

## ECO FLNTU – Fluorometer with Turbidity



- Combines the unparalleled sensitivity of the ECO fluorometer with an optical scattering measurement at 700 nm for simultaneous determination of turbidity.
- Provides turbidity measurement data that is not affected by CDOM concentration, unlike instruments that attempt to measure turbidity by using blue wavelengths.
- Allows for assessment of fluorescence and turbidity variability and interactions.
- Is configurable with an optional dual analog output for easy integration into CTD packages.
- Provides excellent precision, reliability and overall performance at a fraction of the cost and size of similar instruments.

### Specifications:

	<b>Mechanical</b>
<i>Diameter</i>	2.48 in (6.3 cm)
<i>Length</i>	5.0 in (12.7 cm) (standard) 10.1 in (25.6 cm) (deep)
<i>Weight in air</i>	0.9 lbs (0.4 kg) (standard) 2.86 lbs (1.3 kg) (deep)
<i>Weight in water</i>	0.05 lbs (0.02 kg) (standard) 1.6 lbs (0.75 kg) (deep)
<i>Pressure housing</i>	Acetal copolymer (standard) Titanium (deep)

	<b>Optical (Turbidity)</b>
<i>Wavelength</i>	700 nm
<i>Sensitivity</i>	0.01 NTU
<i>Range, typical</i>	0.01–25 NTU

  

	<b>Optical (Fluorescence)</b>
<i>Wavelength</i>	ex/em 470/695 nm
<i>Sensitivity</i>	0.01 µg/l
<i>Range, typical</i>	0.01–50 µg/l
<i>Linearity (both)</i>	99% R <sup>2</sup>

	<b>Electrical</b>
<i>Digital output resolution</i>	12 bit
<i>RS-232 output</i>	19200 baud
<i>Analog output signal</i>	0–5 V
<i>Internal data logging</i>	optional
<i>Internal batteries</i>	optional
<i>Connector</i>	MCBH6M
<i>Input</i>	7–15 VDC
<i>Current, typical</i>	80 mA
<i>Current, sleep</i>	85 µA
<i>Data memory</i>	65,000 samples
<i>Sample rate</i>	to 8 Hz
<i>Anti-fouling bio-wiper™</i>	optional
<i>Bio-wiper™ cycle</i>	140 mA

	<b>Environmental</b>
<i>Temperature range</i>	0–30 deg C
<i>Depth rating</i>	600 m (standard) 6000 m (deep)
<i>Pressure/temperature sensor</i>	optional

- FLNTU(RT)**— Analog and RS-232 serial output with 4,000-count range. This unit operates continuously when power is supplied.
- FLNTU(RT)D**— Provides the capabilities of the FLNTU(RT) with 6,000-meter depth rating.
- FLNTU**— The capabilities of the FLNTU(RT) with periodic sampling.
- FLNTUB**— The capabilities of the FLNTU with internal batteries 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.

REF – FLNTU iss A APR 2009