### SCIENTIFIC ECHOSOUNDERS





# DT-X

## AUTONOMOUS SUBMERSIBLE ECHOSOUNDER

#### Applications

- Ideal for AUV or ROV instrumentation
- Deploy as a complete seafloor observatory system, tripod mount and batteries available
- Monitor migration and evaluate temporal patterns in distribution and abundance
- Gain insight into behavior variations and event response

#### **Product Highlights**

- Monitor and assess fish, marine mammals, zooplankton, other aquatic organisms
- Completely autonomous with no external cables
- Fully functional DT-X split beam echosounder packaged for seafloor or unmanned vehicle deployments
- Programmable duty-cycle and wake/sleep timer for extended deployments
- OEM version available for integration

# BioSonics

#### DT-X SUB AUTONOMOUS SUBMERSIBLE ECHOSOUNDER

#### **Performance Features**

- System Noise Floor: Extremely quiet -140dB
- Dynamic Range: Greater than 160dB
- Adjustable Ring Rate: 0.01 to 30 pps
- Adjustable Pulse Duration: 0.1 to 1.0 ms
- Adjustable Range: >2000m
- Transmit Power: 100 to 1000 Watts RMS

#### Dimensions

- Housing: 10" diameter x 22" length
- Digital transducer:
  - 7.2" diameter x 6.25" (200, 420 kHz)
  - 10.3" diameter x 8.5" (38, 70, & 120 kHz)

#### Power System

- External Battery, Nominal 12 or 24 Volts DC
- SMART power control eliminates surges and ensures safe shut-down when power is low and reboot only after recharge

#### Communication and Data Storage

- High-capacity storage drives
- USB and Ethernet ports for echosounder configuration and data retrieval
- Integrated data storage and power management systems

#### Echosounder Unit

- Fully programmable
- Self diagnosis and calibration on start-up
- Fully selectable configuration options.
- Integrated orientation sensor
- Programmable duty cycle

#### **Transducer Options**

- Scientific split beam technology
- Wide range of standard frequencies for numerous fisheries and habitat assessment applications; 38, 70, 120, 200, 420 kHz
- Ultra-low side lobes to -35 dB
- Multiple frequencies from a single echosounder





Fully rigged DT-X SUB as deployed for 5-week seafloor observatory mission.