

CHLOROPHYLL-*a* SENSOR



LOW POWER,
COMPACT DESIGN

The RBRcoda chl-a is a real-time chlorophyll-a sensor rated for depths up to 6000m. Its compact design, fast sampling rates, low power consumption, and a high depth rating, make it suitable for use in a wide variety of applications.

FEATURES



Low power
consumption



Cabled version
with MCBH



Up to 32Hz
sampling



Depths up to
6000m



RS-232
output



Compact and
lightweight

The RBRcoda chl-a ensures sensitivity to low concentrations across the measurable range (0-500 μ g/L). All optical components of the RBRcoda chl-a are robust and durable, selected to minimise aging due to UV/sunlight exposure, thus showing minimal change in properties over extended deployments. Its sapphire windows facilitate automated cleaning by a wiper to keep them free of biofouling during long-term moored deployments.

CHLOROPHYLL-*a* SENSOR

LOW POWER, DYNAMIC RANGE

Specifications

Physical

Connector	MCBH-6-MP
Communications	RS-232
Housing	Titanium
Depth rating	6000m
Diameter	25mm
Length	68mm (104mm with connector)
Weight	110g in air, 70g in water
Operating temperature range	-5°C to +35°C
Sampling rate	Up to 32Hz

Optical

Linearity, R ²	0.99
Initial accuracy	5%

Chlorophyll-*a*

Wavelength	470nm/695nm (excitation/emission)
Calibrated range*	0-50µg/L
Measurement range*	0-500µg/L
Detection limit	0.020µg/L

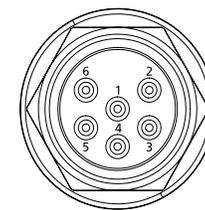
*Scaled to the fluorescence response from a monoculture of *Thalassiosira weissflogii*.

Power

Supply voltage	4.5V to 30V (12V nominal)
Power	6.5mJ/sample (4Hz or slower) 180mW (32Hz)
Sleep current	10µA at 12V



MCBH-6-MP connector pinout



- ▶ Pin 1 - Ground
- ▶ Pin 2 - Power
- ▶ Pin 3 - Serial data from sensor
- ▶ Pin 4 - Serial data to sensor
- ▶ Pin 5 - N/C
- ▶ Pin 6 - N/C

RBR Ltd

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