SPECTRAL EVOLUTION

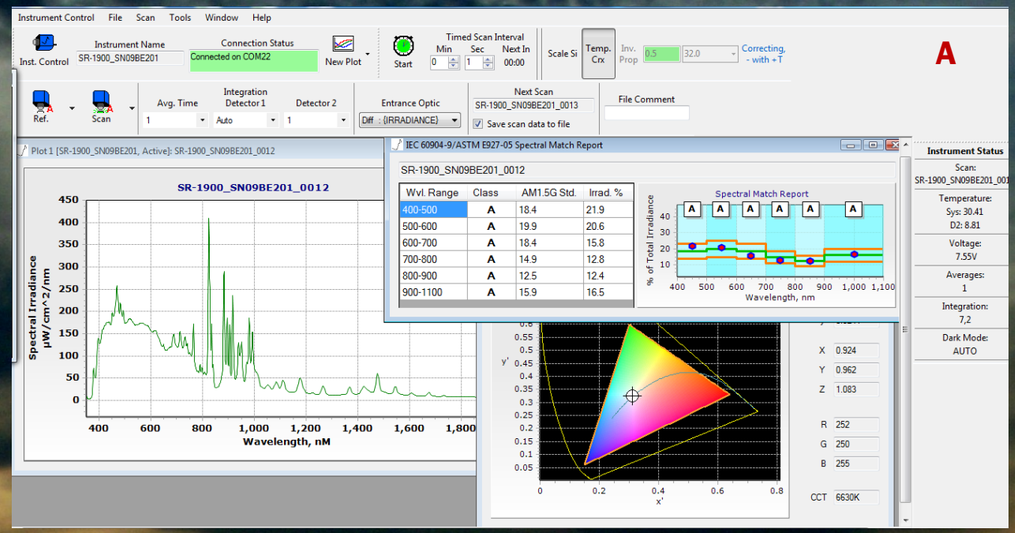
Full range UV-VIS-NIR-SWIR Lab Spectroradiometers

Fast, full featured and flexible!

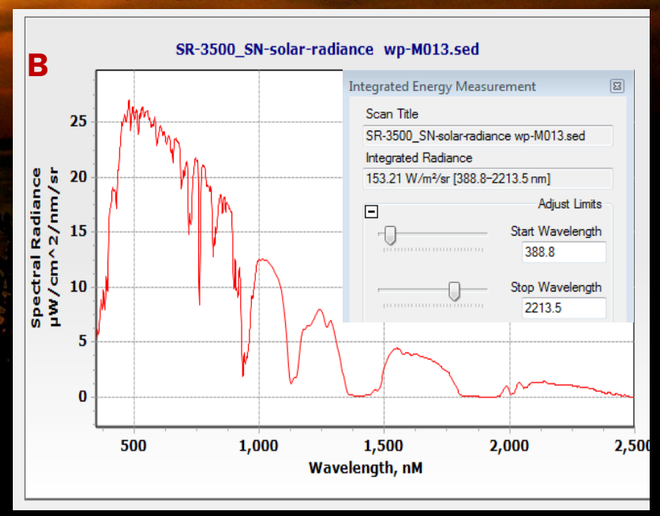
All SR Series Spectroradiometers feature NIST-traceable calibration and automatic dark current shutter control for easy one-touch spectral radiance & irradiance measurements.

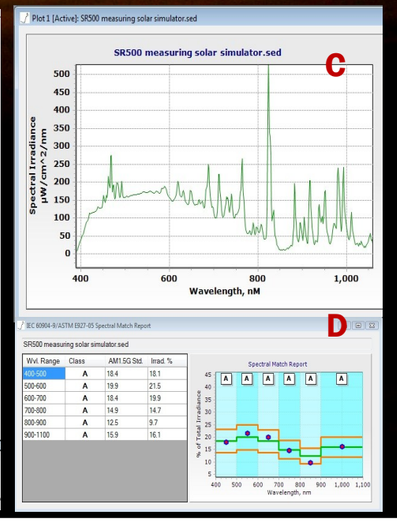
- **Full range UV-VIS-NIR-SWIR measurements with just one scan– no hassling with multiple spectroradiometers**
- **InGaAs/Si photodiode arrays and fixed optics- no moving gratings or internal fiber optics to break or jam**
- **No-fuss autoexposure control– thanks to 7 decades of dynamic range response**
- **Fast, convenient, accurate one-touch scans– autoscaling & auto dark current shutter**
- **Easy to set up anywhere– compact, lightweight single-box design with intuitive software menus.**

All SPECTRAL EVOLUTION Spectroradiometers come with our exclusive DARWin SP Data Acquisition Package– an easy-to-use menu driven software program designed to analyze spectral irradiance, radiance, reflectance, transmittance, absorbance and more....



