

# SMALL PRESSURE LOGGER



The RBRsolo<sup>3</sup> D is a compact, lightweight, and versatile single-channel instrument with a piezoresistive pressure sensor. It offers high performance, flexible measurement schedules, and long deployments. Low power consumption, large memory, and ability to endure harsh conditions make the RBRsolo<sup>3</sup> D a perfect choice for many oceanographic applications.

## **FEATURES**













## The following configurations are available:

- ► RBRsolo<sup>3</sup> D
- ► RBRsolo³ D|fast16
- ► RBRsolo³ D|fast32
- ► RBRsolo³ D|tide16
- ► RBRsolo³ D|wave16

pressure, up to 2Hz continuous sampling pressure, up to 16Hz continuous sampling pressure, up to 32Hz continuous sampling pressure, up to 16Hz bursts with tidal averaging pressure, up to 16Hz bursts with wave analysis

## Deep variant:

▶ RBRsolo³ D | deep





## SMALL PRESSURE LOGGER

## COMPACT, ACCURATE, DEPENDABLE

The RBRsolo<sup>3</sup> D facilitates optimal measurement schedules, whether moored, towed, or profiling. 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<sup>®</sup>, or text files.

### **Specifications**

#### **Physical**

Storage ~65 million samples

Power Any AA cell
Communication USB-C

Clock drift ±60 seconds per year

Depth rating up to 1000m (plastic), up to 10000m (Ti)

Diameter ~25mm Length ~210mm

Weight 130g in air, 30g in water (plastic) 330g in air, 230g in water (Ti)

#### Pressure

Range\* 20 / 50 / 100 / 200 / 500 / 1000dbar (plastic)

1000 / 2000 / 4000 / 6000 / 10000dbar (Ti)

 $\begin{array}{ll} \mbox{Initial accuracy} & \pm 0.05\% \mbox{ full scale} \\ \mbox{Resolution} & <0.001\% \mbox{ full scale} \\ \mbox{Typical stability} & \pm 0.05\% \mbox{ full scale} \mbox{/ year} \\ \end{array}$ 

Time constant <10ms

## **Deployment estimates**

#### RBRsolo<sup>3</sup> D

Sampling rates	24hr to 1s, and 2Hz			
Autonomy	Speed	Time	# samples 10M	
	2Hz	62 days	10M	

#### RBRsolo<sup>3</sup> D|fast16

Sampling rates	24hr to 1s, and 2Hz, 4, 8, 16Hz			
Autonomy	Speed	Time	# samples 60M	
	16Hz	44 days	60M	

#### RBRsolo<sup>3</sup> D|fast32

Sampling rates	24hr to 1s, and 2Hz, 4, 8, 16, or 32Hz			
Autonomy	Speed	Time	# samples	
	32Hz	24 days	60M	

#### Realtime variants

Cabled realtime variants are available as the RBRcoda<sup>3</sup> D.

#### Deep variant

Explore up to 10km deep with RBRsolo<sup>3</sup> D|deep.



<sup>\*</sup>Recommended depth for wave measurements is less than 50m.