TideMaster

TideMaster has been designed to provide an accurate, versatile and easily deployed tide gauge for use in short or long term survey operations with either pressure or radar sensor measurement. Optional control/display panel, Bluetooth, SD card memory and optional weather sensor provide unrivalled functionality. Low power consumption and user selectable sampling regime allow for up to a year of autonomous operation, whilst optional telemetry packages extend the capabilities for real time operations. TideMaster is compatible with a wide range of hydrographic software and tools.

Pressure Transducer option

Type:	Vented strain gauge, with stainless steel mounting bracket.
Range:	Standard 10dBar (approx 10m), with 20m cable. Other ranges and lengths available.
Accuracy:	±0.1% Full Scale.
Calibration:	Held within logging unit.
Dimensions:	18mm diameter x 80mm.

Radar Level Sensor option (see VRS-20 data sheet for full details)

Minimum Range:	0.8 m
Maximum Range:	20 m
Beam Angle:	±6°
Frequency:	25 GHz
Accuracy:	±10 mm
Precision:	1 mm
Footprint:	Radius at different ranges:

Range [M]	Radius [M]
2	0.21
5	0.53
10	1.05
20	2.10
35	3.68

Weather Sensor Options

Windsonic Ultrasonic Anemometer

Wind Speed:	0-60m/s
Wind Direction:	0-359°
Calibration:	Held within sensor.
Dimensions:	142mm x 160mm.

MetPak II ™ Weather Station

Wind Speed:	0-60m/s
Wind Direction:	0-359°
Air Temperature:	-35ºC to +70ºC
Relative Humidity:	0 – 100% RH
Barometric Press:	600 – 1100hPa/mbar
Dew Point:	As per temperature range
Calibration:	Held within sensor.
Dimensions:	142mm x 274mm.

Logging Unit

Housing:	Injection moulded housing rated to IP67, with injection moulded mounting bracket.
Display:	Optional control/display (128x64 OLED) panel for system configuration and data display.
Power:	4 "C" cells within separate sealed compartment. Tool-less battery change. Alkaline cells provide power for up to a year of autonomous sampling
Memory:	512 MB SD card memory allowing for effectively unlimited data storage.
Sampling:	Raw data sampled at 8Hz, mean and standard deviation of burst samples is logged. 5 pre-programmed burst modes + custom sampling mode. Continuous Sampling Mode (1Hz)
Switching:	Power switch on unit.
Resolution:	Data logged to 1mm resolution.
Comms:	Integral Bluetooth for short range wireless communication RS232/RS485 for cabled communication
Dimensions:	Housing 52 mm x 144.5 mm x 197 mm. Bracket 35 mm x 210 mm x 159 mm. Mounted 61.5mm x 210 mm x 197 mm
Weight:	1.1 kg (approx) including batteries.

Radio Telemetry (see UHF telemetry data sheet for full details)

Frequency:	Selectable frequency UHF synthesized radio transceiver, (458.5 - 458.9 MHz).

GPRS Telemetry (see GPRS telemetry data sheet for full details)

Software

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

Ordering

0741001	TideMaster portable water level recorder. c/w wall mounting bracket and electronics/logger (**with display**) in rugged injection moulded housing with batteries. Supplied with Windows based TideMaster Express software and operating manual. (*Transducer option below required*)
0741002	TideMaster portable water level recorder c/w wall mounting bracket, electronics/logger (**without display**) in rugged injection moulded housing with batteries. Supplied with Windows based TideMaster Express software and operating manual. (*Transducer option below required*)
0741PT1D20	1 bar transducer c/w 20m cable and connector.
0745001	VRS-20 Radar level sensor with mounting bracket, 5m power/data cable, junction box, software, manual and transit box

Datasheet Reference: TideMaster version 2B, Feb 2013

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