

AvaSpec-SolarXM

Solar Simulator Spectroradiometer



AvaSpec-SolarXM measuring solar simulator

Solar simulator characterization is made easy with the **AvaSpec-SolarXM** spectroradiometer system. This calibrated system consists of the AvaSpec-ULS2048X16-USB2 back-thinned CCD spectrometer, 2 meter fiber optic, 90 degree cosine receptor, dedicated software application and NIST traceable calibration. The system and software are fully compliant with ASTM method 927-05 for pulsed or steady state solar simulators providing A, B or C classification across six spectral bands

Spectrometer

The **AvaSpec-ULS2048X16-USB2** is a high sensitivity spectrometer based on our exclusive ultra-low stray light design. The instrument's detector provides superior UV and NIR response making it ideal for the spectral range from 360-1100 nm. The configuration provides 2.4 nm resolution from 360-1100 nm and a range of integration times from 1.82 ms up to 60 seconds. The instrument is fitted with a keyed FCPC entrance connector making it possible to connect and disconnect the fiber optic without violating the calibration for easy transport.

Fiber and Cosine Corrector

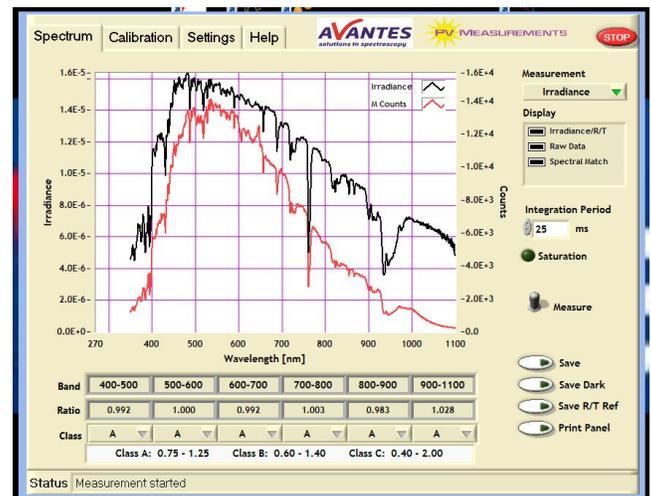
The fiber optic cable is designed with robustness in mind with a stainless steel interlocking jacketing surrounding a 400 micron core high OH silica/silica fiber and FCPC connector. The small form factor 90 degree cosine corrector makes it easy to collect light under your simulator no matter how small the illumination area.

Pulsed or Steady State

The AvaSpec SolarXM is suited for pulsed or steady state simulators. When used with a pulsed solar simulator an external trigger (TTL- 5V) may be supplied by the solar simulator or trigger may be done by the optional AvaTrigger external trigger device which provides a trigger within 300 ns of detecting a pulse. For steady state simulators the spectrometer and controlling software enables real time data collection over a range of integration times.

AvaSpec SolarXM Software

The controlling software for AvaSpec SolarXM is Windows based and 32 64 bit compatible. The software is very easy to use and facilitates calibration by the user, storing to text file and adjustment of all spectrometer parameters including (integration time, averaging, boxcar smoothing). The AvaSpec-SolarXM comes fully calibrated against a NIST traceable standard from 350-1050 nm.



Model	AvaSpec-SolarXM
Spectrometer	AvaSpec-ULS-2048X16-USB2; Slit 50, OSC Range: 360-1100 nm ; Resolution : 2.4 nm (FWHM); FCPC keyed connector
Signal to Noise	500:1
Calibration	Wavelength calibrated; Irradiance calibrated to NIST traceable standard (350-1050 nm)
Fiber Optic Cable Cosine Corrector	400 micron high OH silica fiber with BX stainless steel jacketing 1XSMA, 1X FCPC 90 degree cosine corrector