

ECO PAR

Photosynthetically Active Radiation Sensor

Satlantic and WET Labs have partnered to develop the ECO-PAR™ sensor, which provides highly accurate measurements of PAR (400–700 nm) in all aquatic environments.

Equipped with quality precision optics and proven Bio-wiper™ technology, the ECO-PAR™ sensor can be deployed for extended periods without a reduction in data quality caused by biofouling. Additionally, the ECO-PAR™ has optional internal data logging and power capabilities, precluding the need for an external logging device



Features

- Compact size
- Integrated self-logging
- Configurable output
- High precision and stability
- Optional integrated anti-fouling

Applications

- Long-term monitoring on moorings and buoys
- Water quality studies
- Phytoplankton physiology and photosynthesis studies
- Aquatic productivity studies

Optical

Calibrated range:	0 – 5000 $\mu\text{mol photons m}^{-2} \text{s}^{-1}$
Calibration accuracy:	$\pm 5\%$ NIST Traceable (in air)
Bandpass:	400 – 700 nm
Cosine Collector:	0 - 60° 3%; 60 – 85° 10%

Electrical

Digital output resolution	14 bit
Internal data logging	Optional
Internal batteries	Optional
Connector	MCBH6M
Input	7–15 VDC
Current, typical	80 mA
Current, sleep	85 μA
Data memory	90,000 samples
Sample rate	User selectable to 8 Hz
RS-232 output	19200 baud
Analog output signal	0-5 v
Anti-fouling Bio-wiper™	Optional
Bio-wiper™ cycle	140 mA

Mechanical

Diameter	6.3 cm
Length	12.7 cm
Weight in air	0.4 kg
Weight in water*	0.02 kg
Materials	Acetal copolymer

Environmental

Temperature Range	0 - 30 °C
Depth Rating	200 m