TideStation Portable is a self-contained Tidal Observation solution packaged to allow ease of installation and transportation but with a similar functional configuration to the larger TideStation. TideStation Portable has TideMaster at its core - Valeport’s industry leading Tide Gauge system offering Pressure or Radar tidal observation techniques. It can be interfaced to other Valeport and meteorological sensors. All data can be recorded locally and broadcast to a central command and control point as required.

Within the TideStation Portable enclosure you will find all required ancillary infrastructure to maintain power to the Tide or Meteorological 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

**Battery Life Indication** (fully charged 24Ah battery)

- 1x Pressure Transducer observation per minute each data set telemetered immediately
  - UHF radio ~300 days
  - GPRS ip.buffer ~14 days
- 1x RADAR observation per minute each data set telemetered immediately
  - UHF radio ~35 days
  - GPRS ip.buffer ~7 days

**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 Pressure:** 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.

**Compliance**

- **Directive:** 2014/53/EU (RED)
- **2011/65/EU (RoHS)

**Enclosure Configuration**

Adapted Peli 1560 - transportable hard case which has a retractive extension handle and strong polyurethane wheels.

- 560 x 455 x 265 mm
- corrosion-proof, crush-proof, IP67

**Fittings for:**

- TideMaster
- 1 of 2 telemetry options:
  - Radio: SATEL - SATELLINE-M3_TR1
  - GPRS: 1 port Scannex ip.buffer
- Battery isolation switch
- Lead Acid battery module (24Ahr)
- 12V Regulator (for solar power charging)
- Pressure relief valve

Operational weight does not exceed 25kg

**TideStation Portable Variants**

- **0741022-UHF**
  - Wheeled hard case, fixtures and wiring for:
    - TideMaster tide gauge
    - Associated sensor (vented pressure sensor or VSR20 radar)
    - UHF transmitter (403-470MHz)
    - 24 Ah rechargeable lead acid battery & solar charger

- **0741022-GPRS**
  - Wheeled hard case, fixtures and wiring for:
    - TideMaster tide gauge
    - Associated sensor (vented pressure sensor or VSR20 radar)
    - Scannex ip.buffer - single port
    - 24 Ah rechargeable lead acid battery & solar charger

**Notes**

- the 0741022-UHF/GPRS does not include a TideMaster, telemetry options, battery or solar panels which are ordered separately
- data upload to user's own or 3rd party FTP site / data management system

**Options**

- **0741EA54** TideMaster display/logger module with mounting bracket
- **074PTD20/50** 1bar transducer | specify 20 or 50 m cable
- **0745001** VRS-20 Radar level sensor with mounting bracket cable length to be specified
- **04000581** Scannex Single port buffer – ip.1 12.g.N4X
- **04000583** Satel UHF Telemetry Module - TideStation
- **04000569** Satel UHF Telemetry Module - Base Station
- **0741EA27** MetPak Weather Station: Wind Speed & Direction, Temperature, Humidity, Barometric Pressure | cable length to be specified
- **0741EA25** WindSonic: Wind Speed and Direction | cable length to be specified
- **BT-5V-24** 5V, 24Ah valve regulated lead acid battery
- **0740MS43/44** 12V, 5W Solar PV module / mounting frame