

DIGITAL SCIENTIFIC ECHOSOUNDERS

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



DT-X

HYDROACOUSTIC ASSESSMENT SOLUTIONS

- Fish and Marine Life
- Submerged Aquatic Vegetation
- Bottom Classification & Bathymetry
- Automated Monitoring Systems

DT-X Series Features

- Rugged, weather resistant surface unit with programmable LINUX-based embedded processor
- Multiplex up to 4 transducers from a single echosounder surface unit
- Wired or wireless ETHERNET control
- Wide selection of BioSonics renowned digital transducers, split beam and single beam
- Digital, real-time, streaming, hydroacoustic data
- DGPS, integrated orientation and other external sensor inputs

Applications

- Mobile surveys to assess fish and marine life, submerged aquatic vegetation, bottom classification and bathymetry
- Fully autonomous fixed location surveys for long term assessment of fish and marine life abundance, behavior and migratory routes

BioSonics Software

- **Visual Acquisition™** for real time data acquisition, visualization, storage and playback
- **Visual Analyzer™** for fish, plankton and marine life
- **EcoSAV™** for submerged aquatic vegetation (SAV)
- **VBT™** for bottom type classification and bathymetry

Additional Analysis Software

- Echoview™
- SONAR5-Pro™
- QTC Impact™



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BioSonics, an authorized reseller of the



DT-X Series Technical Specifications and Features

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 from 0.5 to 500 meters
- Transmit Power: User selectable from 100 to 1000 Watts rms

Dimensions

- Echosounder Surface Unit:
49 cm X 39 cm X 19 cm - 13.6 kg
(19 in X 15 in X 8 in - 30 lbs.)
- Digital Transducer (typical):
18 cm diameter X 17 cm - 4kg
(7 in diameter X 6.5 in - 9.5 lbs.)

Power Requirements

- 10-14 Volts DC or
- 85-264 Volts AC
- 30 Watt consumption

Digital Transducers

- Unique design allows acoustic data to be fully digitized within the transducer
- Wide range of frequencies for numerous fisheries and habitat assessment applications; 38, 70, 120, 200, 420, & 1000 kHz
- Scientific grade split beam or standard single beam
- Ultra-low side lobes to -35 dB
- Network up to four separate transducers at four distinct frequencies from a single echosounder
- Digital signal cables 8 - 160 meters (25 - 500 feet)
- Heavy duty anodized aluminum or stainless steel housings

Echosounder Surface Unit

- Portable, weather resistant case
- Fully programmable, multiple transducer, multiplexing configuration
- Wired or wireless communication with laptop computer
- Programmable LINUX-based embedded processor
- Military grade connectors
- Integrated DGPS
- Self diagnosis and calibration on start-up
- High resolution, full color echogram
- User friendly Windows touch screen interface
- Numerous, user selectable, software controlled, configuration, display and data storage options
- Integrated orientation and other external sensor inputs

Data Analysis Software Features

- Echo counting
- Target strength analysis
- Automatic bottom tracking, manual editing
- Population and biomass estimation
- EMS deconvolution
- Target tracking and behavior
- Simultaneous echo integration and target recognition
- SAV coverage, canopy height and density assessment
- Substrate classification
- Bathymetry

