



# VA500 Altimeter



The Valeport Altimeter delivers a new approach to the problem of underwater positioning. State of the art signal processing offers unrivalled range and performance from a 500kHz transducer. Millimetric precision, 0.1m – 100m range, RS232/RS485/0-5V & 0-10V analogue outputs with a wide range power supply address the needs of the ROV, AUV and Hydrographic community in a compact, robust package.

The option of integrating a high accuracy pressure sensor (0.01%) as used in the MiniIPS offers an unbeatable package for your underwater positioning requirements.

OEM options are also available – please contact Valeport for details



## Sensors

### Acoustic

State of the art signal processing technology provides stable, repeatable readings while allowing the range to be extended to unrivalled distances for a 500kHz altimeter.

Type:	500 kHz broadband transducer
Range:	0.1m – 100m
Resolution:	1mm
Beam Angle:	±3°

### Pressure

The optional pressure sensor fitted to the Altimeter is a temperature compensated piezo-resistive sensor, which delivers the performance previously only available from a resonant quartz sensor at a more cost-effective price.

Type:	Temperature compensated piezo-resistive
Range:	10, 30, 100, 300 or 600 Bar
Accuracy:	±0.01% FS
Resolution:	0.001% FS

## Data Acquisition

Sampling:	Continuous or data on demand (by command/TTL)
Data Rate:	1, 2, 4Hz and continuous

## Physical

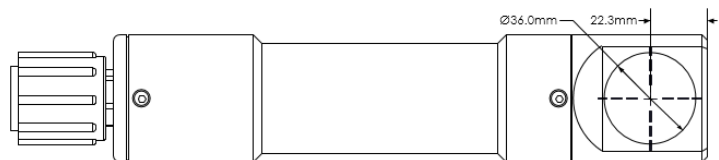
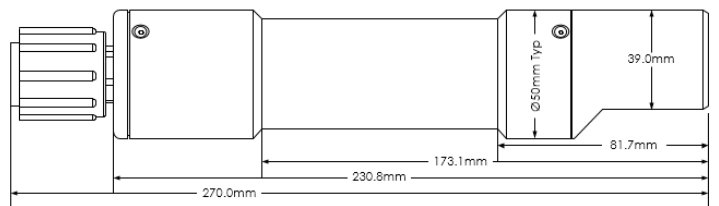
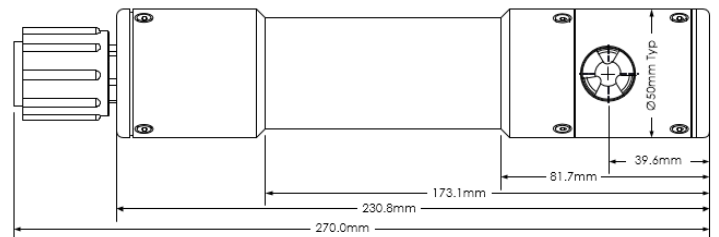
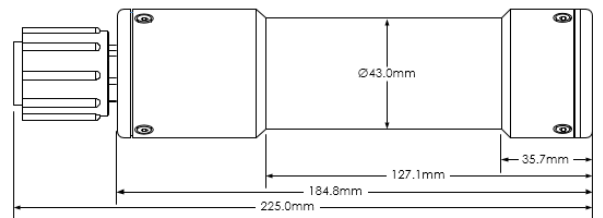
Housing:	Titanium (6000m rated)
Weight:	standard unit: <1kg in air with pressure: <1.5kg in air
Connector:	SubConn MCBH10F Titanium
Shipping:	36 x 29 x 16cm <3Kg

## Communications

Digital Output:	RS232 & RS485 fitted as standard
Protocol:	4800 to 115200 baud, (8,1,N)
Format:	User defined output formatting
Analogue output:	0-5/10V fitted as standard

## Power Requirements

Input:	9 – 28V DC
Power:	<125 mA @ 12V



## Ordering

0430003	VA500 Altimeter, in Titanium
0430004	VA500P Altimeter with 0.01% FS pressure sensor, in Titanium
0430005	VA500RA Altimeter Right Angled sensor in Titanium
0430006	VA500RAP Altimeter Right Angled sensor, in Titanium with 0.01% FS pressure sensor

All supplied with 50cm pigtail, operation manual and transit case