

CYCLOPS-7F™

Submersible Sensors



Cyclops-7F Sensors are high performance, compact submersible sensors designed for integration into any platform that provides power and datalogging. Available with multiple optical configurations, Cyclops-7F Sensors have a universal I/O for connection to parent systems. Recently updated to have a faster settling time, Cyclops-7F is ready to make measurements 1 second after power up.

Cyclops-7F Sensors easily integrate into third-party platforms. Turner Designs has partnered with several integrators to provide single sensor packages, multi-probes and remote monitoring solutions for *in situ* sampling. Below are examples of a few of those integrations.



Cyclops Logger sold by PME



Trimeter sold by Eureka Water Probes

CONTACT US

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PRODUCT HIGHLIGHTS

- Built-in light scatter rejection
- Low power consumption
- Easily integrates into any third-party platform

AVAILABLE PARAMETERS

- Blue Green Algae
 - Phycocyanin (freshwater)
- CDOM/FDOM
- Chlorophyll *in vivo*
 - Blue excitation
 - Red excitation (high CDOM)
- Fluorescent Dye Tracing
 - Fluorescein
 - Rhodamine
- Hydrocarbons
 - Refined Fuels
- Turbidity

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OPTICAL SPECIFICATIONS

| | Minimum Detection Limit | Linear Range |
|----------------------------|----------------------------|-----------------------------------|
| CDOM/FDOM | 0.1 ppb* 0.5 ppb** | 0 - 1,500 ppb* 0 - 3,000 ppb** |
| Chlorophyll <i>in vivo</i> | | |
| Blue Excitation | 0.03 µg/L | 0 - 500 µg/L |
| Red Excitation (high CDOM) | 0.3 µg/L | 0 - 500 µg/L |
| Fluorescein Dye | 0.01 ppb | 0 - 500 ppb |
| Oil - Crude | 0.2 ppb** | 0 - 1,500 ppb** |
| Oil - Fine | 0.4 ppm*** | 0 - 20 ppm*** |
| Phycocyanin | 2 ppb ^{PC} | 0 - 4,500 ppb ^{PC} |
| Phycoerythrin | 0.1 ppb ^{PE} | 0 - 750 ppb ^{PE} |
| Rhodamine Dye | 0.01 ppb | 0 - 1,000 ppb |
| Turbidity | 0.05 NTU | 0 - 1,500 NTU |

* Quinine Sulfate

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

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

POWER REQUIREMENT (mW@12V)

| | | | |
|----------------------------|-----|---------------|-----|
| CDOM/FDOM | 240 | Phycocyanin | 160 |
| Chlorophyll <i>in vivo</i> | 240 | Phycoerythrin | 270 |
| Fluorescein Dye | 145 | Rhodamine Dye | 175 |
| Oil - Crude | 250 | Tryptophan | 540 |
| Oil - Fine | 530 | | |

FLUOROMETER PERFORMANCE

Linearity: 0.99R²

PHYSICAL DIMENSIONS

Length x Diameter:

5.7" x 0.9"; 14.48 x 2.23 cm (SSt)

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

WHO WE ARE

Since 1972 Turner Designs has provided over 75,000 sensitive, reliable and easy-to-use fluorometers for environmental and industrial uses. We specialize in sensitive detection of materials with fluorescence properties. With distributors around the world, we provide free technical support for the life of our instruments.