The exclusive DARWin SP Data Acquisition Module included with each unit allows for full featured instrument control and data handling. (A) The SR-1900 Spectroradiometer equipped with 1m fiber optic and right angle cosine diffuser was used to analyze the performance of a commercial solar simulator as per IEC60904-9/ASTM E927-05. The DARWin SP Data Acquisition software contains subroutines to analyze class performance and create spectral match reports. Pulldown menus for CIE color space are also available. (B) The full range SR-3500 was used to measure outdoor solar radiance using a 4° lens foreoptic and white reflectance plate. Pull down menus allow for easy calculation of integrated energy measurement. (C, D) Even our entry level SR-500 Spectroradiometer comes will all necessary subroutines to generate high quality solar spectra. The figures below demonstrate the radiometric analysis of a commercial solar simulator taken at a customer site. All SPECTRAL EVOLUTION Spectroradiometers are lightweight and easy to carry anywhere.





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Meet our entire lineup of fast, full featured and flexible laboratory spectroradiometers– the easiest full spectrum instruments to set up and use– from SPECTRAL EVOLUTION

Model	SR-3500	SR-3501	SR-2500	SR-1900	SR-1901	SR-1600	SR-1100	SR-500
Spectral Range	350-1000nm	280-2500nm	350-2500nm	350-2500nm	280-1900nm	300-1700nm	320-1100nm	320-1100nm
Spectral Resolution	3.5nm (350-1000nm) 10nm@1500nm; 7nm@2100nm	4nm (280-1000nm) 10nm@1500nm; 7nm@2100nm	3.5nm (350-1000nm) 22nm@1500nm & 2100nm	3.5nm (350-1000nm) 10nm (1000-1900nm)	4nm (280-1000nm) 10nm (1000-1900nm)	5nm (300-1000nm) 10nm (1000-1700nm)	3.2nm	
Sampling Bandwidth	1.5nm (350-1000nm) 3.8nm@1500nm; 2.5nm@2100nm	1.5nm (280-1000nm) 3.8nm@1500nm; 2.5nm@2100nm	1.5nm (350-1000nm) 6nm@ 1500nm & 2100nm	1.5nm (350-1000nm) 3.8nm@1500nm	1.5nm 280-1000nm) 3.8nm@1500nm	1.5nm (300-1000nm) 3nm @ 1500nm	1.5nm (300-1000nm)	
Spectrometer Type	3 Diffraction Gratings		2 Diffraction Gratings				1 Diffraction Grating	
Detectors	512-element UV-enhanced Si Array							
	Two 256-element extended InGaAs arrays		256-element extended InGaAs array			256-element InGaAs Array		
Calibration	Factory calibrated for radiance and/or irradiance using NIST traceable source							
Noise Equivalence Radiance (1.2 meter fiber optic)	0.8x10^{-9} W/cm^2/nm/sr@400nm 1.2x10^{-9} W/cm^2/nm/sr@1500nm 1.8x10^{-9} W/cm^2/nm/sr@2100nm	0.8x10^{-9} W/cm^2/nm/sr @400nm 1.2x10^{-9} W/cm^2/nm/sr @1500nm 1.8 x10^{-9} W/cm^2/nm/sr @2100nm	0.8x10^{-9} W/cm^2/nm/sr @400nm 1.5x10^{-9} W/cm^2/nm/sr @1500nm 1.8x10^{-9} W/cm^2/nm/sr @2100nm	0.8x10^{-9} W/cm^2/nm/sr@400nm 1.2x10^{-9} W/cm^2/nm/sr@1500nm	0.8x10^{-9} W/cm^2/nm/sr @400nm 1.2x10^{-9} W/cm^2/nm/sr @1500nm		0.8x10^{-9} W/cm^2/nm/sr @400nm	
Software included	DARWin SP Data Acquisition							
Power	7.5V, 23W		7.5V, 15W				6-12V, 0.5W	
Dimensions	8.5" x 12" x 3.5"						5.5" x 2.5" x 6.5"	4" x 2" x 5"
Weight	less than 8 pounds						less than 3 pounds	less than 2 pounds
Interface	USB, Bluetooth							USB
Integration Time	7.5 - 1000 ms							
Shutter for dark scans	Yes							
Automatic exposure	Yes							
A/D Converter	16 bit							
λ Reproducibility	0.1nm							
λ Accuracy	0.5nm							