

## 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 $\mu$ 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, COMPACT DESIGN

#### 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 <sup>2</sup>	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

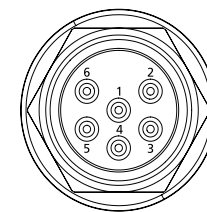
\* Scaled for the in vivo fluorescence response.

##### Power

Supply voltage	4.5V to 30V (12V nominal)
Power	6.5mJ/sample (4Hz or slower) 15mA (180mW) (8Hz or faster)
Sleep current	10µA



##### 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