



# 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. Data display panel, wireless technology, SD card memory and weather sensor interface provide unrivalled functionality. Low power consumption and user selectable sampling regime allow for up to a year of autonomous operation.

A number of Telemetry packages are available to extend the system's capabilities to real time operations. TideMaster is compatible with a wide range of hydrographic software packages and tools.

Please also see TideStation, a self-contained Tidal Observation solution packaged to optimise performance, be flexible in its configuration and simple to install and maintain.

## DATA SHEET

### Product Details



TIDE GAUGES



MULTI-PARAMETER CTD



TIDEMASTER EXPRESS



WIRELESS

### Pressure Transducer Option

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

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

<b>Range</b>	minimum: 0.8 m   maximum: 20m
<b>Beam Angle</b>	±6°
<b>Frequency</b>	25 GHz
<b>Accuracy</b>	±10 mm
<b>Precision</b>	1 mm

<b>Range</b> (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

<b>Wind Speed</b>	0-60m/s
<b>Wind Direction</b>	0-359°
<b>Calibration</b>	Held within sensor

### MetPak II TM Weather Station

<b>Wind Speed</b>	0-60m/s
<b>Wind Direction</b>	0-359°
<b>Air Temperature</b>	-35°C - +70°C
<b>Relative Humidity</b>	0 - 100% RH
<b>Barometric Press</b>	600 - 1100 hPa/mbar
<b>Dew Point</b>	As per temperature range
<b>Calibration</b>	Held within sensor

### miniCT Sensor

<b>Conductivity</b>	
<b>Type</b>	Valeport inductive cell
<b>Range</b>	0 - 80mS/cm
<b>Accuracy</b>	±0.01mS/cm
<b>Resolution</b>	0.001mS/cm

### Temperature

<b>Type</b>	Titanium housed PRT
<b>Range</b>	-5 - +35°C
<b>Accuracy</b>	±0.01°C
<b>Resolution</b>	0.001°C

### Logging Unit

<b>Housing &amp; Bracket</b>	Injection moulded housing rated to IP67
<b>Power</b>	· 4 x C cell batteries within separate sealed compartment · Tool-less battery change · Alkaline cells provide power for up to a year of autonomous sampling
<b>Memory</b>	512 MB SD card memory (effectively unlimited data storage)
<b>Sampling</b>	· Raw data sampled at 8Hz (mean and SD of burst samples is logged) · 5 pre-programmed burst modes · Custom sampling mode. · Continuous Sampling Mode (1Hz)
<b>Switching</b>	Power switch on unit
<b>Resolution</b>	Data logged to 1mm resolution
<b>Comms</b>	Integral wireless module for short range wireless communication  RS232/RS485 for cabled communication

<b>Dimensions</b>	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
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<b>Weight</b>	~1.1 kg including batteries
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### Telemetry

<b>Radio</b>	see UHF telemetry data sheet for full details
<b>Frequency</b>	Selectable frequency UHF synthesized radio transceiver, (403...473MHz)

### Software

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

### Ordering

<b>0741001</b>	TideMaster portable water level recorder
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<b>Notes</b>	Systems supplied with · Electronics/Logger in rugged injection moulded housing · Wall mounting bracket · Batteries · Windows TideMaster Express software · Operating Manual
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A Transducer option below is required

<b>0741PTID20</b>	1 bar transducer includes 20m cable and connector, other cable lengths are available up to 100m maximum
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<b>0745001</b>	VRS-20 Radar level sensor with: Mounting bracket, 5m power/data cable Junction box, software, manual and transit box
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### Options

<b>0745EA XX</b>	VRS-20 Junction Box to TideMaster interface lead XX is length in metres - choose: 5, 10 , 20m
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## Datasheet Reference: TideMaster | July 2023

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