



FLNTU

WET Labs 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.
- 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.



Mechanical		Electrical	
<i>Diameter</i>	2.48 in (6.3 cm)	<i>Digital output resolution</i>	12 bit
<i>Length</i>	5.0 in (12.7 cm) (standard) 10.1 in (25.6 cm) (deep)	<i>RS-232 output</i>	19200 baud
<i>Weight in air</i>	0.9 lbs (0.4 kg) (standard) 2.86 lbs (1.3 kg) (deep)	<i>Analog output signal</i>	0–5 V
<i>Weight in water</i>	0.05 lbs (0.02 kg) (standard) 1.6 lbs (0.75 kg) (deep)	<i>Internal data logging</i>	optional
<i>Pressure housing</i>	Acetal copolymer (standard) Titanium (deep)	<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 μ A
		<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
Optical (Turbidity)		Environmental	
<i>Wavelength</i>	700 nm	<i>Temperature range</i>	0–30 deg C
<i>Sensitivity</i>	0.01 NTU	<i>Depth rating</i>	600 m (standard) 6000 m (deep)
<i>Range, typical</i>	0.01–25 NTU	<i>Pressure/temperature sensor</i>	optional
Optical (Fluorescence)			
<i>Wavelength</i>	ex/em 470/695 nm		
<i>Sensitivity</i>	0.01 μ g/l		
<i>Range, typical</i>	0.01–50 μ g/l		
<i>Linearity (both)</i>	99% R ²		

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.

Specifications subject to change without notice.



ECO FLNTU

Specifications Sheet

WET Labs, Inc.
 P.O. Box 518
 Philomath, OR 97370
 Tel: 541-929-5650
 fax: 541-929-5277
www.wetlabs.com

Revision History

Revision	Date	Revision Description	Originator
A	02/21/03	New Product	I. Walsh
B	02/24/03	Change "shutter" to "bio-wiper™" (DCR 280)	H. Van Zee
C	5/19/03	Change range to 25 NTU (DCR 301)	I. Walsh
C1	9/10/03	Update specifications	H. Van Zee
D	11/24/03	Finalize updated specifications (DCR 338)	H. Van Zee
D1	6/8/04	Update specifications	I. Walsh
E	6/29/04	Updates approved (DCR 400)	H. Van Zee, I. Walsh
E1	5/19/05	Include specs for "deep" meter (draft)	H. Van Zee
F	1/23/06	Finalize "deep" specs, update description (DCR 483)	H. Van Zee
G	9/26/06	Add "deep" unit; update photo, update specifications (DCR 507)	M. Johnson, H. Van Zee