

Altimeter MKII

Digital Precision Altimeters



Applications

- ROV and AUV altitude
- Under ice measurement
- Integration with bathymetric and oceanographic sensors
- Touchdown monitoring of subsea structures
- Wave height measurement

The latest Digital Precision Altimeter offers reliable performance and accurate distance measurement in harsh subsea environments.

Benefits

- Reliable and precise distance measurement
- Millimetre accuracy
- Fully software configurable
- Compact and low weight
- Range of connector options and housing materials
- Fully backwards compatible with previous model

Features

- 200 kHz and 500 kHz options available
- Software configurable digital and analogue output
- Built-in inclinometer with slant-range correction
- Wide input voltage range
- 700 m, 4000 m, 6800 m depth ratings
- Straight and Right Angle transducer configurations

Tritech's latest Precision Altimeter offers a host of additional features along with the existing range of available connector and output options. Utilising our proprietary signal processing engine to provide millimetre accuracy, the devices now feature an inclinometer that can compensate for real time pitch and roll on altitude measurements.

Software configurable digital and analogue outputs allow the device to be integrated to a wide range of interfaces (including seamless operation within Tritech Genesis, Seaset or AltTest software). Compatibility with PC, data-loggers, multiplexers and industrial 4-20 mA interfaces are included as standard. The new instrument is fully backwards compatible with the previous PA sensor range.

Making use of Tritech's proprietary signal processing engine, the instrument actively filters acoustic noise generated by other subsea equipment to offer accurate and reliable target detection in the harshest of environments.

Key Specification	
Operating frequency	200 kHz or 500 kHz
Beamwidth	20° & 6° conical
Depth rating	700 m - 6800 m / 2296.59 ft - 22,309.7 ft
Weight in water	0.8 kg / 1.77 lbs

Acoustic specification	PA200		PA500	
Operating frequency	200 kHz		500 kHz	
Beamwidth	20° conical		6° conical	
Range	0.7 m to 50 m	1 m to 100 m	0.3 m to 50 m	0.1 m to 10 m

Resolution and Accuracy

Measurement Accuracy	1 mm
Inclination Accuracy	± 0.5°
Digital Resolution	1 mm
Analogue Resolution	0.001% of range (0 to 10 Vdc) or 0.003% of range (0 to 5 Vdc)

Electrical and communications

Supply voltage	9 to 50 Vdc
Power Requirements* ¹	<2 W
Digital Output	RS-232 or RS-485 (4800 to 115200 Baud)
Analogue Output	- 0 to 5 Vdc - 0 to 10 Vdc - 4 to 20 mA Current Loop (Optional)
Output Modes	Free-running, Interrogate, Multidrop Network, MK3 Comms, TTL Trigger

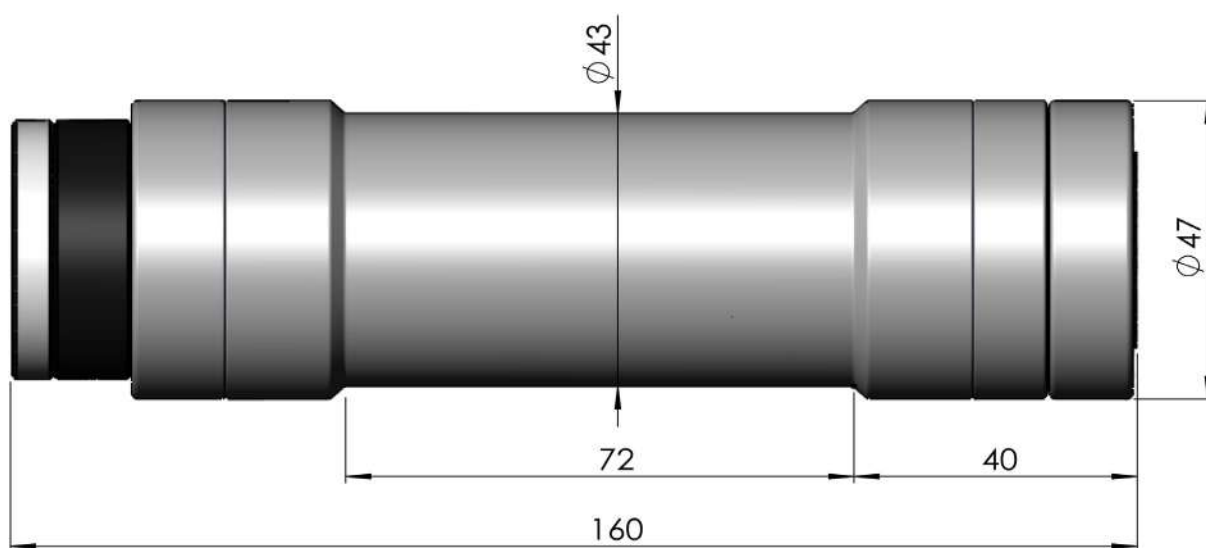
Physical specification

Depth rating	700 m / 4000 m / 6800 m 2296.59 ft / 13,123.36 ft / 22,309.7 ft
Material choice* ²	Acetal, Anodised Aluminium, Stainless Steel, Titanium All right-angle transducers are ABS
Weight (Air / Water) (Stainless Steel Forward Looking)	1.15 kg (2.54 lbs) / 0.8 kg (1.77 lbs)
Operating Temperature	-10 °C to 40 °C (14 °F to 104 °F)
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)

*¹Input Voltage 12 Vdc

*²Depth Dependant

Specification subject to change in line with Tritech's policy of continual product development



Not to scale. Measurements in mm.

Tritech International Limited

Peregrine Road, Westhill Business Park
Westhill, Aberdeenshire AB32 6JL
United Kingdom
Email: sales@tritech.co.uk
Tel: +44 (0)1224 744111