SeaBat D100

Multibeam echosounder for efficient and robust mid-water survey

Teledyne introduces a market-driven system engineered for versatile and robust hydrographic surveys across a wide depth range of 10 to 3000 meters.

The latest addition to our SeaBat product line, the SeaBat D100, addresses the growing demand for a compact mid-water multibeam system that delivers reliable, accurate, and consistent survey performance. Designed with operational efficiency in mind, it is rapid to mobilize, easy to operate, and provides high-quality data even in demanding environments.

The D100 supports a range of deployment scenarios including permanent installation, portable setups on vessels of opportunity, and integration as a payload on uncrewed surface vessels (USVs).

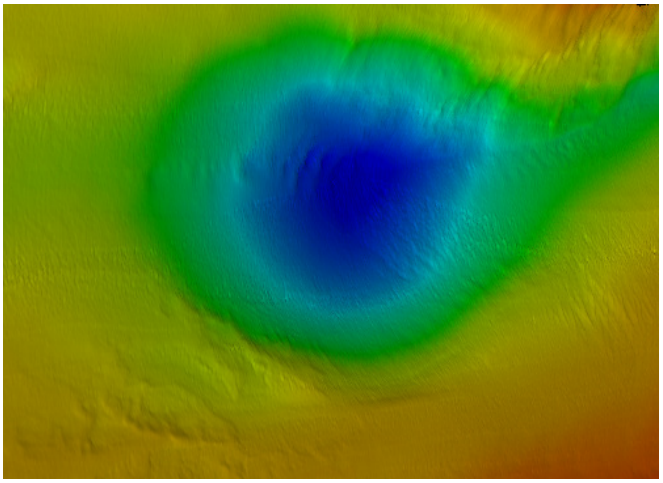
Its 19" rack-mount architecture enables streamlined mobilization across crewed and uncrewed platforms. The system's wideband transducer ensures efficient mapping performance across the full operational depth range, while the modular cascading-element design enables configurable resolution settings that adapt to changing survey requirements.

Receive Module (RXM)

Sonar Processing Module (SPM)

Transmit Module (TXM)

SeaBat D100 wet end



With its compact footprint, high performance, and deployment flexibility, the SeaBat D100 sets a new standard for mid-water multibeam systems.

Key Features

- Depth range 10 to 3000m
- Accurate, robust, versatile
- Compact mid-water multibeam
- Rapidly mobilized on platform of opportunity

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SYSTEM SPECIFICATIONS

Operating frequency:	44 to 60kHz
Depth range:	10 to 3000m[1]
Max ping rate:	20Hz
Max number of soundings:	Up to 1024 soundings per ping/swath
Pulse definition	0.1 to 35ms, CW or FM
Multi-ping:	2x, 3x, 4x
Motion Compensation:	Stabilized Roll (±15°) and Pitch (±10°)
Yaw-induced gap mitigation:	Through active Multi-ping
Sounding pattern:	Equi-Angle, Equi-Distance
Data types:	Bathymetry, Sidescan, Snippets Backscatter, Water column

Topside modules:

	Transmit Module	Receive Module	Sonar Processing Module
	6U 19”	2U 19”	2U 19”
Weight:	42-50kg	12kg	12kg
Height:	315.0mm	88.0mm	88.0mm
Width:	478.0mm	478.0mm	478.0mm

[1]Stated ranges may be impacted by environmental conditions, vessel installation, and motion.

		SeaBat D100 1x1	SeaBat D100 1x1.5	SeaBat D100 2x1.5
Beamwidth TX x RX:		1° x 1°	1° x 1.5°	2° x 1.5°
Transmit Array TX:	Dimensions[3]:	1622mm x 116mm x 109mm	1622mm x 116mm x 109mm	830mm x 116mm x 109mm
	Weight[3]:	44kg	44kg	22kg
Receiver Array RX:	Dimensions[3]:	152mm x 1475mm x 90mm	152mm x 983mm x 90mm	152mm x 983mm x 90mm
	Weight[3]:	30kg	20kg	20kg
Cable length:		25m	25m	25m

[3]Dimensions in along-ship X across ship X height, in mm. Weights in air, excluding cables, in kg
For relevant tolerances for dimensions above and detailed outlined drawings see Manual

Options:

- Rails for installation in steel hull and gondola
- Bracket for over-the-side/ moonpool deployment
- Gondola design support
- Position, Heading, Motion, and Sound-Velocity sensors
- Extension cables

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