

DESO 5DS

Full ocean depth singlebeam echosounder

The DESO 5DS is a hydrographic grade deepwater singlebeam echosounder designed for reliable high performance in deep ocean surveys. It utilizes very high power transceiver electronics to survey the oceans down to 10km depth.

The raw data record is stored in proprietary format by Teledyne's own software and can be acquired, replayed, and analyzed similar to thermal paper records. Depth data is continuously generated on serial and network interfaces and can be recorded by hydrographic software.

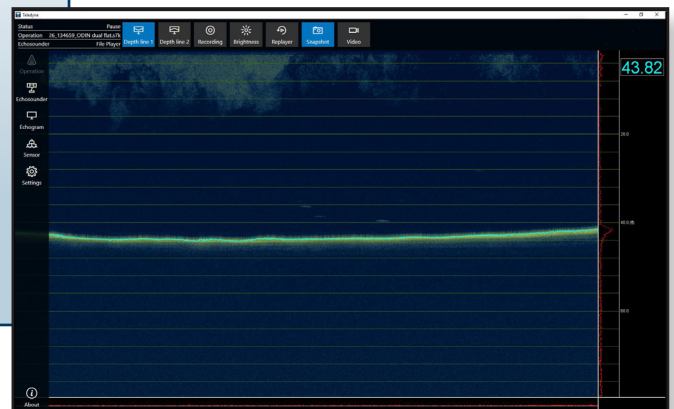
The DESO 5DS is based on our latest singlebeam sonar technology, designed as a precise and reliable survey tool for the survey from shallow waters to full ocean depth.

The DESO 5DS utilizes the most robust automatic control and bottom detection algorithms available – providing you with precise depth information and brilliant water column profile even under the most challenging conditions.



PRODUCT FEATURES

- Full ocean depth singlebeam echosounder
- 10km depth range
- Water column recording
- Robust and reliable bottom tracking
- New User Interface for easy control and operation



The new SBES UI operator software is being used to operate the DESO 5DS



TELEDYNE MARINE
 RESON
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DESO 5DS Full ocean depth singlebeam echosounder



DESO 5DS SYSTEM SPECIFICATIONS

| | |
|---------------------------------|--|
| Operating frequency | LF 2–50kHz |
| | HF 30–250kHz |
| Channels | Dual channel |
| | 200kHz 1cm resolution and ±1cm +0.1% of depth accuracy |
| | 33kHz 5cm resolution and ±5cm +0.1% of depth accuracy |
| | 12kHz 15cm resolution and ±8cm +0.1% of depth accuracy |
| Depth range | |
| | 200kHz 0.5 to 400m |
| | 33kHz 1.0 to 3,000m |
| | 12kHz 3.0 to 11,000m |
| Max ping rate | 50Hz |
| Pulse type | CW and FM (chirp) |
| Output power | Up to at least 3kW, depending on transducer |
| Input power | 100-230VAC 50/60Hz, max 300W |
| Data output | LAN interface: For each channel the measured depth and full amplitude-time echogram, passed through auxiliary sensor data, s7k data protocol. |
| | Serial: Various ASCII formats |
| Transducer interfaces | Impedance: Minimum 50 Ohm |
| | <ul style="list-style-type: none"> • Single connector TX1 for dual transducer • Two separate connectors TX1 and TX2 for separate transducer cables |
| Interfaces | 3 serial connectors (RS-232): |
| | Input: GNSS position and time, heave, motion, heading |
| | Output: Depth (various ASCII formats) |
| | 1 Ethernet LAN |
| Dimensions H x W x D | 88mm x 478mm x 462mm (2U 19" rack mount) |
| | Weight Maximum 13kg (excl. external cables and transducers) |
| Environmental parameters | Temperature operation (storage): -20°C to +55°C (-30°C to +70°C) |
| | Complies with standard EN 61000-3-2, 61000-3-3, 61326-1, 60945 89+10, 61010-1 |

