

SINGLE-CHANNEL LOGGER



The RBRvirtuoso³ single-channel instruments can integrate almost any sensor from RBR, offering high accuracy, flexible schedules, USB-C download, Wi-Fi communication, and twist activation. Variants with pressure, temperature, radiometer, PAR, and turbidity sensors are also available in titanium housing for deep applications (| deep), designed to endure harsh conditions.

FEATURES











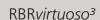


The RBRvirtuoso³ can integrate any one of the following sensors:

- ▶ Temperature (T)
- Pressure (D)
- ▶ Dissolved oxygen (DO)
- ► Optical dissolved oxygen (ODO)
- ▶ Photosynthetically active radiation (PAR)
- ► Radiometer (rad)

- ► Turbidity (Tu)
- ► Fluorescence (FI)
- ▶ Voltage
- ► Transmittance
- ▶ pH
- ▶ ORP
- ► CH₄
- ► CO₂

The RBRvirtuoso³ instruments facilitate 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®, or text files.





SINGLE-CHANNEL LOGGER

MEASURE MORE, DEPLOY LONGER, DOWNLOAD FASTER

Specifications

Physical

Storage 240M readings
Power¹ 8 AA cells
External power 4.5 to 30V

Communication USB-C or RS-232/485
Clock drift ±60 seconds/year
Housing Plastic or titanium

Diameter 63.3mm (plastic), 60.3mm (Ti)

Length Configuration dependent

Weight Configuration dependent

Max depth rating Up to 10000 m

(configuration dependent)

Sampling rate 2Hz; options up to 32Hz (configuration dependent)

Temperature

Range² -5° C to 35° C
Initial accuracy $\pm 0.002^{\circ}$ Resolution $< 0.00005^{\circ}$ C
Typical stability $\pm 0.002^{\circ}$ C per year < 0.1s |fast, <1s standard

Pressure

 Range³
 20/50/100/200/500/750dbar (plastic) 1000/2000/4000/6000/10000dbar (Ti)

 Initial accuracy
 ±0.05% full scale

 Resolution
 <0.001% full scale per year</td>

 Typical stability
 ±0.05% full scale per year

 Time constant
 <10ms</td>

RBR Ltd

+1 613 599 8900 info@rbr-global.com rbr-global.com

Dissolved Oxygen (OxyGuard®)

Turbidity (Seapoint®)

Time constant 0.1s
Linearity <2% deviation for 0-1250FTU

Fluorescence (Seapoint®)

Wavelengths 470nm / 685nm (chlorophyll a) 370nm / 440nm (cDOM)

Time constant 0.1s

Options

- Wi-Fi communication
- External data and power connection via connectorised end-caps
- ► |fast8, |fast16, or |fast32 variants for profiling
- ▶ |tide16, |wave16 variants with wave burst and tidal averaging
- ldeep variants in titanium housing for depths up to 10000m



¹ Lithium thionyl chloride batteries are only recommended for the RBRvirtuoso³ T and RBRvirtuoso³ D. Use alkaline or lithium iron batteries for all other configurations.

² A wider temperature range is available upon request. Contact RBR for more information.

³ Recommended depth for wave measurements is less than 50m.