w/switch
- One six-foot (6’) cathode pole with a ten-foot (10’) straight cord and eleven-inch (11”) stainless steel anode ring wo/switch
- Custom 440w Honda powered electrofishing generator
- Large transport case for Xstream unit

**Contract Requirements:** Bidder shall complete Attachment A, Reciprocal Limitations Act Requirements, and electronically attach to the bid. Failure to do so may result in your bid being rejected as non-responsive.

**Ship To/Delivery Location:** 286 Industrial Park Road, Ebensburg, PA 15931. All costs including shipping/handling shall be included in the unit price bid. All deliveries shall be Free on Board (FOB) destination. No additional costs shall be permitted.

**Bid Award:** The contract shall be awarded to the lowest responsive and responsible bidder based on the lowest total price submitted.

DEP is not responsible for the maintenance of the eMarketplace website.

The Department of General Services Supplier Service Center is available to assist vendors with registration, bidding and account management. For questions regarding registration help, send an email to:

[RA-PSC\\_Supplier\\_Requests@pa.gov](mailto:RA-PSC_Supplier_Requests@pa.gov) or call (877) 435-7363, then choose Option 1.

For questions regarding bidding help, send an email to [srmhelp@pa.gov](mailto:srmhelp@pa.gov) or call (877) 435-7363, then choose Option 2.

DEP is not responsible for the support or functionality of any DGS website.

**All bids shall be submitted electronically ONLY before closing date and time.**

**Payment Terms:** Payment shall be made upon satisfactory receipt of items ordered and submission of corresponding invoice(s).