

ECO FLNTUFluorometer and Scattering Meter

Sea-Bird Scientific offers the Environmental Characterization Optics (ECO) series of meters that incorporate a common set of options with a single basic design to make them ideal for a wide variety of deployments.

The FLNTU:

- Combines the unparalleled sensitivity of the ECO fluorometer with an optical scattering measurement at 700 nm for simultaneous determination of turbidity
- Ranges for output tailored to the environment
- Allows for assessment of fluorescence and turbidity variability and interactions
- Digital and analog output for easy integration into analog CTD packages or serial data streams
- Provides excellent precision, reliability and overall performance at a fraction of the cost and size of similar instruments







Optical - Turbidity

Wavelength	700 nm
Sensitivity	0.013 NTU
Range, Typical	0-25 NTU

Optical - Fluorescence

Wavelength ex/em	470/695 nm
Sensitivity	0.025 μg/l Chl
Range, Typical	0–50 μg/l Chl
Linearity (both)	99% R²

Electrical

Digital output resolution	12 bit
Internal data logging	Optional
Internal batteries	Optional
Connector	MCBH6MP
Input	7–15 VDC
Current, typical	60 mA
Current, sleep	140 μΑ
Data memory	90,000 samples
Sample rate	User selectable to 8 Hz
RS-232 output	19200 baud
Anti-fouling Bio-wiper™	Optional*

Options*

FLNTU(RT)— Analog and RS-232 serial output with 4,000-count range. Unit operates continuously when power is supplied.

FLNTU(RT)D—Provides the capabilities of the FLNTU(RT) with 6,000-meter depth rating.

FLNTUB—The capabilities of the FLNTU with internal batteries and memory for autonomous operation.

FLNTUS—The capabilities of the FLNTU with an integrated anti-fouling Bio-wiper™.

FLNTUSB—The capabilities of the FLNTUS with internal batteries for autonomous operation.

Environmental

Temperature Range	0 - 30 °C
Depth Rating*	600 m

Mechanical

Diameter	6.3 cm
Length	12.7 cm (standard) 17.78 cm (deep)
Weight in air	0.4 kg (std) 1.3 kg (deep)
Weight in water*	0.02 kg (std) 0.75 (deep)
Materials	Acetal copolymer (standard) Titanium (deep)

*The limit depth for ECO with Anti-fouling Bio-wiper™ and Internal Batteries (models B, S and SB) rated to 300 m.

