



Multispectral Radiometers

Product #:

MULTISPECTRALRADIOMETERS

USD Price:

Contact Sea-Bird

Measurements of radiance or irradiance in air or water

Multispectral radiometers are fully digital sensors that combine precision optics and high performance microelectronics to provide spectral records of light collected in an ocean environment. OCRs are designed for applications in which performance, size, and power are key constraints. These sensors can be mounted on profilers, moorings or AUVs.

- Optional bioshutter
- Fully characterized cosine response
- Custom low fluorescence filters
- Networking capability
- Data collecting and processing software included
- Fast sampling rate (7–24 Hz optional)

Capable of radiance or irradiance measurements

Measure in air, water, or both

4 or 7 wavelengths available

UV wavelengths of 305, 325, 340, and 380 nm

Optional bioshutter

Specifications

Current Draw:	25 mA
Depth Rating:	200 to 2,000 m
Detector:	17 mm ² silicon photodiode; 13 mm ² silicon photodiode
Field-of-View:	Cosine response 10 deg in water, 14 deg in air
Input Voltage:	6-22 VDC

Irradiance Cosine Error:	3% from 0–60 deg; 10% from 60–85 deg
Length:	11 cm
Noise Equivalent Irradiance (NEI):	$2.5 \times 10^{-3} \mu\text{W cm}^{-2} \text{ nm}^{-1}$
Noise Equivalent Radiance (NER):	$300 \times 10^{-3} \mu\text{W cm}^{-2} \text{ nm}^{-1} \text{ sr}^{-1}$
Number of Channels:	4 or 7
Radiance Spatial Response:	$5 \times 10^{-4} > 1.5 \text{ FOV}$
Spectra:	Irradiance, UV, or Radiance
Spectral Bandwidth:	10 or 20 nm
Wavelength Range:	400-865 nm Radiance and Irradiance; 305, 325, 340, or 380 nm UV
Weight in air, water:	0.26 kg