

# DTZ Explore

Fully autonomous compact scientific split beam sonar system

The all new DTZ Explore is the first fully autonomous scientific split beam sonar system. Housed in a compact, low-power, submersible unit, the DTZ is capable of long-term, full water column data collection and real-time biological event reporting.

## Scientific Sonar Delivers Defensible Data

Environmentally responsible development of offshore energy, aquaculture and other offshore activities, requires persistent marine life monitoring for project permitting and stakeholder acceptance. Scientific split beam sonar technology is the method of choice for monitoring baseline marine life population distribution, device interaction, and any long-term effects of development.

**BioSonics DTZ Explore** is the first and most compact split beam sonar of its kind and **opens up the possibilities for underwater monitoring**. The DTZ can easily attach to any crewed vessel, un-crewed mobile vessel, fixed platform or structure and provides the most scientifically defensible data possible on a wide range of water column organisms, from plankton to whales.



### Specifications

- Core Architecture: ARM Cortex-A9, System-on-Chip
- Operating System: Linux (AMD Peta Linux)
- Communication: Ethernet, RS-232, TTL Sync
- Power Consumption: 6W from 12VDC nominal input

## Product Features

- **Easy Integration** as an external sensor on UUVs, USVs, Data Buoys, ADCPs, Observatories
- **Three Operational Modes:**
  1. Fully autonomous data collection and storage PLUS internal Edge computing and automated low bandwidth reporting of biological detections with Ethernet or RS232 connectivity
  2. Fully autonomous long-term data collection, with 1TB internal raw data storage
  3. Traditional, over-the-side mobile survey with topside laptop
- **Integrated Pitch and Roll Sensor:** Precise transducer orientation data with each ping
- **Wideband Split Beam Transducer:** Selectable LFM and/or CW transmit pulse
- **Marine Mammal Friendly:** Available at 200 kHz frequency with custom shaped pulse for low frequency sound suppression. Suitable for long-term monitoring in the presence of marine mammals