Small Tide and Wave Recorders

Measure more, deploy longer, download faster

The RBR*solo* is our most compact, lightweight, and versatile single channel logger. RBR*solo* D|tide and RBR*solo* D|wave loggers offer flexible measurement schedules, long wave burst samples, expanded memory and power for extended deployments and faster download of large data files.

Features

- 20M measurements and 16Hz sampling
- Flexible tide averaging
- Fast USB download speed
- Low frequency wave detection
- Intermittent and continuous burst ability
- Cabled real-time variant |rt

Configurations:

RBR*solo* D|tide   pressure recorder with tidal averaging

RBR*solo* D|wave   pressure recorder with intermittent and continuous wave burst and tidal averaging

The new single tide and wave recorders provide the ease and flexibility to establish the best sampling regime for your measurements. Both loggers take averages of the pressure readings over longer periods of time and at rates up to 16Hz to provide accurate tide level readings. The wave recorder bursts continuously or intermittently making it easier to measure for example boat wakes. The large number of burst samples makes low frequency waves easier to detect. Tide and/or wave data exports to Matlab®, Excel®, or text files make post processing with your own algorithms easier. Ruskin performs wave analysis, to provide basic information about the wave composition (e.g. wave energy, $H_{1/3}$, $T_{1/3}$, T_{ave} and H_{ave}). Like all RBR products, the RBR wave and tide loggers are designed to be easy to configure and easy to use.

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Specifications

Physical

Power:	One 3.6V LiSOCl$_2$ AA battery
Communication:	True USB
Download speed:	USB 2.0
Storage:	~20M measurements
Clock accuracy:	± 60 seconds/year
Length:	210mm
Diameter:	25.4mm
Weight:	125g in air

RBR*solo* D|tide

Sampling rate:	24hr to 1s and 2, 4, 8 or 16Hz
Averaging duration:	1s to 24h
Averaging interval:	1s to 24h

RBR*solo* D|wave*

Samping rate:	24hr to 1s and 2, 4, 8 or 16Hz
Burst (samples):	512 to 32768 (powers of 2)
Burst interval:	1s to 24hr

*Tide values are the average of the burst readings

Pressure

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

|rt real-time variant

External Power:	Requires 6-18V DC ~2mA
Memory:	No on board memory
Data:	RS-232 polled or autonomous streaming
Baud Rate:	1200 to 115k
Connector:	MCBH-6MP