

TGR-1050 HT

For long term tide monitoring

HYDROTIDE []

Recording Tide Gauge

Also sold as the HydroTide Mk II

The TGR-1050 is a purpose designed recording tide gauge for long term monitoring of tidal activity in unattended locations. The instrument may store up to 2,400,000 readings on 8MB memory and has battery capacity to run unattended for five years.

It may be connected by direct RS232 or RS485 line, VHF/UHF radio telemetry or CDMA/GSM modem to the office or base station. It may also be programmed to operate autonomously, and it is able to run in this way for up to five years on internal batteries.

Tide measurement is achieved by averaging pressure data, sampled at a rate of 4Hz. The sample period and the length of the avaeraging burst are programmable

Features:

- 4Hz burst sampling
- Fully Programmable
- 8MB Memory (2,400,000 samples)
- High-speed download
- Telemetry ready
- NIST Traceable calibration

Calibration constants are stored in the logger and recalibration is possible by simply entering the new constants that are provided with the Druck transducer. Water density may be entered, and depth is always compensated for atmospheric pressure by a vented cable to the sensor

The **RBR TGR-1050 HT** is housed within a rugged extruded aluminium housing rated to IP 65.

Specification

Power: QTY 4 C Size Alkaline batteries
External power: 12V 5mA (sample) 20µA sleep
Communications: RS-232/485 cable; or telemetry
Download Speed: Cable: ~115,000 samples/minute

Clock Accuracy: \pm 32 seconds/year Size: \pm 365mm x 38mm

Memory: 8Mbyte Flash (2,400,000 samples)

Size: 148 x 75 x 250mm

Weight: 1.5 kg

Calibration: NIST traceable standards

Depth

Sensor: Druck series PDCR 1830 Range: 10/15/20/35/70/100 metres

Accuracy: $\pm 0.1\%$ full scale (optionally $\pm 0.06\%$)

Resolution: <0.001% full scale

- User selected datum
- Correction for water density may be entered
- Automatic compensation for atmospheric pressure

Software

The TGR-1050 HT uses integrated RBR Windows software. Features include display of battery volts, realtime mode, entry of calibration constants, two point calibration and interactive setup complete with estimates of battery life and memory capacity.

