



# **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. Millimetre 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.



#### 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 continuous,

## **Physical**

Housing: Titanium (6000m rated)
Size: 49mm max Ø

47mm main body Ø

195mm length (including connector) 225mm length with pressure fitted

Weight: <1kg (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 out put formatting

Analogue output: 0-5/10V fitted as standard

## **Power Requirements**

Input: 9 - 28vDC Power: >125 mA @ 12V

Ordering

0430003 VA500 500kHz altimeter, titanium housed. Supplied

with 50cm pigtail interface lead, operation manual

and transit case

0430004 VA500P 500kHz altimeter with 0.01% accuracy

pressure sensor, titanium housed. Supplied with 50cm pigtail interface lead, operation manual and

transit case

0430005 VA500RA 500kHz altimeter with titanium housed

right angled sensor. Supplied with 50cm pigtail interface lead, operation manual and transit case

0430006 VA500RAP 500kHz altimeter with 0.01% accuracy

pressure sensor, titanium housed right angled sensor. Supplied with 50cm pigtail interface lead,

operation manual and transit case

Data Sheet Reference: Altimeter Version 2e, June 2013