

PA200 and PA500

Digital Precision Altimeters



Tritech's digital precision altimeters offer configurable design with a wide range of options available. OEM configurations include, for example, low magnetic signature rigid Delrin™ (Plastic) housings or supplied with a right-angled transducer.

Output for the PA200 or PA500 can either be simultaneous analogue and digital outputs, allowing them to be interfaced to a wide range of PC devices, (including operated through Tritech's data acquisition and logging software, Seanet Pro), data loggers, ROV telemetry systems and multiplexers.

The 500kHz PA500 Altimeter is supplied with Tritech's 700 series bathy.

In addition, Tritech's altimeters are supplied with AltTest diagnostic software which provides a simple way of communicating with Tritech altimeters and displays real-time current and average data. AltTest is compatible with all configurations of the Tritech PA200 and PA500 altimeter.

High performance electronics in a proven compact and robust design for accurate height off seabed and subsea distance measurements.

Full digital synthesis of transmit and receive frequencies, together with greatly improved input dynamic range.

Benefits

- Millimetre resolution capability
- Use for distance measurement
- Compact and low weight
- Various connector options
- Highly configurable design

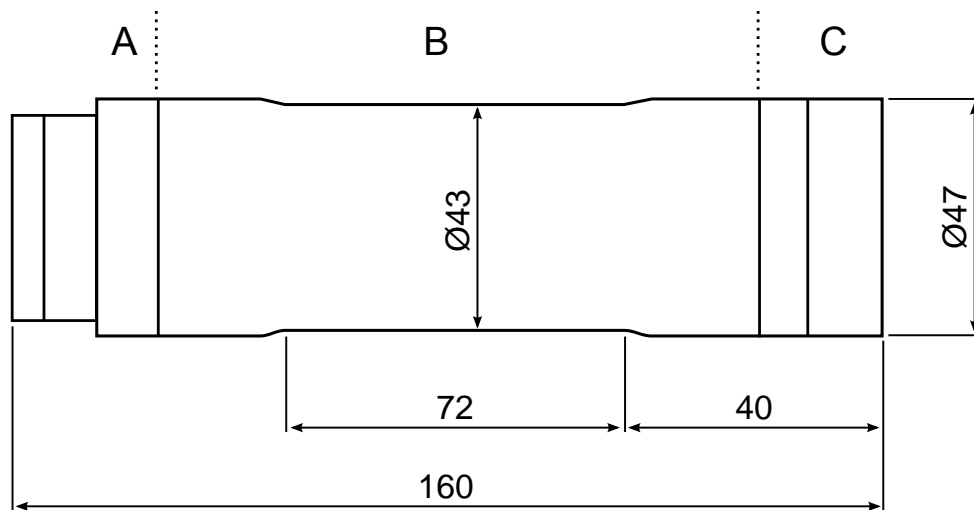
Features

- Analogue output
- Digital output
- Free running output
- Interrogated output
- Optional low operating voltage
- 700m, 4000m or 6800m ratings

Applications

- ROV and AUV altitude
- Under ice measurement
- Integration with oceanographic sensors
- Low cost hydrographic surveys
- Integration with bathymetric systems
- Touchdown monitoring of subsea structures
- Wave height measurement
- Monitoring of scouring on bridge supports

Specification



Not to scale, dimensions in mm.



Note

Diagram shows standard PA200/PA500 4000m rated version, other depth ratings and also a right angled transducer are available.

Acoustic	PA200	PA500	Resolution	
Operating frequency	200kHz	500kHz	Digital	1mm
Beamwidth	20° conical	6° conical	Analogue	0.025% of range
Range	0.7 to 100m	0.3 to 50m (0.1 to 10m optional)		

Electrical and Communication	
Power supply	24V DC at 80mA or 12V DC at 160mA
Analogue output	0 to 10V DC (with 24V power supply), 0 to 5V DC or 4 to 20mA
Data communications	RS232 or RS485
Output modes	Free running, interrogated or part of multidrop network

Physical	
Weights	1.15kg in air, 0.8kg in water (4000m stainless steel body)
Depth rating	700m with Delrin™ housing (aluminium alloy endcap) 4000m with aluminium alloy housing 4000m/6800m with stainless steel housing 6800m with titanium 6Al-4V housing
Materials	Dependent on depth, as shown above for straight transducer models. All right-angle transducers are ABS (part C in the diagram).
Temperature	-10 to 35°C operating (-20 to 50°C storage)