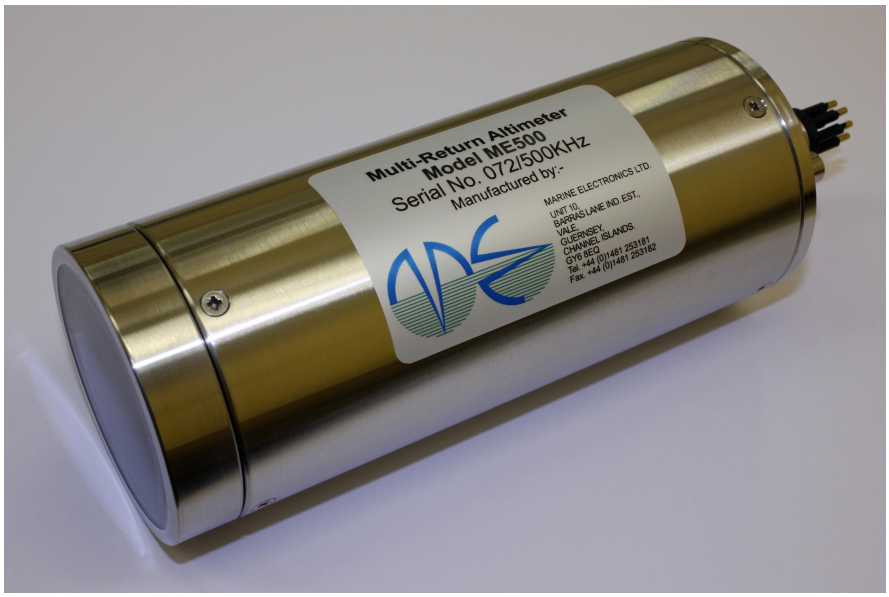
Multi-Return Altimeter

Model ME500



The Model ME500 Altimeter measures the acoustic travel time from the Transducer face to the sea bed and back and is ideally suited for use in water with a high concentration of sediment. For each acoustic pulse the returned echoes are digitised, processed and the range to the seabed transmitted serially via an RS232 or RS485 link, or output as a DC voltage with either +5v or +10v full-scale reading.

This unit differs from most Altimeters of the "first-return" type by digitising the receiver output at high speed into a FIFO memory. The range to the sea-bed is then calculated in the digital domain by the mathematical processing algorithm programmed into the internal RISC microcontroller.

The unit consists of a titanium housing with an acoustic transducer mounted in one end-cap and an underwater connector in the other. The connector is used to supply DC power and RS232 or RS485 communication. The electronics consists of two PCB's, one containing the Transmitter/Receiver and one containing the Microcontroller, Telemetry and power supply. The electronics may be re-packaged to suit a particular application, or incorporated into an existing underwater housing with the Transducer mounted remotely. Contact Marine Electronics to discuss your specific requirements.

Specification

Frequency:	500kHz
Beamwidth:	6° Conical Beam
Operating Ranges:	0.2m to 50m
Operating Depth / Material:	Delrin 30m Aluminium 500m Titanium 1000m Stainless Steel 2000m *(6000m available on request)*
Range Resolution:	12.5mm
Power Supply:	12v to24v DC
Digital Output:	RS232 at 9600 baud or RS485 at 9600 baud
Analogue Output:	0 to +5v full-scale or 0 to +10v full-scale
Dimensions:	68mm diameter, 168mm long

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