Your Path Through the Sea

**RBRduo** 

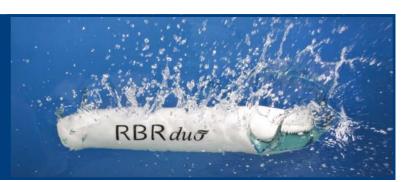
# Two Channel Recorder

## Measure more, deploy longer, download faster

RBR*duo* dual channel loggers offer flexible measurement schedules, sampling up to 1Hz, large memory, extra power for extended deployments, and fast USB download for large data files. Optional features: sample averaging and up to 6Hz sampling.

#### **Features**

- Long deployment
- 30M readings
- Fast USB download speed
- Optional averaging and fast sampling



The RBRduo is a dual channel logger available in the following standard configurations:

RBRduo T.D measures temperature and depth

RBRduo T.DO measures temperature and dissolved oxygen

RBRduo C.T measures conductivity and temperature (salinity)

For tide and wave recorders please see the Tide and Wave Data Sheet.

Additionally the RBRduo can be fitted with any two sensors/functions\*:

Temperature

Tide

Turbidity

• pH

• Depth (Pressure)

Wave

Fluorescence

ORP

Conductivity

Dissolved O<sub>2</sub>

T-string

PAR

The RBRduo makes it easy to configure the optimum sampling regime for your measurements. The large data storage capacity and fast download ability facilitate long deployments with higher sampling rates. The RBRduo is available in a standard body or extended body with more power for long deployments. Almost every sensor from RBR can be interfaced to the RBRduo. Dataset export to Matlab®, Excel®, or text files make post processing with your own algorithms easy.

<sup>\*</sup> Contact RBR for sensor availability



Your Path Through the Sea

# Two Channel Recorder

## Measure more, deploy longer, download faster

## Specifications

#### **Physical**

Power: 8 or 16 3V CR123A cells Communication: True USB or RS-232/485

~30M readings Storage: Clock accuracy: ± 60 seconds/year Depth rating: Up to 10,000m

Size: ~260 or 395mm x Ø63.5mm

without sensors

Weight: Varies per sensor configuration

Sampling period: 1s to 24h

Sampling rate: 1, 2, 3, 4, 5 or 6Hz

Averaging rate: >1s, 1, 2, 3, 4, 5 or 6Hz

1s to 24h Avg duration:

Housing: Plastic or titanium

#### Pressure (Depth)

Range: 20 / 50 / 100 / 200 / 500 / 1000

/2000/4000/6000/10000m

(dbar)

±0.05% full scale Accuracy: Resolution: <0.001% full scale

Time constant: < 0.01s

Typical stability: ~0.05%/year - typical

#### **Temperature**

Range: -5°C to 35°C Accuracy: ±0.002° Resolution: <0.00005°C

Time constant: ~1s (standard) or ~0.1s (optional)

~0.002°C/year - typical

### Typical stability:

### Conductivity

Range: 0 - 85mS/cmInitial accuracy: ±0.003 mS/cm Typical stability: 0.010 mS/cm/year Resolution: ~0.001 mS/cm

Time Constant: Set by flow through cell. Cell

length is 40mm.

#### Dissolved Oxygen (Oxyguard®)

0 to 600% Range:

±2% O, saturation (5°C to 25°C) Accuracy:

Resolution: 0.5% of saturation

~10s, 90% step change @ 20°C Response time:

