

WAVELET OPTICAL WATER QUALITY KIT

SUMMARY

The research-grade sensor included in the Wavelet Optical Water Quality Kit is ideal for various environmental optical water quality applications. The sensor measures fluorescence levels to detect concentrations of cyanobacteria, chlorophyll in vivo, dissolved organic matter (CDOM/FDOM), crude oil and refined fuels, and other contaminants in streams, rivers, and coastal waters. Combined with Wavelet technology, this submersible sensor is well-suited for autonomous and continuous monitoring within aquatic environments.

FEATURES

- ▶ Energy-Efficient
- ▶ Low Maintenance
- ▶ Streamlined & Continuous Data Collection

APPLICATIONS

- ▶ Hydrodynamic Modeling
- ▶ Microbial Contamination Awareness
- ▶ Continuous Fluorescence & Turbidity Monitoring

SENSOR SPECIFICATIONS

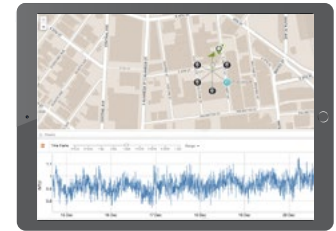
Linearity	0.99R2
Dimensions (L x Ø)	14.5 cm x 2.3 cm (5.7 in. x 0.9 in.) included 14.5 cm x 3.2 cm (5.7 in. x 1.25 in.) optional
Operating Temperature	Ambient Temperature: 0°C to 50°C (32°F to 122°F) Water Temperature: -2°C to 50°C (28°F to 122°F)
Max. Depth	600 m (1,970 ft)

Measuring Parameter	Min. Detection Limit	Range
A. Turbidity	0.05 NTU	0 – 3,000 NTU
B. Phycocyanin	2 ppb	0 – 40,000 ppb
C. CDOM/FDOM	0.15 ppb / 0.5 ppb	0 – 1,250 ppb / 0 – 5,000 ppb

Other Cyclops-7 Models Available for Measuring the Following Parameters:

Chlorophyll in vivo

Blue Excitation	0.025 µg/L	0 – 500 µg/L
Red Excitation	0.5 µg/L	>500 µg/L
Crude Oil	0.2 ppb	0 – 2,700 ppb
Refined Fuels	10 ppb	>10,000 ppb
Phycocyanin	0.15 ppb	0 – 750 ppb
Fluorescein	0.01 ppb	0 – 500 ppb
PTSA	0.1 ppb	0 – 650 ppb
Rhodamine WT	0.01 ppb	0 – 1,000 ppb
Optical Brighteners	0.6 ppb	0 – 15,000 ppb
Tryptophan	3 ppb	>20,000 ppb



Wavelet Optical Water Quality Kits include the following, along with the specified submersible optical sensor with 10 m (33-ft) cable:

- Wavelet Device & Activator
- 4G (LTE), 3G, 2G Global SIM Card
- Internal Lithium Battery
- Installation Hardware
- External Power Connector

Model No. WA2111-SE00025

Wavelet Turbidity Optics Kit:

- **A. SE00025** Turbidity Optics Sensor

Model No. WA2111-SE00029

Wavelet Phycocyanin Optics Kit:

- **B. SE00029** Phycocyanin Optics (Blue-Green Algae) Freshwater Sensor

Model No. WA2111-SE00030

Wavelet CDOM/FDOM Kit:

- **C. SE00030** CDOM/FDOM Sensor