RBR
MEASURE THE BLUE PLANET

rbr-global.com

RBR*duraturo*$^4$

# EXPANDED LOGGER

MEASURE MORE,
DEPLOY LONGER,
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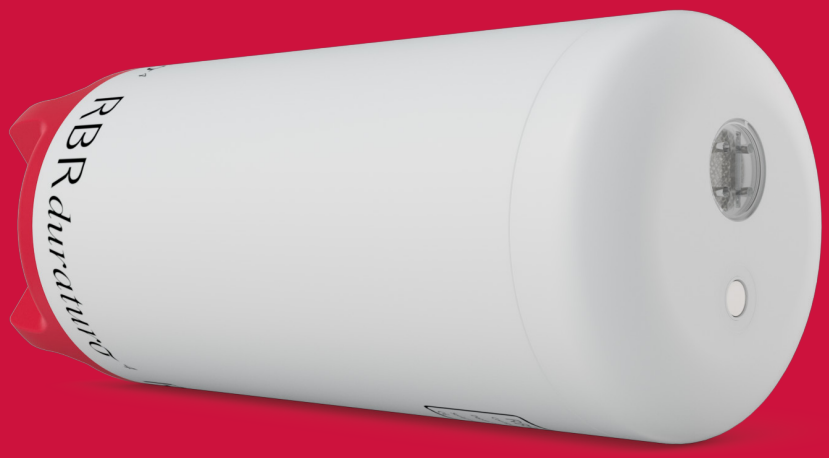


The RBR*duraturo*$^4$ delivers high-accuracy measurements with flexible sampling schedules and a significantly extended battery life. Sampling rates of up to 32Hz support data-intensive acquisition of raw temperature and/or pressure. By averaging pressure measurements over extended intervals, the instrument provides precise tide-level data.Configurable intermittent and continuous wave-burst sampling enables the characterization of wave conditions—including wave energy,, $H_{1/3}$, $T_{1/3}$, $T_{ave}$, $H_{ave}$ to support the detection of infrequent events such as vessel wakes.

## FEATURES

- Flexible tide averaging
- Low frequency wave detection
- Twist activation
- Infinite memory*
- Up to 32Hz sampling
- Extended battery capacity

*not really, but we stopped counting at billions of samples.

## Available configurations

- RBR*duraturo*$^4$ T.D — temperature and pressure; up to 2Hz continuous sampling
- RBR*duraturo*$^4$ T.D|fast — temperature and pressure; up to 32Hz continuous sampling
- RBR*duraturo*$^4$ T.D|tide32 — temperature and pressure; continuous sampling or tidal averaging
- RBR*duraturo*$^4$ T.D|wave32 — temperature and pressure; continuous sampling, tidal averaging, or wave burst

The RBR*duraturo*$^4$, 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.

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## Specifications

### Physical

| | |
|---|---|
| Storage | Infinite memory* |
| Power | 6 D cells |
| Communication | USB-C |
| Clock drift | ±60 seconds/year |
| Housing | Plastic |
| Diameter | 100mm |
| Length | 246mm |
| Weight | 2.4kg |
| Depth rating | 300dbar |
| Sampling rate | 2Hz; options up to 32Hz |
| Operating temperature | -5° to 35° |
| Storage temperature | -20° to 50° |

*not really, but we stopped counting at billions of samples

### Pressure

| | |
|---|---|
| Range[1] | 30 / 100 / 300dbar |
| Initial accuracy[2] | ±0.05% full scale |
| Resolution | <0.001% full scale |
| Typical stability | ±0.01% full scale per year |
| Time constant | <10ms |

[1]Recommended depth for wave measurements is less than 100m.
[2]±0.01% full scale available is available upon request.

### Temperature

| | |
|---|---|
| Range* | -5°C to 35°C |
| Initial accuracy | ±0.002°C |
| Resolution | <0.00005°C |
| Typical stability | ±0.002°C / year |
| Time constant | <0.1s \|fast, <1s standard, <60s \|slow |

*A wider temperature range is available upon request.

## Deployment configurations

### RBR*duraturo*⁴ T.D|tide32

| | |
|---|---|
| Sampling rate | 24h to 2Hz (continuous mode)<br>1, 2, 4, 8, 16 or 32Hz (tide mode) |
| Averaging duration | 1s to 24h |
| Averaging interval | 1s to 24h |

### RBR*duraturo*⁴ T.D|wave32

| | |
|---|---|
| Sampling rate | 24h to 1s and 2, 4, 8, 16 or 32Hz continuous, tide, and wave modes) |
| Burst (samples) | 512 to 32768 (powers of 2) |
| Burst interval | 1s to 24hr |


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