Teledyne Odom Hydrographic

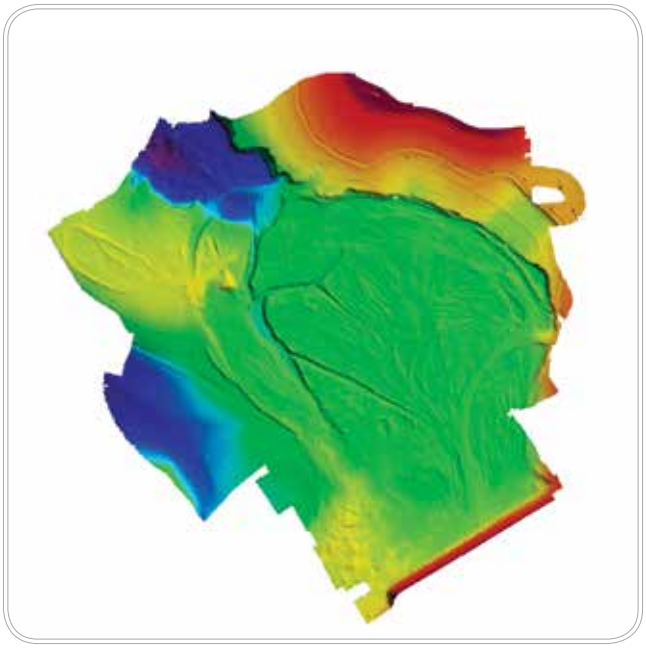
MB1

Multibeam Echo Sounder

The New Generation of Multibeam Echo Sounder

Introducing our new multibeam echo sounder: the **Teledyne Odom Hydrographic MB1**. Designed and manufactured entirely within the Teledyne Marine group to meet the growing needs of hydrographic professionals that are looking for a low-cost shallow-water multibeam echo sounder.

Using both amplitude and phase bottom detection, the MB1 is capable of sounding a swath of up to 120° in over 120m water depth. With 24 bit raw data and a dedicated projector, both raw water column and seabed data can be collected within the controller software. The new and improved **Real Time Appliance (RTA)** improves time synchronization on all of the sensors necessary for surveying down to 0.1ms. New options include a fully integrated GPS heading system built into the RTA and a TSS motion sensor built into the sonar head. Teledyne Impulse Titan® Series connectors are used for quick dependable data and power connection.



MB1 data.

PRODUCT FEATURES

- Phase and amplitude detection
- 120° swath width
- User-defined beam distribution and angles
- Sidescan and snippets
- 24-bit resolution water column backscatter data
- Uncertainty estimation
- Raw data logging for post processing, beam forming, bottom detection
- Titanium and acetal construction
- Optional integrated motion sensor and GPS heading system
- Field serviceable/upgradeable

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TECHNICAL SPECIFICATIONS

Frequency (KHz)	User-selectable, 170–220
Range Resolution	3.6cm
Pulse Width	User-selectable, tied to range
A/D	24 bit
Maximum Ping Rate	60Hz
Number of Beams	User-selectable, 10-512
Swath Width	User-selectable, 10°-120°
Beam Spacing	User-selectable, 0.23°-12°
Maximum Sounding Depth (Nadir)	240m
Bottom Detection Method	Amplitude & Phase
Data Products	Bathymetry, water column backscatter, snippets, sidescan, real time uncertainty
Environment	Maximum Deployment Depth 100m MB1 Sonar Operating Temperature -5 to +35°C MB1 Sonar Storage Temperature -20 to +55°C RTA Operating Temperature -5 to +50°C RTA Storage Temperature -20 to +65°C Dry Weight 10.2kg/22.5lbs transducer only ; 11.3kg/24.9lbs with Digibar V attached Weight in Water 4.3kg/9.5lbs transducer only; 5kg/11lbs with Digibar V attached
Power Requirement	12–30VDC 110-240VAC with included power supply
Power Consumption	34W
Software	Teledyne Odom's Windows based software included: IMAGE - Control, Data Display and Export
Dimensions	Head: 267mm (10.51in) L, 152mm (5.98in) W, 146mm (5.75in) H RTA: 286mm (11.25in) L, 305mm (12.00in) W, 133mm (5.25in) H

Above: Real Time Appliance (RTA).

Right: MB1 Fairing.

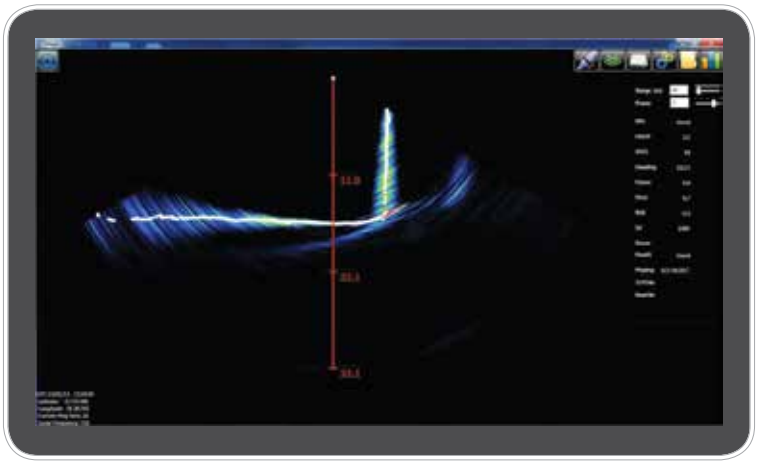

Image Software.

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