#### **TELEDYNE MARINE**

# MB2 Multibeam Echosounder

## Hydrographic Echosounder for demanding 24/7 use

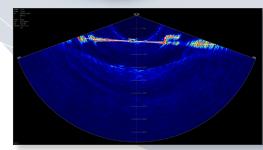
The MB2 Multibeam Echosounder is developed for fast mobilization on smaller vessels and is optimized for shallow water survey companies, port and harbor authorities, dredging companies, and other users looking for an easy-to-use and quickto-deploy high-resolution system.

As an option MB2 can be supplied with an integrated IMU and GPS heading system as well as an integrated real-time SVP sensor to simplify installation and calibration, making the MB2 perfect for use on vessels of opportunity, small survey launches, and ASVs.

MB2 features a dedicated cylindrical transmit array and broad range of sounding frequencies improving on the performance of the MB1 by offering a wider coverage and narrower acoustic beam.

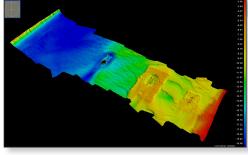
Using both amplitude and phase bottom detection, the MB2 is capable of sounding a swath of up to 140° in up to 110m water depth. With 24 bit raw data, both water column and seabed information can be collected within the controller software. The Real Time Appliance (RTA) synchronizes all of the sensors with accuracy better than 0.1ms.





Outfall diffuser outside Santa Barbara harbor

Mississippi River survey under the I-10 Bridge in Baton Rouge



### **PRODUCT FEATURES**

- 1.8° x 1.8° beam width
- Selectable swath width up to 140 degrees
- User selectable frequency range from 200 to 460 kHz
- 24-bit resolution, no analog TVG
- User selectable number of beams 10 to 256
- Water column backscatter data included as standard features

- · Sidescan and snippets included as standard features
- Raw data logging for post processing, beamforming, bottom detection
- Titanium and Acetal construction
- Optional built-in Applanix POS MV
- Optional integrated real-time SVP sensor







### **TECHNICAL SPECIFICATIONS**

Frequency (KHz)	User selectable, 200 - 460
Swath width	User selectable, 10° - 140°
Acoustic beam width	Along track 1.8° x 1.8° across track
Range resolution (cm)	2
Pulse width	User selectable, optionally tied to range
A/D	24 bit
Maximum ping rate	60Hz
Number of beams	User selectable, 10-256
Maximum sounding depth (Nadir)	200m
Bottom detection method	Amplitude and phase
Data products	Bathymetry, water column backscatter, snippets, sidescan, real time uncertainty
Dimensions (head)	267mm (10.51in) L, 152mm (5.98in) W, 206mm (8.10in) H
Dimensions (RTA)	286mm (11.25in) L, 260mm (10.25in) W, 140mm (5.50in) H
Weight in air	11.0kg/24.3lb sonar head only
	12.0kg/26.5lb with SVP 70
Weight in water	4.1kg/9.0lb sonar head only
	4.8kg/10.6lb with SVP 70 attached
Power requirement	12-30VDC, 15W-30W depending on the option
Environmental	Maximum deployment depth 100m
	MB2 Sonar operating temperature -5 to +35°C
	MB2 Sonar storage temperature -20 to +55°C
	RTA operating temperature -5 to +50°C
	RTA storage temperature -20 to +65°C
Included features	Phase and amplitude detection
	Real time roll raw data and stabilization
	Software included allowing setup, control, replay of raw data, and full data quality monitoring
	User-defined beam distribution - equidistant or equiangular
	Ping rates up to 60Hz



Real Time Appliance (RTA).



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