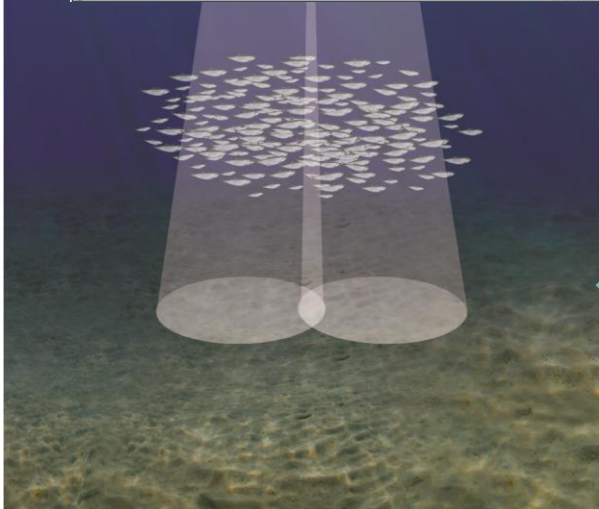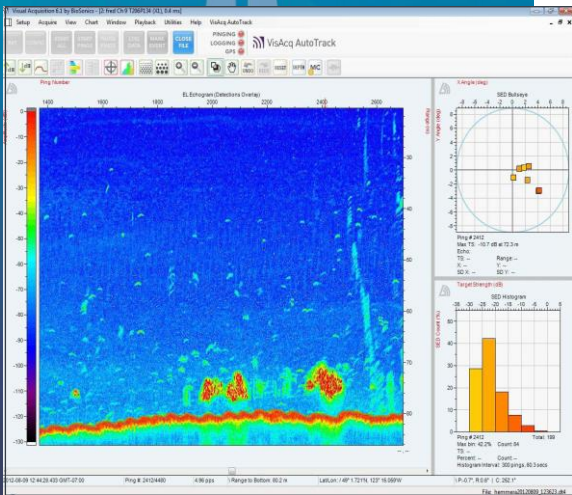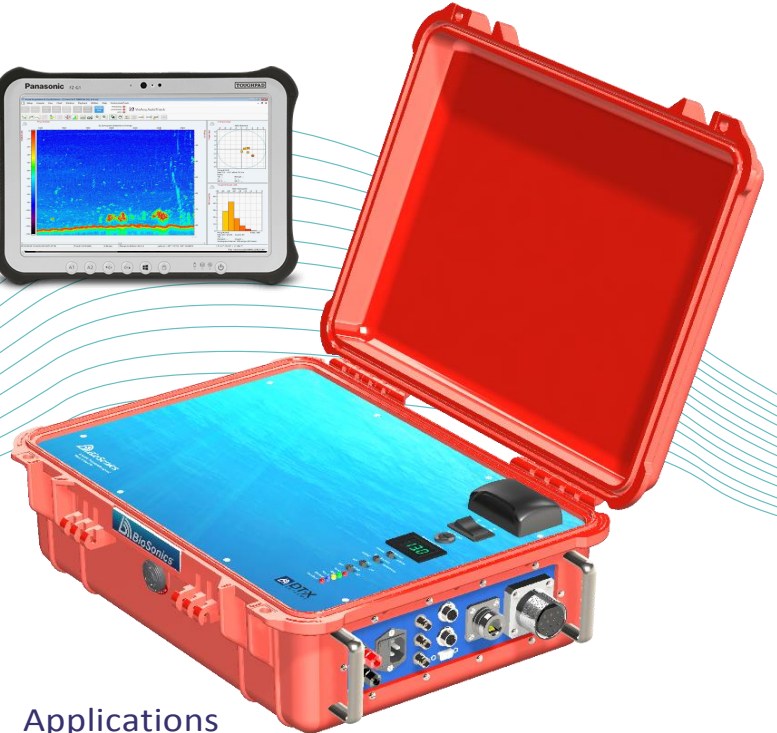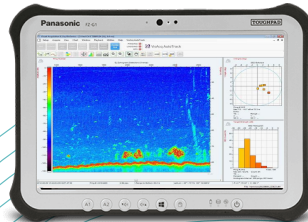# DT-X EXTREME

## AUTONOMOUS PORTABLE SCIENTIFIC ECHOSOUNDER



## Applications

- Mobile surveys to assess fish population, biomass and size distribution
- Fixed-station monitoring at rivers, dams, water intakes
- ASV/USV surveys, surface buoys, and other unmanned or unattended deployments
- Fish passage, entrainment and migration studies
- Habitat mapping, seagrass, substrate classification and bathymetric surveys

## Product Highlights

- Scientific split beam technology
- Operates with or without a PC or Tablet in autonomous mode
- Ultra-rugged IP67 metal connectors
- Log up to 30 days of data
- Programmable wake/sleep function
- Internal Wi-Fi router & DGPS, voltage monitor, and much more!

## DT-X EXTREME AUTONOMOUS PORTABLE SCIENTIFIC ECHOSOUNDER

### Echosounder Specifications

- Programmable LINUX-based embedded processor
- Wired or wireless ETHERNET control
- Real-time depth and speed output via NMEA 0183
- Internal DGPS with optional external interface
- Metal IP67 connectors
- High resolution, full color echogram
- System Noise Floor: Extremely quiet -140dB
- Dynamic Range: Greater than 160dB
- Selectable Ping Rates from 0.01 to 30 pps
- Selectable Pulse Duration: from 0.1 to 1.0 ms
- Split Beam Detection Range: 0.5 to 2,000 meters
- Transmit Power: 1000 Watts RMS
- Input Power: 11-26 VDC or 90-264 VAC
- Power Consumption:
  Active mode: 30 Watts; Sleep mode: <1 Watt
- Weights and Dimensions
  L: 49 cm (19") W: 39 cm (15") H: 19 cm (8"); Wt.: 11.4kg (22 lbs.)

### Digital Transducer Specifications

- Signal digitization provides improved SNR and overall superior data quality
- Integrated Orientation Sensor included
- Wide range of frequencies:
- 38, 70, 120, 200, 420, & 1000 kHz
- Scientific grade split beam or single beam
- Ultra-Low side lobes to -35 dB
- Network up to 10 separate transducers at various frequencies
- *NEW* stainless steel bulkhead and cable connectors
- Anodized aluminum housings
- Weights and Dimensions:

  **200, 400, 1000 kHz**
  D: 18 cm (7.2") H: 17 cm (6.3") W: 4kg (9.5 lbs.)
  **38, 70, 120 kHz**
  D: 26 cm (10.3.") H: 22 cm (8.5") W: 14-17kg (30-38 lbs.)

### BioSonics Data Collection, Data Analysis and Real-Time Reporting Software - INCLUDED!

**Visual Acquisition** — Echosounder configuration and data collection/playback

**Visual Analyzer** — Echo counting and echo integration for fish density and biomass estimation

**VisAcq AutoTrack** — Real-time processing and automated reporting for fisheries applications

**Visual Habitat** — Aquatic habitat mapping and assessment, measure plant canopy height and % coverage, SAV and substrate classification