RBR

MEASURE THE BLUE PLANET

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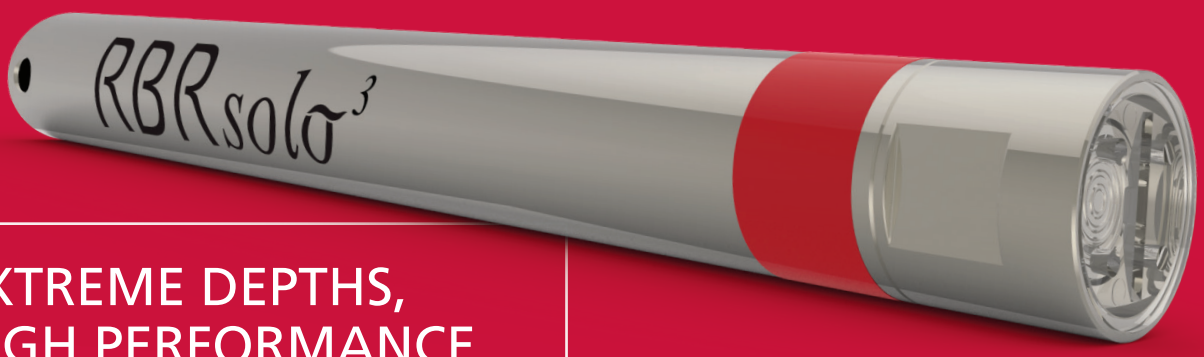
RBR*solo*³|deep, RBR*duet*³|deep

ABYSSAL LOGGERS



EXTREME DEPTHS, HIGH PERFORMANCE

The RBR*solo*³ T|deep, RBR*solo*³ D|deep, and RBR*duet*³ T.D|deep in titanium housing are small but highly durable. Deployable to the bottom of the Marianas Trench, they provide accurate and stable measurements in the most challenging environments. Low power consumption allows for extended schedules.

FEATURES

- Depths up to 10000m
- Any AA battery
- Long deployments
- Up to 32Hz sampling
- USB-C download
- Cabled RBR*coda*³ variant available

The following configurations are available:

RBR*solo*³ T|deep	temperature; up to 2Hz sampling
RBR*solo*³ T|fast|deep	temperature; up to 8Hz, 16Hz, or 32Hz sampling
RBR*solo*³ D|deep	pressure; up to 2Hz sampling
RBR*solo*³ D|fast|deep	pressure; up to 8Hz, 16Hz, or 32Hz sampling
RBR*duet*³ T.D|deep	temperature and pressure; up to 2Hz sampling
RBR*duet*³ T.D|fast|deep	temperature and pressure; up to 8Hz, 16Hz, or 32Hz sampling

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EXTREME DEPTHS, HIGH PERFORMANCE

The RBR*solo*³ T|deep, RBR*solo*³ D|deep, and RBR*duet*³ T.D|deep are designed to endure harsh conditions. Titanium housing resists all forms of marine corrosion. Specialized circuitry ensures exceptional signal-to-noise ratio. Large data storage capacity and reliable battery power facilitate long deployments with higher sampling rates. Downloads are quick with USB-C. A dedicated desiccant 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.

Specifications

Physical

Storage	~65 million samples (RBR*solo*³ D) ~130 million samples (RBR*solo*³ T) ~45 million samples (RBR*duet*³ T.D)
Power	Any AA cell
Communication	USB-C
Clock drift	±60 seconds per year
Diameter	25mm
Length	230mm (RBRsolo³ D|deep) 225mm (RBRsolo³ T|slow|deep) 240mm (RBRsolo³ T|deep) 266mm (RBRduet³ T.D|deep)
Weight	<400g in air, <70g in water
Sampling rates	Up to 32Hz

Temperature

Range*	-5°C to 35°C
Initial accuracy	±0.002°C
Resolution	<0.00005°C
Typical stability	±0.002°C per year
Time constant	<0.1s (|fast) <1s (standard) <15s (|slow, embedded thermistor)

Pressure

Range	1000/2000/4000/6000/10000dbar
Initial accuracy	±0.05% full scale
Resolution	<0.001% full scale
Typical stability	±0.05% full scale per year
Time constant	<10ms

Deployment estimates

RBR*solo*³ T|fast|deep

Speed	Time	# samples
2Hz	140 days	24M
32Hz	48 days	130M

RBR*solo*³ D|fast|deep

Speed	Time	# samples
2Hz	58 days	10M
32Hz	24 days	65M

RBR*duet*³ T.D|fast|deep

Speed	Time	# samples
2Hz	53 days	9M
32Hz	16 days	44M

Realtime variants

Cabled realtime variants are available as the RBR*coda*³.

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