

PA200 and PA500

Digital Precision Altimeters



Tritech PA200 and PA500 Digital Precision Altimeters are based on high performance electronics with a proven and robust design.

OEM configurations include low magnetic signature rigid Delrin™ housings or right-angled heads. Control of the altimeters may be performed directly from a PC, through a control system or part of a multidrop network. The units may be supplied with simultaneous analogue and digital outputs, allowing them to be interfaced to a wide range of PC devices, data loggers, ROV telemetry systems and multiplexers.

Configurable design with a wide range of options available

Full digital synthesis of transmit and receive frequencies, together with greatly improved input dynamic range, offer unsurpassed levels of performance from a compact unit.

Benefits

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

Features

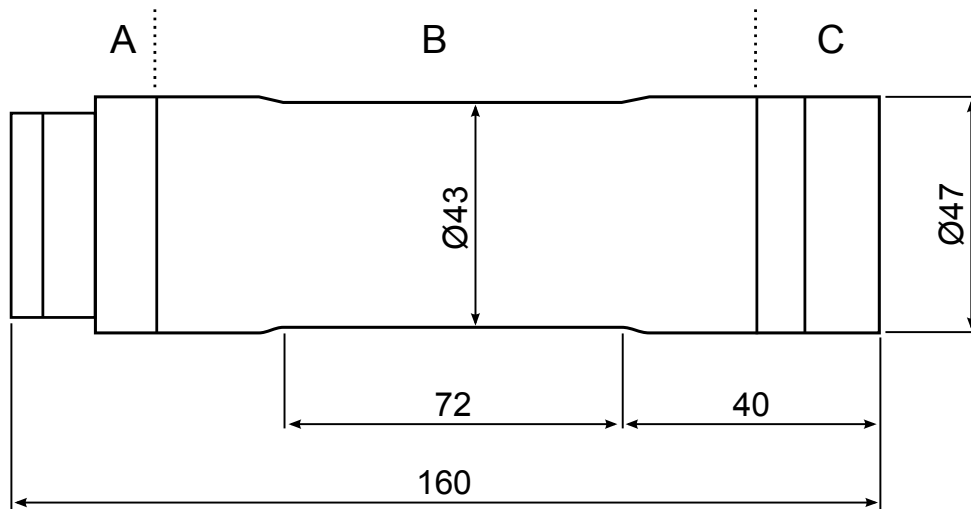
- Analogue output
- Digital output
- Free-running output
- Interrogated output
- Optional low operating voltage
- 700m, 4000m or 6800m ratings

Applications

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

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Specification



Not to scale, dimensions in mm.

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	12° conical	6° conical	Analogue	0.025% of range
Range	0.7 to 100m	0.3 to 50m (0.1 to 10m option)		

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 4000/6800m with stainless steel housing 6800m with titanium 6Al-4V housing
Materials	Depended 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)