

# 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.

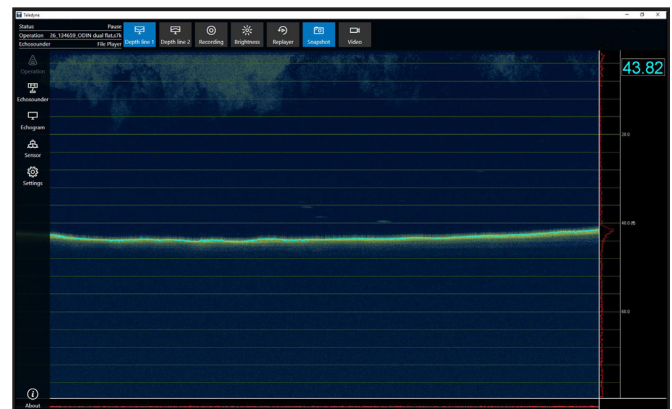
The raw data record is stored in proprietary format by Teledyne's own software and can be acquired, replayed, and analyzed similar to thermal paper records. Depth data is continuously generated on serial and network interfaces and can be recorded by hydrographic software.

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  
Everywhere you look™

DESO 5DS

Full ocean depth singlebeam echosounder



SYSTEM SPECIFICATIONS

Operating frequency	LF 10–50kHz
	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"> <li>• Single connector TX1 for dual transducer</li> <li>• Two separate connectors TX1 and TX2 for separate transducer cables</li> </ul>
Interfaces	3 serial connectors (RS-232): Input: GNSS position and time, heave, motion, heading Output: Depth (various ASCII formats) 1 Ethernet LAN 4 Sync connectors (Trig in, Trig out etc.)
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 §9+10, 61010-1