

# 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 and battery pack.



## 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 $\mu\text{A}$
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

	S	S	SB
Diameter	6.30 cm		
Length	13.3 cm	28.0 cm	
Depth Rating	300 m		
Temp Range	0 - 30 °C		
Weight in air / water	0.594 kg 0.173 kg	1.062 kg 0.136 kg	1.062 kg 0.136 kg
Materials	Acetal copolymer		

S = Shutter, B = Battery, SB = Shutter, Battery