

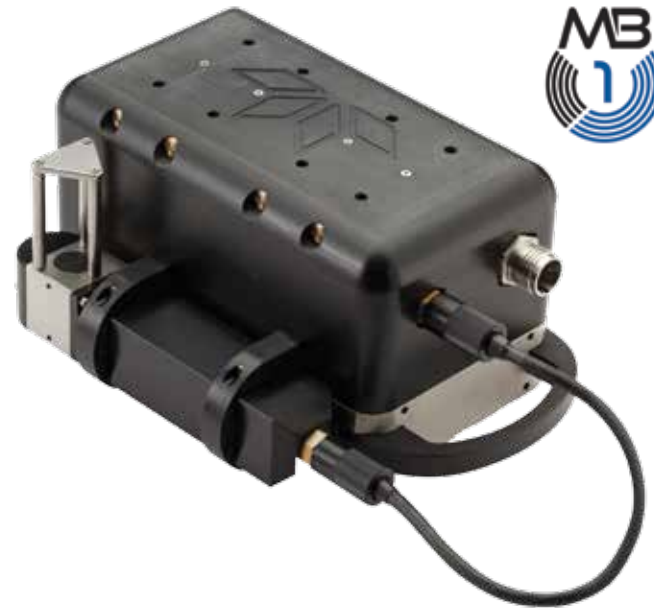


Teledyne Odom Hydrographic

# MB1

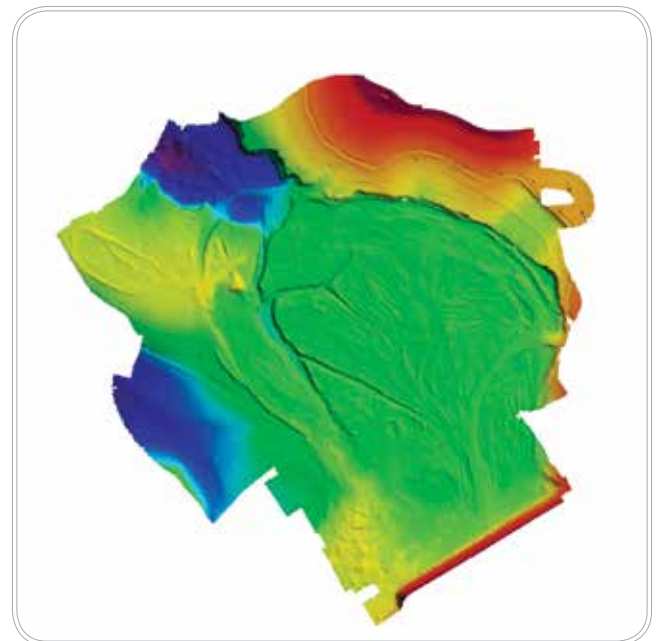
Multibeam Echo Sounder

## 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

## Multibeam Echo Sounder



### TECHNICAL SPECIFICATIONS

<b>Frequency (KHz)</b>	User-selectable, 170-220														
<b>Range Resolution</b>	3.6cm														
<b>Pulse Width</b>	User-selectable, tied to range														
<b>A/D</b>	24 bit														
<b>Maximum Ping Rate</b>	60Hz														
<b>Number of Beams</b>	User-selectable, 10-512														
<b>Swath Width</b>	User-selectable, 10°-120°														
<b>Beam Spacing</b>	User-selectable, 0.23°-12°														
<b>Maximum Sounding Depth (Nadir)</b>	240m														
<b>Bottom Detection Method</b>	Amplitude & Phase														
<b>Data Products</b>	Bathymetry, water column backscatter, snippets, sidescan, real time uncertainty														
<b>Environment</b>	<table border="0"> <tr> <td>Maximum Deployment Depth</td> <td>100m</td> </tr> <tr> <td>MB1 Sonar Operating Temperature</td> <td>-5 to +35°C</td> </tr> <tr> <td>MB1 Sonar Storage Temperature</td> <td>-20 to +55°C</td> </tr> <tr> <td>RTA Operating Temperature</td> <td>-5 to +50°C</td> </tr> <tr> <td>RTA Storage Temperature</td> <td>-20 to +65°C</td> </tr> <tr> <td>Dry Weight</td> <td>10.2kg/22.5lbs transducer only ; 11.3kg/24.9lbs with Digibar V attached</td> </tr> <tr> <td>Weight in Water</td> <td>4.3kg/9.5lbs transducer only; 5kg/11lbs with Digibar V attached</td> </tr> </table>	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
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<b>Power Requirement</b>	12-30VDC 110-240VAC with included power supply														
<b>Power Consumption</b>	34W														
<b>Software</b>	Teledyne Odom's Windows based software included: IMAGE - Control, Data Display and Export														
<b>Dimensions</b>	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.

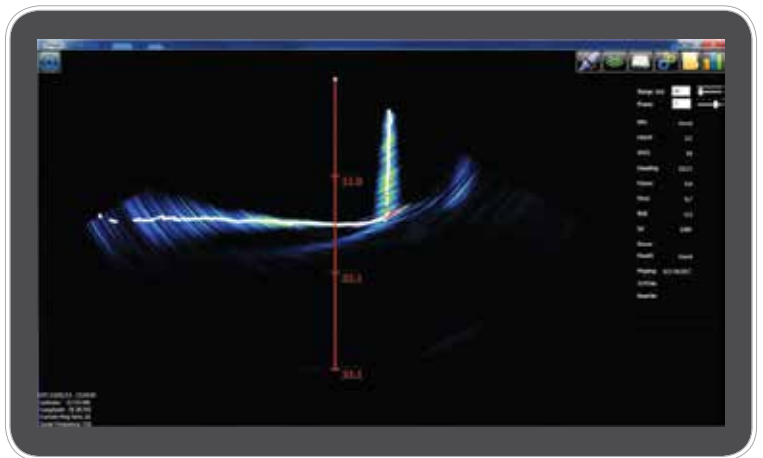


Image Software.

