



# 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 (~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

### 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 TM Weather Station

Wind Speed:	0-60m/s
Wind Direction:	0-359°
Air Temperature:	-35°C to +70°C
Relative Humidity:	0 – 100% RH
Barometric Press:	600 – 1100 hPa/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:	<ul style="list-style-type: none"> <li>4 "C" cells within separate sealed compartment.</li> <li>Tool-less battery change.</li> <li>Alkaline cells provide power for up to a year of autonomous sampling</li> </ul>



Memory:	512 MB SD card memory (effectively unlimited data storage)
Sampling:	<ul style="list-style-type: none"> <li>Raw data sampled at 8Hz (mean and SD of burst samples is logged)</li> <li>5 pre-programmed burst modes</li> <li>Custom sampling mode.</li> <li>Continuous Sampling Mode (1Hz)</li> </ul>
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 including batteries.

### Telemetry

Radio	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. with display
0741002	TideMaster portable water level recorder without display
Notes	Systems supplied with <ul style="list-style-type: none"> <li>Electronics/Logger in rugged injection moulded housing</li> <li>Wall mounting bracket</li> <li>Batteries</li> <li>Windows TideMaster Express software</li> <li>Operating Manual</li> </ul> A Transducer option below is required
0741PT1D20	1 bar transducer includes 20m cable and connector
0745001	VRS-20 Radar level sensor with: Mounting bracket, 5m power/data cable Junction box, software, manual and transit box

### Options

0745EA XX	VRS-20 J Box to TideMaster interface lead XX is length in metres – choose: 5, 10, 20m
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