

The ECO FLbb-AP2 is designed for profiling floats. The instrument is tuned for shelf and deep ocean applications where high resolution of small temporal and spatial gradients is essential to understanding particle dynamics and biogeochemical cycles.

- Unparalleled sensitivity of the ECO in an optical backscattering measurement at 700 nm.
- Material selection and extensive testing of the instrument assures long lived performance where recovery and service is not possible.
- Horizontal configuration eliminates float interference.



Specifications

Mechanical		Electrical	
<i>Diameter</i>	6.3 cm (instrument only)	<i>Digital output resolution</i>	12 bit
<i>Length</i>	14.9 cm	<i>RS-232 output</i>	19200 baud
<i>Weight in air</i>	0.578 kg	<i>Connector</i>	IE55-1206-BCR
<i>Weight in water</i>	0.143 kg	<i>Input</i>	7–15 VDC
<i>Pressure housing</i>	ABS, epoxy, HDPE, 6061 aluminum (hard anodized)	<i>Data output rate</i>	1 Hz (user settable to 4 Hz)
		<i>Operating current, typ.</i>	35 mA
		<i>Operating current, max.</i>	50 mA

Optical		Environmental	
<i>Backscattering wavelength</i>	700 nm	<i>Temperature range²</i>	- 2 to 30 deg C
<i>Backscattering sensitivity¹</i>	0.0015 m ⁻¹	<i>Depth rating</i>	2000 m
<i>Backscattering range¹</i>	0 - 3 m ⁻¹		
<i>Fluorometer EX/EM</i>	470/695 nm		
<i>Chlorophyll sensitivity</i>	0.015 µg/l		
<i>Fluorescence range</i>	0 –30 µg/l		
<i>Linearity</i>	99 % R ²		

¹Backscattering specifications are given in beam c_p (m⁻¹) based on the regression of the response of the instrument relative to the beam c_p measured at the coincident wavelength using an ac-s spectrophotometer. Scale factors for backscattering incorporate the target weighting function and the solid angle subtended.

²The water temperature range through which the instruments are tested. The -2 deg C minimum covers all natural waters on Earth. Please contact WET Labs for testing to higher temperatures.