

# Submersible Fluorometer



## C3 Submersible Fluorometer

The C3 Submersible Fluorometer can be configured with one, two or three optical sensors ranging from the ultraviolet to the infrared spectrum. Internal memory storage capacity combined with an external submersible lithium ion battery allows the C3 to run during extended or short-term deployments. Each C3 comes with a factory-installed temperature sensor. Optional factory-installed depth sensors and mechanical wipers are also available. The durable delrin housing is highly resistant to harsh environments. C-Soft Windows™ based software allows for intuitive calibration, datalogging set-up and file management capabilities as well as digital data integration.

## Customized Optical Sensors

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

### Available Optical Sensors


- Turbidity
- Chlorophyll *a in vivo*
- Blue Green Algae - Phycocyanin
- Blue Green Algae - Phycoerythrin
- Fluorescein Dye
- Rhodamine Dye
- CDOM
- Optical Brighteners
- Crude Oil


Contact Us for Custom Optics


## Highlights of the C3

- One, Two or Three Optical Sensors
- Temperature Sensor Included
- Optional Depth Sensor Available
- Optional Mechanical Wiper Available
- All Plastic Housing
- Robust Memory – Over 480,000 Data Points!
- Easy to Use Software with Data Management Capabilities



 Digital integration with a CTD profiler or third party platform

 Extended Deployments in the Self-Contained Mode with Submersible Battery

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



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Application	Minimum Detection Limit	Dynamic Range	C3 Physical Specifications	
Chlorophyll <i>a</i> *	0.025 µg/L	0-300 µg/L	Weight in Air	1.64 kg; 3.6 lbs
CDOM	0.2 ppb QS**	0-1000 ppb QS**	Length	23 cm; 9.1 in
Crude Oil	0.1 ppm	0-1000 ppm	Diameter	10 cm; 3.9 in
Cyanobacteria	150 cells/mL	0-150,000 cells/mL	Material	Delrin Plastic
Optical Brighteners	0.002 ppb QS**	0-10,000 ppb QS**	Temperature	-2 to 50 degrees C.
Fluorescein Dye	0.01 ppb	0-500 ppb	Depth	0 to 600 meters
Rhodamine Dye	0.01 ppb	0-500 ppb	C3 Electrical Specifications	
Turbidity	0.05 NTU	0-3000 NTU	External Power	8 to 30 VDC
			Output	Digital Signal
			Interface	RS232 Interface
			Maximum Sample Rate	1 Second
			Maximum Power Requirements	1 Watt

\* Chlorophyll specifications determined with Rhodomonas SP culture  
 \*\* Quinine Sulfate

## Ordering Information

INSTRUMENT	PART NUMBER	AVAILABLE FACTORY-INSTALLED OPTICS	PART NUMBER
C3 Submersible Fluorometer	2300-000	Turbidity	2300-240
		Chlorophyll <i>a in vivo</i>	2300-200
C3 ACCESSORIES	PART NUMBER	Blue Green Algae - Phycocyanin	2300-231
Mechanical Wiper	2300-450	Blue Green Algae - Phycoerythrin	2300-230
Pressure Sensor	2300-360	Fluorescein Dye	2300-220
Submersible Battery Pack	2200-601	Rhodamine Dye	2300-210
Battery Pack Bracket	2300-603	CDOM	2300-251
Flow Cap	2300-700	Optical Brighteners	2300-252
Shade Cap	2300-500	Crude Oil	2300-253
Shade Cap Weight	2300-510	<i>Contact Us for Custom Optics</i>	
Solid Secondary Standard*	2300-900		
24" Pigtail Interface Cable w/ Locking Sleeve	2200-170	OIL SPILL RESPONSE FOR SMART PROTOCOL	PART NUMBER
Boosters (Set of 2)**	2200-900	SMART Firmware	2200-201
10 Meter Extender Cable**	105-2595	SMART Shade Cap	2300-502
25 Meter Extender Cable**	105-2596		
50 Meter Extender Cable**	105-2597		

\*Only available for visible wavelengths  
 \*\*Boosters are required for cable lengths greater than 10 meters

