

# CYCLOPS-6K™

SUBMERSIBLE SENSORS



## Cyclops-6K Submersible Sensors

Cyclops-6K, the newest version of the Cyclops-7 Submersible Sensors, enables fluorescence detection to ocean depths of 6000 meters. Reinforced Titanium housing and a specialized optical head ensure sensor integrity at extreme pressures. The LED excitation source allows for low power consumption and excellent signal stability enabling long-term deployments. The introduction of the Cyclops-6K gives researchers a new, affordable tool for deep ocean exploration.

## Designed for Integration

The Cyclops-6K integrates easily with any third-party platform that supplies power and datalogging.

## Cyclops-6K Highlights

- 6000 meter depth
- Reinforced Titanium housing
- Easily integrates with CTDs, ROVs, AUVs
- Small size
- Low power consumption
- Built-in light scatter rejection
- Affordable price/excellent value
- **NEW** Cyclops Explorer enables various lab applications

## Available Sensors

- Chlorophyll *in vivo*
- Blue Green Algae
  - Phycoerythrin (marine)
  - Phycocyanin (freshwater)
- CDOM/FDOM
- Hydrocarbons
  - Crude Oil
  - Refined Fuels
- Turbidity

Reliable Instruments for an Unreliable World

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## Fluorometer Performance

Linearity: 0.99R<sup>2</sup>

APPLICATION	MINIMUM DETECTION LIMIT	DYNAMIC RANGE
CDOM/FDOM	0.15 ppb** 0.5 ppb***	0-1250 ppb** 0-5000 ppb***
Chlorophyll <i>in vivo</i>	0.025 µg/L	0-500 µg/L
Oil - Crude	0.2 ppb***	0-2700 ppb***
Oil - Fine	10 ppb* 10 ppm****	>10,000 ppb* >100 ppm****
Phycocyanin	2 ppb <sup>PC</sup>	0-40,000 ppb <sup>PC</sup>
Phycoerythrin	0.15 ppb <sup>PE</sup>	0-750 ppb <sup>PE</sup>
Turbidity	0.05 NTU	0-3000 NTU

\* 1,5 Naphthalene Disulfonic Disodium Salt

\*\* Quinine Sulfate

\*\*\* PTSA (1,3, 6, 8 - Pyrenetetrasulfonic Acid Tetrasodium Salt)

\*\*\*\* BTEX (Benzene, Toluene, Ethylbenzene, Xylenes)

<sup>PC</sup> Phycocyanin pigment from Prozym diluted in Deionized water

<sup>PE</sup> Phycoerythrin pigment from Prozym diluted in Deionized water

## Physical Dimensions

Length x Diameter:  
6.6" x 1.75"; 16.76 x 4.45 cm

Weight: 22 oz; 624 grams

## Environmental Characteristics

Temperature Range:  
Ambient: 0 to 50 deg C  
Water Temp: -2 to 50 deg C

Depth Range: 6000 meters

Signal Output: 0 - 5 VDC

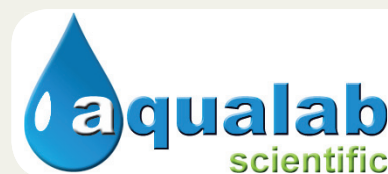
Supply Voltage Range: 3 - 15 VDC

Power Requirements: <300mW typical

## Ordering Information

AVAILABLE INSTRUMENTS	PART NUMBER	CYCLOPS-6K ACCESSORIES	PART NUMBER
Chlorophyll <i>in vivo</i>	2160-000-C	Solid Secondary Standard	2160-900
Blue Green Algae - Phycocyanin	2160-000-P	UV Solid Secondary Standard	2160-901
Blue Green Algae - Phycoerythrin	2160-000-E	Flowthrough Cap	2160-600
CDOM/FDOM	2160-000-U	Shade Cap	2160-700
Crude Oil	2160-000-O	0.6 Meter Pigtail Cable with Locking Sleeve	2100-750
Refined Fuels	2160-000-G	5 Meter Pigtail Cable with Locking Sleeve	2100-755
Turbidity	2160-000-T	10 Meter Pigtail Cable with Locking Sleeve	2100-751
		25 Meter Pigtail Cable with Locking Sleeve	2100-752
		50 Meter Pigtail Cable with Locking Sleeve	2100-753
		Cyclops Explorer	2100-485

Contact Us for Custom Optics



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