



Teledyne Odom Hydrographic

MB1

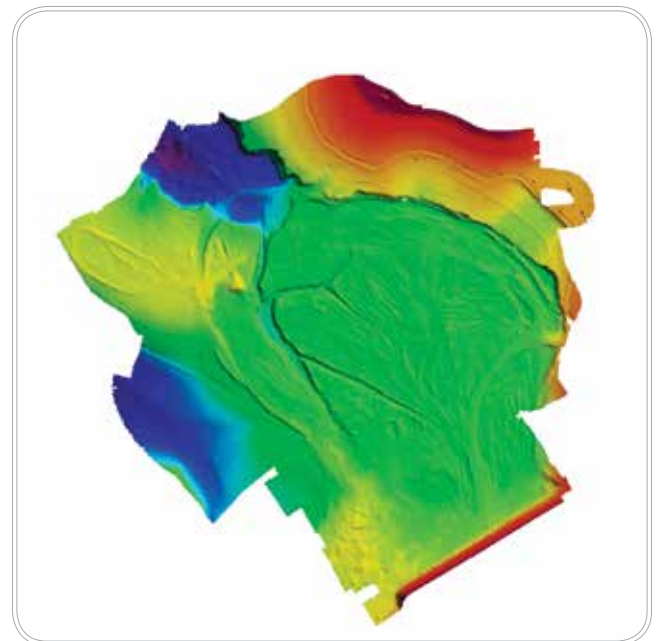
Multibeam Echo Sounder

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





MB1

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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 | 200m |
| | 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.

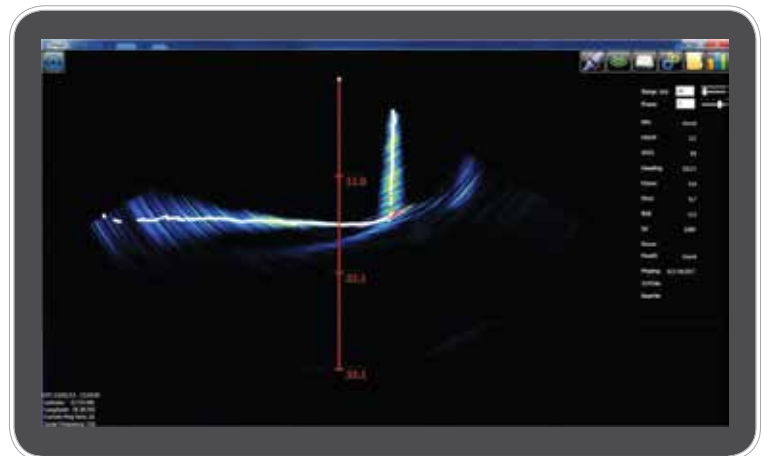


Image Software.



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Specifications subject to change without notice.
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