

# C3™ and C6P™ Submersible Fluorometers



## C3 & C6P Submersible Fluorometers

These Submersible Fluorometers can be configured with up to three or six optical sensors ranging from the deep ultraviolet to the infrared spectrum. Internal memory storage capacity combined with an external submersible lithium ion battery allow the C3 or C6P to run during extended or short-term deployments. Each unit comes with a factory-installed temperature sensor. Factory-installed depth sensors and mechanical wipers are also available. The durable delrin housing is highly resistant to harsh environments. Antifouling copper tape pieces are included for placement on the C3 optical head to reduce bio-fouling on and around the sensors. An antifouling copper plate is available as an option for both the C3 and C6P for longer deployments. The Integrator Firmware option is recommended when the C3 or C6P are used as part of a continuous sampling system that requires 24/7 streaming data collection. C-Soft Windows™ based software allows for intuitive calibration, datalogging set-up and file management capabilities as well as data integration.

## Customized Optical Sensors

Choose up to six optical sensors to be factory installed for a variety of applications.

### Available Optical 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
- Contact us for Custom Optics*

## Highlights of the C3 & C6P

- 1, 2, 3, 4, 5 or 6 Optical Sensors
- Temperature Sensor Included
- Optional Depth Sensor
- Optional 3-Brush Mechanical Wiper
- All Plastic Housing
- Robust Memory – Over 60,000 Data Lines!
- Easy to Use Software with Data Management Capabilities
- Optional C-ray Deployment Body Enables Horizontal Towing of the C3



Digital integration with a CTD profiler or third party platform (Analog adapter available for C3)



Extended Deployments in the Self-Contained Mode with Submersible Battery



Reduced Bio-Fouling with Antifouling Copper Tape or Copper Plate



Solid Secondary Standard used to check signal stability or correlate to a primary standard

**Reliable Instruments for an Unreliable World**

# C3™ and C6P™ Submersible Fluorometers



Application	Minimum Detection Limit	Linear Range	Physical Specifications	
CDOM/FDOM	0.1 ppb** 0.5 ppb***	0-1,500 ppb** 0-3,000 ppb***	Weight in Air	1.64 kg; 3.6 lbs (C3) 2.54 kg; 5.6 lbs (C6P)
Chlorophyll <i>in vivo</i>			Length	23 cm; 9.1 in (C3) 27.43 cm; 10.8 in (C6P)
Blue excitation	0.03 µg/L	0-500 µg/L	Diameter	10 cm; 3.9 in (C3) 13.84 cm; 5.25in (C6P)
Red excitation	0.3 µg/L	>500 µg/L	Material	Delrin Plastic
Fluorescein Dye	0.01 ppb	0-500 ppb	Temperature	-2 to 50 degrees C.
Oil - Crude	0.2 ppb***	0-1,500 ppb***	Depth	0 to 600 meters
Oil - Fine	3 ppb* 3 ppm****	3,500 ppb* 30 ppm****	<b>Electrical Specifications</b>	
Optical Brighteners	0.6 ppb***	0-2,500 ppb***	Output	Digital (ASCII) Analog (0 - 5 volt)- optional C3 only
Phycocyanin	2 ppb <sup>PC</sup>	0-4,500 ppb <sup>PC</sup>	Interface	RS232 Interface
Phycoerythrin	0.1 ppb <sup>PE</sup>	0-750 ppb <sup>PE</sup>	Minimum Sample Interval	1 Second
PTSA Dye	0.1 ppb***	0-650 ppb***	Minimum Power Supply	8 - 30 volts; 5 watts
Rhodamine Dye	0.01 ppb	0-1,000 ppb	Maximum Current Draw @ 12 volts	
Tryptophan	3 ppb	5,000 ppb	- operational	200 mA (C3) / 300 mA (C6P)
Turbidity	0.05 NTU	0-1,500 NTU	- sleep mode	3 mA

\* 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 Prozyme diluted in Deionized water  
<sup>PE</sup> Phycoerythrin pigment from Prozyme diluted in Deionized water

## Available Accessories

3-Brush Mechanical Wiper	0.6 Meter Pigtail Interface Cable
Pressure Sensor	Communication & Integration Cable w/ Locking Sleeve
Antifouling Copper Tape (9) (C3 only)	Boosters (Set of 2)*
Antifouling Copper Plate	10 Meter Extender Cable
Analog Output Adapter (C3 only)	25 Meter Extender Cable*
Submersible Battery Pack	50 Meter Extender Cable*
High Capacity Submersible Battery Pack	Integrator Firmware
Battery Pack Bracket	*Boosters are required for cable lengths greater than 10 meters
Flow Cap	
Shade Cap (Recommended for most deployments)	<b>OIL SPILL RESPONSE FOR SMART PROTOCOL (C3)</b>
Shade Cap Weight	SMART Firmware
C-ray Towed Deployment Body (C3 only)	C-ray Shade Cap
C-ray Shade Cap (C3 only)	C-ray Deployment Body
Solid Secondary Standard	
UV Solid Secondary Standard	

## Contact Us

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