

# CYCLOPS-7

SUBMERSIBLE SENSORS



## Cyclops-7 Submersible Sensors

The CYCLOPS-7 line of submersible sensors is designed for integration into multi-parameter platforms requiring a high performance, compact sensor at a significantly lower price than traditional submersible sensors. The CYCLOPS-7 combination of price, performance and size makes the sensor very attractive for oceanographic, freshwater and dye tracing applications.

## Designed for Integration

Cyclops-7 was designed specifically for integration into any platform that supplies power and datalogging.



## Cyclops-7 Highlights

- Integrates into a C6 Multi-Sensor Platform or any third-party platform
- Extremely small size
  - 5.7" x 0.9" (SSt or Ti)
  - 5.7" x 1.25" (Delrin)
- Affordable price / excellent value
- Low power consumption
- Built-in light scatter rejection
- Interfaces with DataBank Datalogger
- **NEW** Cyclops Explorer enables various lab applications

## Available Sensors

- Blue Green Algae
  - Phycoerythrin (marine)
  - Phycocyanin (freshwater)
- CDOM/FDOM
- Chlorophyll *in vivo*
- Fluorescent Dye Tracing
  - Fluorescein
  - PTSA
  - Rhodamine
- Hydrocarbons
  - Crude Oil
  - Refined Fuels
- Turbidity
- Wastewater Monitoring
  - Optical Brighteners
  - Tryptophan

*Custom Optics Available : 260-900 nm*

## Fluorometer Performance

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

APPLICATION	MINIMUM DETECTION LIMIT	DYNAMIC RANGE
CDOM/FDOM	0.15 ppb**	0-1250 ppb**
	0.5 ppb***	0-5000 ppb***
Chlorophyll <i>in vivo</i>	0.025 µg/L	0-500 µg/L
Fluorescein Dye	0.01 ppb	0-500 ppb
Oil - Crude	0.2 ppb***	0-2700 ppb***
Oil - Fine	10 ppb*	>10,000 ppb*
	10 ppm****	>100 ppm****
Optical Brighteners	0.6 ppb***	0-15,000 ppb***
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>
PTSA Dye	0.1 ppb***	0-650 ppb***
Rhodamine Dye	0.01 ppb	0-1000 ppb
Tryptophan	3 ppb	>20,000 ppb
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:

5.7" x 0.9"; 14.48 x 2.23 cm (SS or Ti)

5.7" x 1.25"; 14.48 x 3.18 cm (Delrin)

Weight: 5.0 oz; 142 grams

## Environmental Characteristics

Temperature Range:

Ambient: 0 to 50 deg C

Water Temp: -2 to 50 deg C

Depth Range: 600 meters

Signal Output: 0 - 5 VDC

Supply Voltage Range: 3 - 15 VDC

Power Requirements: <300mW typical

## Ordering Information

### AVAILABLE INSTRUMENTS

Blue Green Algae - Phycoerythrin (freshwater) or Phycocyanin (marine)

CDOM/FDOM

Chlorophyll *in vivo*

Crude Oil

Fluorescent Dye Tracing - Fluorescein, PTSA or Rhodamine

Refined Fuels

Turbidity

Wastewater Monitoring - Optical Brighteners or Tryptophan

Contact us for Custom Optics

**Titanium and Plastic Housings also available. Titanium and Plastic withstand corrosion better than stainless steel and are recommended for stationary deployments in highly corrosive environments.**

## Contact Us

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### CYCLOPS-7 ACCESSORIES

Solid Secondary Standards

Flowthrough Cap

Shade Cap

2 Foot Pigtail Cable with Locking Sleeve

5 Meter Pigtail Cable with Locking Sleeve

10 Meter Pigtail Cable with Locking Sleeve

25 Meter Pigtail Cable with Locking Sleeve

50 Meter Pigtail Cable with Locking Sleeve

Cyclops Explorer

DataBank Datalogger available.

For details visit [www.turnerdesigns.com](http://www.turnerdesigns.com).