

# DIGITAL SCIENTIFIC ECHOSOUNDERS

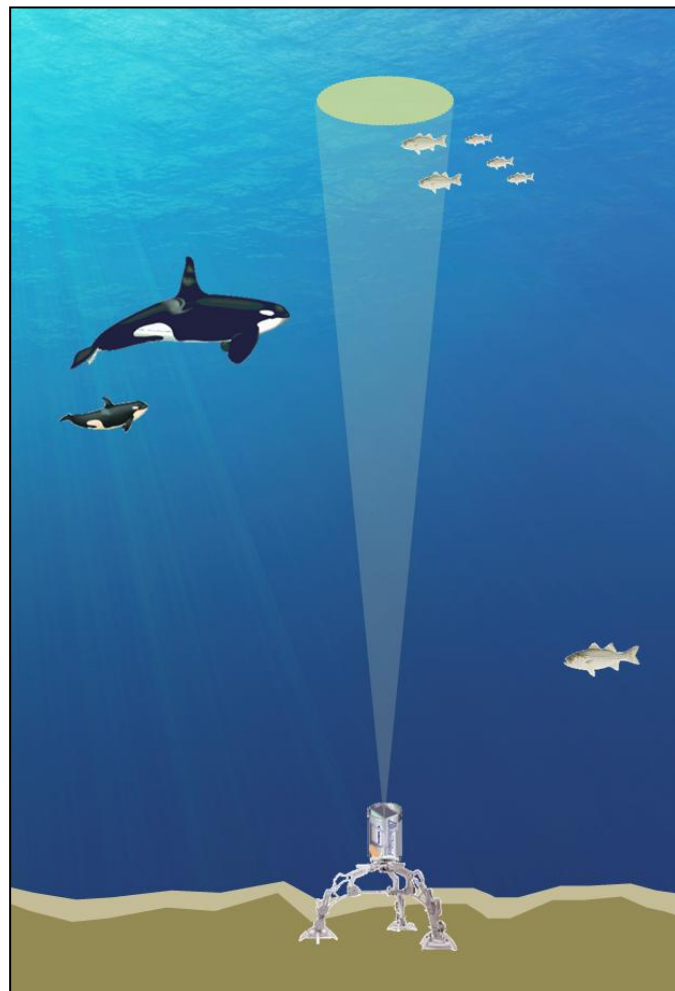
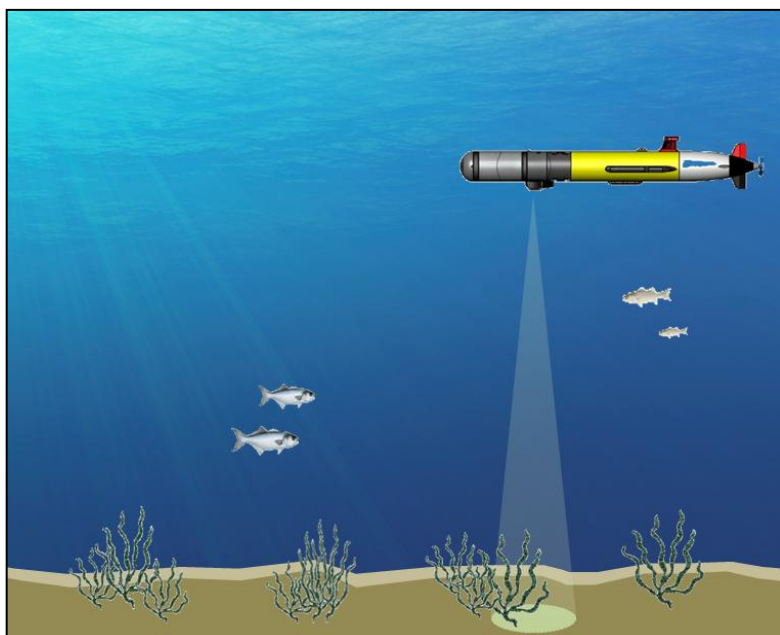
BioSonics, Inc. – World Leader in Digital Scientific Echosounder Technologies

