

## **SPECIFICATIONS - INFINITY XSTREAM BACKPACK ELECTROFISHING PACKAGE- 440w 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 specs and NO SUBSTITUTIONS WILL BE ACCEPTED.

Any questions regarding the technical aspects of the Specifications should be directed to David Leiford at 814.472.1886. Questions regarding the contracting or bidding procedures shall be directed to Tammy Cree at 814.472.1811.

Electrofishing is the most effective sampling of riverine fishes. The gas generator backpack unit has a Sp. Conductivity range which makes it the most effective mobile sampling unit particularly in 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 it to effectively trap and measure aquatic life 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
  - Equipped with 440w 4-stroke generator power source
    - Auto voltage regulated
    - Throttles down for lower voltages or when anode pole switch is in "off" position
  - Optional 24v 22.2 amp-hr. lithium iron phosphate smart battery is 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 1second
  - Dual channel feature is primarily used by the lamprey program
- 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 (affton switch)
- Equipped with built-in megohmmeter to test waders and gloves
- Weight
  - Base Unit 16.50lbs
  - Power Source
    - Custom 4 stroke generator weight 14 lbs
    - Total operation weight with generator 30.51bs
- General Menu and Information Display (scroll through) ·
  - Ability to save and recall up to eight 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
  - Y." tum 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 6ft anode pole, 11" aluminum ring and custom 3 ft length of straight cord
- One 6ft cathode pole, 11" alum. ring; custom 8ft length of straight cord
- Custom 4 stroke generator power source

- 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: Items do not need to be shipped. They will be picked up at the factory address by BAMR personnel.

- Bid Award

- The contract shall be awarded to the lowest responsive and responsible bidder based on the lowest total price submitted.

- Payment Terms

- Payment shall be made upon satisfactory receipt of items ordered and invoice submitted.