

TriLux

Multi-parameter Algae Fluorometer

Low cost, miniature algae sensor that monitors two key algal parameters and turbidity in a single probe



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TriLux is a low cost, miniature algae sensor that monitors two key algal parameters and turbidity in a single probe.

The 3-in-1 fluorometer enables widespread monitoring in a variety of applications, including harmful algal blooms, aquaculture, water treatment works and river catchments.

With two different parameter combinations and depth ratings to 2000 m, TriLux is suitable for a wide variety of water environments:

- Chlorophyll a, Phycocyanin, Turbidity for freshwater deployments
- Chlorophyll a, Phycoerythrin, Turbidity for marine deployments

TriLux is compact and easy to integrate in wider systems and platforms including CTDs, data buoys, monitoring stations, AUVs and gliders.



Features

- **Monitors two key algal parameters and turbidity in a single probe**
- **Low cost solution for widespread algae monitoring and large scale monitoring programmes**
- **Real-time data output in $\mu\text{g/l}$**
- **User configurable sampling frequency from 0.1 Hz to 3 Hz**
- **Robust ambient light and turbidity rejection**

Applications

- **Monitoring within water treatment plants**
- **Algal bloom monitoring in rivers, lakes, estuaries and oceans**



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Specifications

Performance

Dynamic range*	Calibrated for 0-100 $\mu\text{g/L}$ Chlorophyll a in acetone)
Limit of detection	Typically 0.1 % of full range
Combinations	Chlorophyll a, Turbidity, Phycoerythrin Chlorophyll a, Turbidity, Phycocyanin
* Configurable up to 1000 $\mu\text{g/L}$	

Mechanical

Size	\varnothing 26.5 mm x 140 mm (including connector)
Weight in air	190 g
Pressure housing	Titanium (2000 m)
Depth rating	2000 metres
Connector	MCBH-6-MP

Electrical

Input voltage	11 to 25 Vdc
Data output	Digital RS232 and analogue 0 to 5 Vdc (or RS422, SDI-12 and 4-20 mA options)
Power requirements	<1 Watt @ 12 V

**In view of our continual improvements, the designs and specifications of our products may vary from those described.*

