

DO-1050

Dissolved Oxygen Recorder



The DO-1050 is a small, self-contained, submersible dissolved oxygen recorder. The DO-1050 is calibrated to an accuracy of $\pm 1\%$ O₂ saturation, and can be easily recalibrated by the end-user. Each recorder employs an Oxyguard dissolved oxygen sensor (522M18), making it an ideal instrument for marine, freshwater, and aquaculture applications.

Features:

- Small Size
- High Accuracy
- Large Memory
- High-speed download

Flash memory ensures data retention for 20 years even if the batteries run out. 8MB of storage provides sufficient memory for 2,400,000 samples and a full set of samples can be taken by one set of batteries. The DO-1050 has a rigid battery holder, which keeps the batteries firmly in place and provides a stiff backbone for the electronics. The two high-powered 3V lithium cell batteries (CR123A) are widely available. A very low current allows the DO-1050 to operate for up to three years.

There are two external casings for the DO-1050: plastic and titanium. Both models are compact, measuring 230mm in length and have an outer diameter of 38mm. The plastic logger weighs 310g and the titanium 500g. The depth ratings for the different casings are: 740m (plastic); 2,000m (titanium; limited by dissolved oxygen sensor).

Technical

General

Power:	QTY 2, 3V CR123A cells
Communications:	RS-232/485; logged, cable, or telemetry
Download Speed:	~115,000 samples/minute
Clock Accuracy:	± 32 seconds/year
Size:	265mm x 38mm
Memory:	8Mbyte Flash (2,400,000 samples)
Weight:	310g; 70g in water (plastic)
Deployment:	up to 3 years

Dissolved Oxygen

Range:	0 to 150%
Accuracy:	$\pm 1\%$ O ₂ Saturation

For more details, please visit our website: www.rbr-global.com

Software

The DO-1050 uses fully integrated Windows® software. The RBR software package has a straight-forward logger set up display menu, which includes setting the sampling period, and selection of the start and stop times by means of a graphical calendar. It also has analysis features for reviewing data, and saving it to various file formats for easy import into other analysis software, such as Matlab® or Microsoft® Excel®. Please see 'RBR Software' datasheet for more information.

RBR Ltd.

27 Monk Street, Ottawa, ON Canada K1S 3Y7
 ph: +1-613-233-1621 fax: +1-613-233-4100
 info@rbr-global.com www.rbr-global.com

RBR Europe GmbH

Schultenstrasse 8, 59597 Erwitte, Germany
 ph: +49-2943-974270 fax: +49-2943-974276
 info@rbr-europe.com www.rbr-europe.com