



# TideStation



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

TideStation has TideMaster at its core - Valeport's industry leading Tide Gauge system. Offering Pressure, Radar and hybrid tidal observation techniques coupled with interfaces to other meteorological and 3<sup>rd</sup> party systems. All data can be recorded locally and broadcast to a central command and control point as required.

Within the TideStation enclosure you will find all required ancillary infrastructure to maintain power to the Tide and Met equipment interfaced and your chosen communications systems.

### Tidal Observation:

#### 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% of full scale.

#### 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

### 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.

To interface other sensor packages please contact Valeport for details



TideStation with VRS-20, Pressure and METPak with Solar Charging

### Enclosure Configuration

- IP67 cabinet options for Stevenson screen style format
- Power supply: Could be locally sourced
  - 12V / Regulator (for solar/wind power generation) / UPS
  - Optional separate cabinet for batteries, UPS, mains etc.
- Fittings for:
  - TideMaster
  - Dual telemetry options (UHF/GPRS/Iridium/ipBuffer(1 and 4 port)
- Pressure relief valve



The TideStation Junction Box and wiring loom is fitted for ease of set up and the flexibility to reconfigure/expand the system at a later time.

### There are 2 standard TideStation variants

Option 1	Single Port ipBuffer TideStation Junction Box optional Satel UHF radio
configuration example:	TideMaster, VRS-20 and Pressure Sensor
Option 2	4 port ipBuffer TideStation Junction Box optional Satel UHF radio
configuration example:	TideMaster, VRS-20, Pressure Sensor, miniCT, METPak II, plus other instruments

