

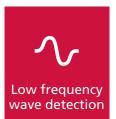
RBRsolo³ D, RBRduet³ T.D, | tide and | wave



The RBRsolo³ D and RBRduet³ T.D, |tide and |wave, are compact and lightweight instruments. By taking averages of pressure readings over extended periods of time, they provide accurate tide level data. Intermittent and continuous wave bursts allow for obtaining wave characteristics (wave energy, $H_{1/3}$, $T_{1/3}$, T_{ave} , H_{ave}) and detecting infrequent phenomena, like boat wakes.

FEATURES













The following configurations are available:

▶ RBR*solo³* D|tide16

pressure, tidal averaging

▶ RBRsolo³ D|wave16

pressure, tidal averaging, intermittent and continuous wave burst

▶ RBRduet³ T.D|tide16

temperature and pressure, tidal averaging

▶ RBR*duet³* T.D|wave16

temperature and pressure, tidal averaging, intermittent and continuous wave burst

The RBRsolo³ D and RBRduet³ T.D, | tide and | wave, facilitate optimal measurement schedules. Large storage capacity and reliable battery power facilitate long deployments with higher sampling rates. Downloads are quick with USB-C. A dedicated holder makes it simple to replace desiccant before each deployment. The calibration coefficients are stored with the instrument, and only one software tool, Ruskin, is required to operate it. Datasets can be read directly in Matlab, or exported to Excel, OceanDataView®, or text files.



RBRsolo³ D, RBRduet³ T.D, | tide and | wave

SMALL TIDE AND WAVE LOGGERS

MEASURE MORE, DEPLOY LONGER, DOWNLOAD FASTER

Specifications

Physical

Storage ~65 million samples* (RBRsolo³ D)

~45 million samples* (RBRduet³ T.D)

Power Any AA battery

Communication USB-C

Clock drift ±60 seconds per year

Diameter 25.4mm

Length 211mm (RBRsolo³ D) 266mm (RBRduet³ T.D.)

Weight <150g in air, <30g in water

Max depth rating 1000m

Pressure

Range* 20 / 50 / 100 / 200 / 500 / 1000dbar Initial accuracy ±0.05% full scale <0.001% full scale

Typical stability ±0.05% full scale / year

Time constant <10ms

Temperature

 $\begin{array}{lll} \mbox{Range*} & -5\mbox{°C to } 35\mbox{°C} \\ \mbox{Initial accuracy} & \pm 0.002\mbox{°C} \\ \mbox{Resolution} & <0.0005\mbox{°C} \\ \mbox{Typical stability} & \pm 0.002\mbox{°C} \ / \mbox{ year} \\ \mbox{Time constant} & <0.1\mbox{s [fast, <1s standard]} \end{array}$

Deployment configurations

RBRsolo³ D|tide16, RBRduet³ T.D|tide16

Sampling rate 24h to 2Hz (continuous mode) 1, 2, 4, 8, or 16Hz (tide mode)

Averaging duration 1s to 24h Averaging interval 1s to 24h

RBRsolo³ D|wave16, RBRduet³ T.D|wave16

Sampling rate 24h to 1s and 2, 4, 8, or 16Hz (continuous, tide, and wave modes)

Burst (samples) 512 to 32768 (powers of 2)

Burst interval 1s to 24hr

Realtime variants

Cabled realtime variants of RBRsolo³ D|tide and RBRduet³ T.D |tide are available as the RBRcoda³.



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^{*}A sample may include multiple readings.

^{*}Recommended depth for wave measurements is less than 50m.

^{*} A wider temperature range is available upon request. Contact RBR for more information.