## **DT-X** AUTONOMOUS SUBMERSIBLE ECHOSOUNDERS

- Monitor and assess marine mammals, fish, zooplankton, and other aquatic organisms
- Completely autonomous – NO EXTERNAL CABLES
- Submersible housing for seafloor or unmanned vehicle deployments

### System Features

- Fully autonomous – integrated data storage and power systems
- Pressure housings submersible to 300m or 1100m
- Programmable duty-cycle and , wake/sleep timer for extended deployments



### Applications

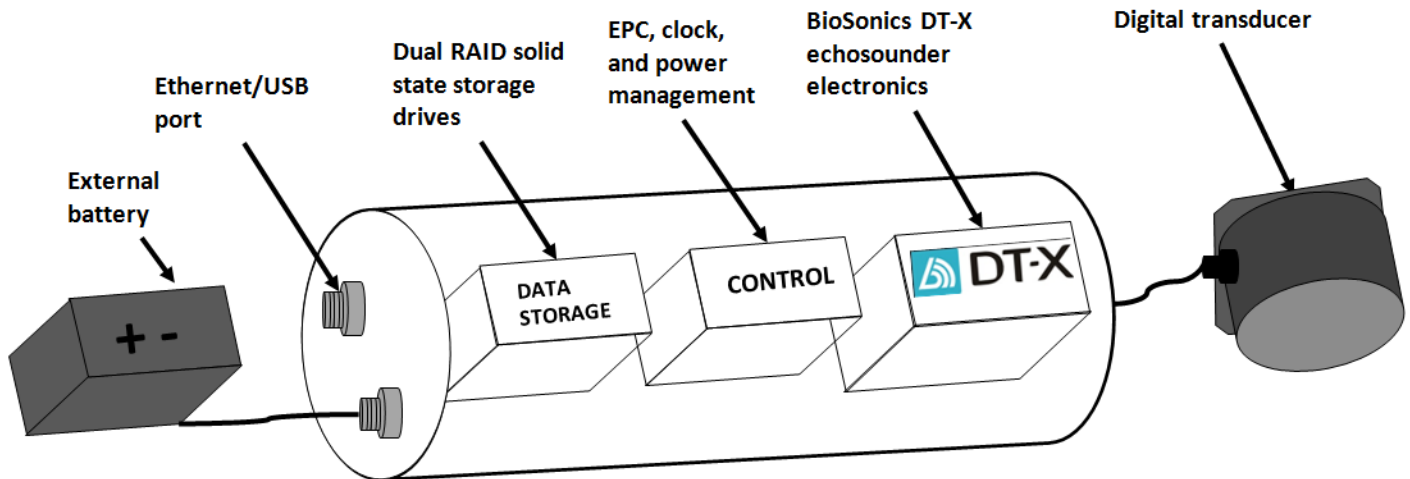
- Ideal for AUV or ROV instrumentation
- Seafloor observatory for water column profiling
- Monitor marine mammal migration and evaluate abundance over time
- Gain insight into temporal behavior and variation and event response



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# DT-X Series Technical Specifications and Features

## AUTONOMOUS SUBMERSIBLE ECHOSOUNDERS



### Performance Features

- System Noise Floor: Extremely quiet -140dB
- Dynamic Range: Greater than 160dB
- Ping Rates: User selectable from 0.01 to 30 pings per second
- Pulse Duration: User selectable from 0.1 to 1.0 milliseconds
- Range Settings: User selectable
- Transmit Power: User selectable from 100 to 1000 Watts rms

### Dimensions

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

### Communication and Data Storage

- Solid-state RAID storage drives
- USB and Ethernet ports for echosounder configuration and data retrieval

### Echosounder Unit

- Fully programmable
- Self diagnosis and calibration on start-up
- User selectable configuration and data storage options
- Optional integrated orientation sensor

### Digital Transducers

- Acoustic data fully digitized within the transducer
- Wide range of standard frequencies for numerous fisheries and habitat assessment applications; 38, 70, 120, 200, 420, & 1000 kHz
- Ultra-low side lobes to -35 dB
- Multiple frequencies from a single echosounder

### Power System

- External Battery, 11-14 Volts DC
- Programmable duty cycle
- SMART power control eliminates surges and ensures safe shut-down when power is low and reboot only after recharge

