

LRPA200

Long Range Precision Altimeter



The Long-range Precision Altimeter LRPA200 is both a stand-alone and network device and offers the same reliable features and flexibility of Tritech's standard altimeter series (PA200).

The LRPA200 may be supplied with simultaneous analogue and digital outputs allowing it to be interfaced to a wide range of PC devices, data loggers, ROV telemetry systems and multiplexers.

Control of the altimeters may be performed directly from a PC, from a suitable control system or as part of a multidrop network.

For long range and high accuracy echosounding applications

Full digital synthesis of transmit and receive frequencies, together with a wide dynamic input range offer, unsurpassed levels of performance from a compact unit. The altimeter is also highly configurable and can provide interrogated or free-running modes and a variety of analogue outputs.

Benefits

- Millimetre resolution capability
- Use for distance measurement
- 4000m or 6800m depth rating
- Various connector options
- Highly configurable design

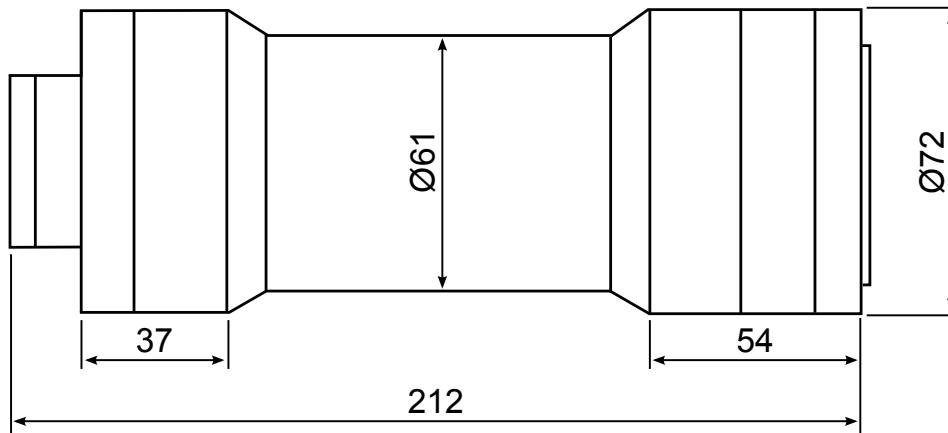
Features

- Analogue output
- Digital output
- Simultaneous analogue and digital output
- Free-running output
- Interrogated output

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

Specification



Not to scale, dimensions in mm.

Diagram shows standard 4000m rated version

Acoustic	
Operating frequency	200kHz
Beamwidth	10° conical
Range	2 to 200m
Digital timing resolution	1mm
Analogue resolution	0.025% of range

Electrical and Communication	
Power supply	24V DC at 90mA (12V DC optional)
Analogue output	0 to 10V DC (with 24V power supply) 0 to 5V DC 4 to 20mA
Communication protocols	RS232 or RS485
Output modes	Free running, interrogated or part of a multidrop network

Physical	Standard Model	Deep Rated Model
Weight in air	1.3kg	4.33kg
Weight in water	0.95kg	2.93kg
Depth rating	4000m	6800m
Materials	Aluminium alloy (stainless steel optional)	
Operating temperature	-10 to 35°C	
Storage temperature	-20 to 50°C	

The deep rated unit is larger than the standard unit with a diameter of 76mm and a length of 222mm (with Burton connector). The Burton 5506 series connector is standard, but other connectors are available on request.

Specifications subject to change according to a policy of continual development.

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