RBR
MEASURE THE BLUE PLANET

rbr-global.com

RBR*duet*^{4} T.D

SMALL TWO-SENSOR LOGGER



COMPACT, ACCURATE, DEPENDABLE

The RBR*duet*^{4} T.D is a compact, lightweight temperature and pressure logger designed for high-precision oceanographic measurements in demanding environments. It combines exceptional accuracy and resolution with extremely low power consumption, enabling multi-year deployments using any standard AA battery chemistry. Engineered for durability in harsh marine conditions, the RBR*duet*^{4} T.D delivers reliable, long-term performance across a wide range of oceanographic applications.

FEATURES

- Long deployments
- Compact and lightweight
- One AA battery
- Up to 32Hz sampling
- USB-C download
- Infinite memory*

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

Available configurations

RBR*duet*^{4} T.D	temperature and pressure; up to 2Hz continuous sampling
RBR*duet*^{4} T.D|fast32	temperature and pressure; up to 32Hz continuous sampling
RBR*duet*^{4} T.D|tide32	temperature and pressure; continuous sampling or tidal averaging
RBR*duet*^{4} T.D|wave32	temperature and pressure; continuous sampling, tidal averaging, or wave burst

Variants

RBR*duet*^{4} T.D|deep	temperature and pressure; depths up to 10000m
RBR*duet*^{4} T.D|2x	temperature and pressure; double the autonomy of RBR*duet*^{4} T.D

SMALL TWO-SENSOR LOGGER

COMPACT, ACCURATE, DEPENDABLE

The RBR*duet*⁴ T.D is built for long, accurate field use with low effort. Delivering high accuracy in a compact, field-ready form factor, it combines lab-grade performance with deployment simplicity. USB-C enables fast configuration and data download, while support for standard AA battery chemistry provides global power options. Paired with Ruskin software for intuitive setup and retrieval, the RBR*duet*⁴ T.D is designed for exceptionally long deployments, using RBR's latest ultra-low-power electronics to maximise endurance without compromising precision. Data are stored in RSK format and are accessible using RBR's open Python and MATLAB toolboxes, enabling direct integration into workflows and automated processing pipelines. Ruskin provides Excel exports and publication-ready charts in PNG and PDF formats, ensuring straightforward reporting, analysis, and archiving.

Specifications

Physical

Storage	Infinite memory[1]	
Power	Any AA cell(s), any chemistry	
Communication	USB-C	
Clock drift	±60 seconds / year	
Depth rating[2]	up to 1700m (plastic), up to 10000m (Ti)	
Diameter	34mm (plastic), 37mm (Ti)	
Length	**1x cell**	**2x cell**
plastic	274mm	340mm
Ti	278mm	348mm
Weight		
plastic	170g	205g
Ti	390g	485g

[1] Not really, but we stopped counting at billions of samples.
[2] Actual depth rating is determined by the pressure sensor.

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

* A wider temperature range is available upon request.

Pressure

Range*	
plastic	20 / 100 / 300 / 1000dbar
Ti	1000 / 2000 / 6000 / 10000dbar
Accuracy	±0.01% full scale
Resolution	<0.001% full scale
Typical stability	±0.01% full scale / year
Time constant	<10ms

* Recommended pressure ranges for wave measurements are 20 and 100dbar.

Example deployment estimates

RBR*duet*⁴ T.D

Sampling rates	24h to 1s, and 2Hz		
Autonomy	Speed	Time	# samples
1x cell	5s	713 days	12.3 million
	2Hz	99 days	17.1 million
2x cell	5s	3.9 years	26.4 million
	2Hz	199 days	34.3 million

RBR*duet*⁴ T.D | fast32

Sampling rates	24h to 1s, and 2Hz, 4Hz, 8Hz, 16Hz, 24Hz, or 32Hz		
Autonomy	Speed	Time	# samples
1x cell	32Hz	14 days	39 million
2x cell	32Hz	28 days	78 million

Deep variant

Explore up to 10km deep with RBR*duet*⁴ T.D|deep

2x variant

Double autonomy with RBR*duet*⁴ T.D|2x



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