AURORA FIELD SPECTRORADIOMETER

SS-200-SS

Aurora
Field Spectroradiometer

Measures the spectral distribution of light across wavelengths from 350 to 849 nm in outdoor or indoor environments, with Modbus or USB-C communication available. Calculates 16 built-in light-quality indices spanning PAR, PFD spectral bands, and photometric units.

Product Specifications

	SS-200-SS
Measurement Range	350 to 849 nm
Wavelength Data Increment	1 nm interpolated output
Spectral Bandwidth	12 nm
Pixel Resolution	Approximately 2 nm
Measurement Repeatability	Less than 1%
Wavelength Accuracy	±2nm
Calibration Uncertainty	± 10% (380-849 nm)
Temperature Stability	±2%
Non-linearity	Less than 1 % (up to 4000 µmol m^{-2} s^{-1})
Cosine Response	± 5 % at 75° zenith angle
Sampling Speed	100 ms plus the integration time
Automatic Integration Time Range	Up to 1,000 ms
Automatic Integration Time Response	5 to 25 seconds
Startup Time	Up to 30 s
Operating Environment	-20 to 50˚C, 0 to 100% relative humidity (see manual for details)
Calculations	Calculates 16 metrics/indices: PFD UV (350-399 nm), PFD Blue (400-499 nm), PFD Green (500-599 nm), PFD Red (600-700 nm), PFD FR (701-800 nm), PFD PFR (701-750 nm), PAR (400-700 nm), ePAR (400-750 nm), Total PFD (350-849 nm), YPFD, PPE, iPPE, Lux, Foot Candle, Far Red Fraction, and Red to Far Red Ratio.
Measurement Units	Watts/m^2, µmol/m^2, and Relative
Mass	158 g
Detector	CMOS Linear Image Sensor
Housing	Aluminum with Cerakote and anodized finishes; Sintered quartz diffuser
Dimensions	48.8 mm x 48.8 mm x 45.8 mm
Ingress Protection Rating	IP65
Voltage Requirement	5-24 V
Current Usage	58-62 mA DC at 12 V
Output	USB-C, Modbus RS485, and Modbus RS232
Cable	Shielded, twisted-pair wire; TPR jacket; pigtail lead wires; stainless steel 316 connector
Warranty	4 Years
Support	Firmware Updates