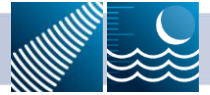




## miniTIDE Water Level Recorder



The miniTIDE is a high accuracy, low cost water level recorder, designed to operate throughout a minimum of one lunar cycle.

Combining the 0.01% pressure measurement technology utilised on Valeport's larger instruments with novel low power, high volume data logging, the miniTIDE provides a cost-effective, reliable solution that will appeal to both coastal surveyors and academia alike.

### Sensors

The miniTIDE is fitted with a novel temperature compensated piezo-resistive pressure transducer that offers levels of performance previously only available from costly resonant quartz transducers.

#### Pressure

*Range:* 10, 30, 50, 100, 300 or 600 Bar  
*Resolution:* 0.001% range  
*Accuracy:*  $\pm 0.01\%$  range

### Data Acquisition

The miniTIDE features a selection of pre-programmed sampling patterns, allowing the device to monitor (and average) pressure readings for a number of seconds at regular time intervals, e.g. 40 seconds sampling every 10 minutes. Alternatively, the instrument may be set to output data at a fixed sample rate of 1 or 2 Hz, for continuous monitoring applications.

### Communications

The instrument will operate autonomously, with setup and data extraction performed by direct communications with PC before and after deployment. It also operates in real time, with a choice of communication protocols fitted as standard and selected by pin choice on the output connector:

*RS232* Up to 200m cable, direct to serial port  
*RS485* Up to 1000m cable  
*Baud Rate:* 4800 - 460800  
*Protocol:* 8 data, 1 stop, No parity, No flow control

### Memory

The miniTIDE is fitted with a solid state non-volatile Flash memory, capable of storing over 30 million lines of data.

### Electrical

*Internal:* 1 x C cell, 1.5v alkaline or 3.6v lithium  
*External:* 9 - 28vDC  
*Power:* <200mW  
*Battery Life:* 30 days (alkaline) @ 40 secs / 10 mins  
 80 days (lithium) @ 40 secs / 10 mins  
*Connector:* Subconn MCBH10F



### Physical

*Materials:* Acetal or titanium housing (as ordered), acetal lock ring and transducer cap

*Depth Rating:* 500m (acetal)  
 6000m (titanium)  
 NB: Maximum deployment depth may be limited by transducer range

*Instrument Size:* 48mm $\varnothing$ , 270mm long (including connector)

*Deployment cage:* 110mm $\varnothing$  x 450mm long

*Weight:* 0.7kg (acetal)  
 1.4kg (titanium)

*Shipping:* 51 x 42 x 27cm, 10kg

### Software

System is supplied with DataLog Express Windows based PC software, for instrument setup, data extraction and display. DataLog Express is license free.

### Ordering

0660007-XX miniTIDE Water Level Recorder in acetal housing, supplied with switch plug, deployment frame, 3m communications lead, DataLog Express software, manual and transit case.

Note: XX denotes pressure transducer range. Select from 10, 30 or 50bar

0660008-XX miniTIDE Water Level Recorder in titanium housing, supplied with switch plug, deployment frame, 3m communications lead, DataLog Express software, manual and transit case.

Note: XX denotes pressure transducer range. Select from 10, 30, 50, 100, 300 or 600bar

Datasheet Reference: miniTIDE version 2c, June 2013

As part of our policy of continuing development, we reserve the right to alter at any time, without notice, all specifications, designs, prices and conditions of supply of all equipment

Valeport Limited, St. Peter's Quay Totnes, Devon, TQ9 5EW UK

t. +44 (0)1803 869292 f. +44 (0)1803 869293 e. sales@valeport.co.uk w. www.valeport.co.uk