

CYCLOPS-7

SUBMERSIBLE SENSORS



Cyclops-7 Submersible Sensors

The CYCLOPS-7 line of submersible sensors is 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

- Extremely small size
 - 5.7" x 0.9" (SSt or Ti)
 - 5.7" x 1.25" (Delrin)
- Affordable price / excellent value
- Built-in light scatter rejection
- Low power consumption
- Integrates into a C6 Multi-Sensor Platform or any third-party platform
- Interfaces with DataBank Datalogger
- Cyclops-7 Submersible Logger Available
- Cyclops Explorer enables various lab applications

Available Sensors

- Blue Green Algae
 - Phycoerythrin (marine)
 - Phycocyanin (freshwater)
- CDOM/FDOM
- Chlorophyll *in vivo*
 - Blue excitation
 - Red excitation
- 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: 0.99R²

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>		
Blue excitation	0.025 µg/L	0-500 µg/L
Red excitation	0.5 µg/L	>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 ^{PC}	0-40,000 ppb ^{PC}
Phycoerythrin	0.15 ppb ^{PE}	0-750 ppb ^{PE}
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)

^{PC} Phycocyanin pigment from Prozym diluted in Deionized water

^{PE} Phycoerythrin pigment from Prozym diluted in Deionized water

Physical Dimensions

Length x Diameter:

5.7" x 0.9"; 14.48 x 2.23 cm (SSSt 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*

- Blue excitation

- Red excitation

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

Toll-Free : 1.877.316.8049

Email : sales@turnerdesigns.com

Address:

Phone : 408.749.0994

Web : www.turnerdesigns.com

845 West Maude Avenue

Fax : 408.749.0998

Sunnyvale, CA 94085

CYCLOPS-7 ACCESSORIES

Solid Secondary Standards

Flowthrough Cap

Shade Cap (Recommended for most deployments)

0.6 Meter 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.