

Hydro-Tide & Wave Recorders

Accessible real-time reporting

RBR surface mounted atmospherically compensated tide or tide and wave loggers offer flexible measurement schedules, tidal averaging, wave bursting, and remote real time output.

Features

- Wave burst ability
- Up to 4Hz sampling
- Flexible tide averaging
- 5 year battery operating life
- Atmospherically compensated



The tide and wave recorders are available in the following standard configurations:

TGR-1050HT compensated pressure recorder with tidal averaging

TWR-2050HT ambient temperature recorder with intermittent wave burst and tidal averaging

Land mounted tide and wave recorders provide the ease and flexibility to establish the best sampling regime for your measurements. Pressure readings can be averaged over time to provide accurate tide level readings. The wave recorder bursts intermittently to measure pressure at rates up to 4Hz for 4096 samples. Ruskin performs wave analysis on each burst, to provide information about the wave composition (e.g. wave energy, $H_{1/3}$, $T_{1/3}$, T_{ave} and H_{ave}). Wave or tide data exports to Matlab®, Excel®, or text files make post processing with your own algorithms easier.



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Specifications

Physical

Power:	8 1.5V C cells or 12V DC external power
Communication:	RS-232/485 or modems
Length:	255mm
Width:	205mm
Depth:	120mm
Storage:	~2M measurements
Weight:	<5kg excluding sensor and cable
Pressure sensor:	Druck® PDCR 1830
Clock accuracy:	±60 seconds/year

Tide

Averaging rate:	1s to 24hr
Averaging duration:	1s to 24hr
Sampling rate:	1s to 24hr

Waves

Burst rate:	1, 2, or 4Hz
Samples per burst:	512, 1024, 2046, or 4096

Pressure

Range:	10 / 20 / 50m (dBar)
Accuracy:	±0.05% full scale
Resolution:	<0.001% full scale
Time Constant:	<10ms
Drift:	~0.1%/year

Ambient

Range:	-5°C to 35°C
Accuracy:	±0.002°
Resolution:	<0.00005°C
Time constant:	~1s; or ~0.1s (fast)
Drift:	~0.002°C/year

Standard Range:

- PDCR1830 10dBar 0-15psig 15m Cable Length
- PDCR1830 10dBar 0-15psig 25m Cable Length
- PDCR1830 20dBar 0-30psig 25m Cable Length
- Other ranges are special order

