



OceanTools

MA500D and MA850D

Precision altimeters

The **OceanTools MA500D** and **MA850D** precision echosounder altimeters contain the latest DSP electronics to produce *subsea altitude measurement* with millimetric accuracy and resolution.



Overview

The **MA500D** utilises frequency swept CHIRP technology and advanced composite transducers.

To achieve its deeper depth rating, the **MA850D** uses a monolithic, rather than composite, transducer. It therefore doesn't chirp, but operates at a fixed 850kHz.

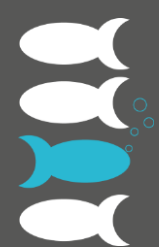
The altimeters provide numerous output formats, including RS232, RS485, NMEA-0183 and analogue.

The supplied Windows-based software allows the user to configure and control the altimeter, graphically displays altimeter data and offers full logging and replay of the data.

There are many applications for underwater altimeters, including:

- ROV and AUV altitude measurement
- Subsea lander altitude measurement
- Under-ice measurement
- Subsea surveying

Applications for multiple altimeters include safely lowering large items to the seabed, monitoring canal locks and hydro-electric plants for sediment build-up and assisting AUV navigation.



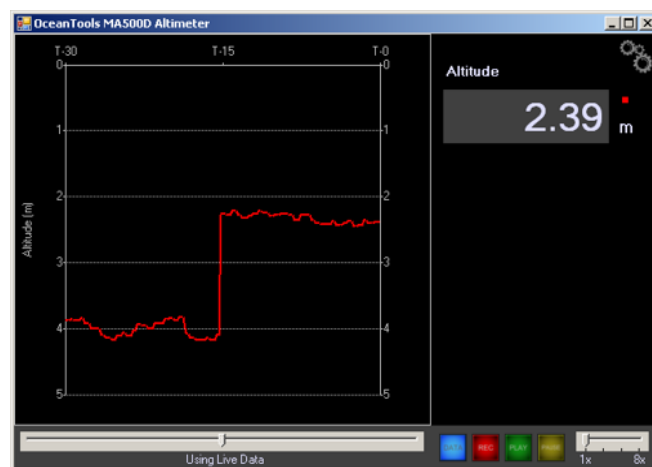
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Key Features

- CHIRP electronics (MA500D only)
- Simultaneous analogue and digital outputs
- NMEA-0183 output
- 9–36VDC operation
- Software allows log and replay of data
- User definable Velocity of Sound



Specifications

	MA500D	MA850D
Operating frequency	Chirp 480 - 520kHz	850kHz
Beamwidth	6° conical	6° conical
Range resolution	1cm	1cm
Maximum range	30m	5m
Minimum range	0.5m	0.2m
Transmit pulse length	60µs	10µs
Maximum diameter	80mm	80mm
Length (excl connector)	107mm	90.5mm
Weight in air (approx)	1.4kg	2.0kg
Weight in water (approx)	1.1kg	1.6kg
Depth rating	3000m	4000m
Input voltage range	9–36VDC	
Operating current	100mA @ 24VDC	
Data output	RS232, RS485, Analogue	
Connector type	MCBH8M	

Product datasheets, GA drawings, case studies and other supporting documents are available to download from data.oceantools.co.uk
 All specifications are subject to change without notice. E&OE.

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