

Lab Spectroradiometers

Absolute spectral measurement across a wide wavelength range



Three Wavelength Options

350 to 1000 nm, 300 to 850 nm, or 300 to 1000 nm.

Complete Package

The package includes a spectroradiometer, two meter fiber-optic cable, cosine-corrected detector, AL-200 leveling plate, USB cable, USB drive with required drivers and software (compatible with all Windows operating systems), and shoulder bag (functions as a carrying case and field measurement pack). A reflectance probe and reflectance standard are available as accessories.

Portable Lab and Field Measurements

The instrument features a small design with a rugged housing and no moving parts. The spectroradiometer is powered through the USB port on a computer, allowing mobile measurements.



Case Study

An Apogee spectroradiometer studied the growth and productivity of 20 different tomato breeds in greenhouses and residential spaces at the University of Florida.



	PS-100	PS-200	PS-300
Irradiance Calibration Range	350 to 1000 nm	300 to 850 nm	300 to 1000 nm
Wavelength Sensitivity	350 to 1150 nm	190 to 850 nm	220 to 1100 nm
Wavelength Resolution	1 nm	0.85 nm	1.5 nm
Detector Type	CCD, 2048 pixel		
Grating Type	Holographic & Ruled, 600 g/nm	Holographic and aberration-corrected, 590 g/nm	
Digitizer	16-bit		
Signal to Noise Ratio	1000:1		
Stray Light	0.1 % at 435 nm, 0.5 % at 600 nm	0.02 % at 435 nm, 0.2 % at 200 nm	0.02 % at 435 nm, 0.2 % at 220 nm
Measurement Repeatability	Less than 1 %		
Irradiance Calibration Uncertainty	± 10 %		
Detector Integration (Exposure) Range	1 ms to 65 s		
Directional (cosine) Response	± 5 % at 80° zenith angle		
Software	Windows compatible, included		
Computer Interface	USB 2.0		
Power Requirement	100 mA at 5 V DC, supplied via USB cable		
Operating Temperature	0 to 60 C		
Optical Cable	2 m armored fiber-optic		
Base Unit Size	25 mm x 75 mm x 125 mm	69 mm x 100 mm x 150 mm	
Mass	500 g	900 g	
Warranty	1 year against defects in materials and workmanship		