

SMALL PRESSURE LOGGER



COMPACT,
ACCURATE,
DEPENDABLE

The RBRsolo⁴ D is a compact, lightweight 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 RBRsolo⁴ D delivers reliable, long-term performance across a wide range of oceanographic applications.

FEATURES

 <p>Long deployments</p>	 <p>Compact and lightweight</p>	 <p>One AA battery</p>	 <p>Up to 32Hz sampling</p>	 <p>USB-C download</p>	 <p>Infinite memory*</p>
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*not really, but we stopped counting at billions of samples.

Available configurations

- ▶ RBRsolo⁴ D pressure; up to 2Hz continuous sampling, depths up to 1000m
- ▶ RBRsolo⁴ D|fast pressure; up to 32Hz sampling, depths up to 1000m
- ▶ RBRsolo⁴ D|tide32 pressure; up to 32Hz bursts with tidal averaging
- ▶ RBRsolo⁴ D|wave32 pressure; up to 32Hz bursts with wave analysis

Variants

- ▶ RBRsolo⁴ D|deep pressure; depths up to 10000m
- ▶ RBRsolo⁴ D|2x pressure; double the autonomy of RBRsolo⁴ D

SMALL SINGLE-SENSOR LOGGER

COMPACT, ACCURATE, DEPENDABLE

The RBRsolo⁴ D is built for long, accurate field use with low effort. Delivering $\pm 0.05\%$ full scale 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 RBRsolo⁴ D is designed for exceptionally long deployments, using RBR's latest ultra-low-power electronics to maximize 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 per year	
Depth rating ²	up to 1700m (plastic), up to 10000m (Ti)	
Diameter	25.4mm (plastic), 25mm (Ti)	
Length	1x cell	2x cell
plastic	227mm	293mm
Ti	232mm	302mm
Weight		
plastic	140g	174g
Ti	310g	405g

¹ Not really, but we stopped counting at billions of samples.

² Actual depth rating is determined by pressure sensor.

Pressure

Range ¹	
plastic	20 / 50 / 100 / 200 / 500 / 1000dbar
Ti	1000 / 2000 / 6000 / 10000dbar
Accuracy ²	$\pm 0.05\%$ full scale
Resolution	$< 0.001\%$ full scale
Typical stability	$\pm 0.05\%$ full scale / year
Time constant	< 10 ms

¹ Recommended depth for wave measurements is less than 50m.

² $\pm 0.01\%$ full scale is available upon request.

Deployment estimates

RBRsolo⁴ D

Sampling rates	24hr to 1s, and 2Hz		
Autonomy	Speed	Time	# samples
1x cell	5s	3.2 years	12.3 million
	2Hz	244 days	42.1 million
2x cell	5s	6.4 years	26.4 million
	2Hz	488 days	85.5 million

RBRsolo⁴ D | fast32

Sampling rates	24hr to 1s, and 2Hz, 4Hz, 8Hz, 16Hz, 24Hz, or 32Hz		
Autonomy	Speed	Time	# samples
1x cell	32Hz	17 days	47.3 million
2x cell	32Hz	34 days	94.7 million

Deep variant

Explore up to 10km deep with RBRsolo⁴ D | deep

2x variant

Double autonomy with RBRsolo⁴ D | 2x



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