

Profiler II

Free-Falling Optical Profiler

The Profiler II design builds on Satlantic's experience with previous generations of optical profiling systems. The unique design provides the option to use the system as a free fall profiling device or in conjunction with a detachable float for near-surface measurements (HyperTSRB). The Profiler II Hub is flexible and can be outfitted with either multispectral or hyperspectral optical sensors that can be quickly interchanged in the field. This flexibility and power makes the Profiler II the most versatile platform for measuring optical properties in a wide range of aquatic environments.

Features

- Various deployment configurations - Free fall, frame mounted, buoy mode
- Multiple radiometer options - multi, hyperspectral or combinations
- Full ancillary suite - tilt, temperature, conductivity, depth, ECO Puck series sensors
- Easily deployed to avoid ship shadow anomalies
- Data logging and processing software included

Applications

- Bio-optical algorithm development
- Satellite calibration and validation
- Environmental monitoring
- Data products include water leaving radiance, remote sensing reflectance, energy fluxes, and PAR



Electrical Characteristics

A/D Conversion:	6 bit ADC
Sample rate:	12 Hz max
Data rate:	57.6 k baud
Telemetry interface:	RS-422 / RS-232
Power requirements:	Powered through MDU-200 & 12VDC PS

Physical Characteristics

Length:	100 cm
Weight:	8.2 kg
Descent rate:	0.1 - 1.0 m/sec (user adjustable)
Operating temperature:	-2.5 to 40 °C
Depth Rating:	220 m

Ancillary Sensors:

Pressure Sensor Range:	30 bar (435 psi) ; 10 bar (145 psi) optional
Accuracy: Resolution	0.01 % FS 0.002 % FS
External Temperature Sensor Range:	-2 to + 32 °C
Accuracy: Precision:	0.005 °C 0.001 °C
Conductivity Sensor Range:	0-70 mS/cm
Accuracy: Resolution:	0.005 mS/cm 0.001 mS/cm
Tilt Sensor Linear range:	+/- 45 °C
Accuracy:	<0.2 °C
Optional Sensors WET Labs ECO pucks:	Fluorescence, Backscattering, Turbidity

