



StellarNet Releases New low cost Solar Measurement System

StellarNet announces a new SpectroRadiometer system designed to characterize and evaluate light emissions according to industry standards used for solar simulators and a variety of applications.

The complete NIST traceable system consists of a portable UV-VIS-NIR fiber optic spectrometer and fiber light receptor. The SpectraWiz® software now includes a new solar match panel that is part of the Light Monitor application, that is used to characterize and classify light emissions for solar simulators. The *Solar Match Monitor* application calculates spectral irradiance for each 100nm bin from 400-1100nm and compares the results to the ideal percent for each bin range per IEC/JIS/ASTM. The proximity of the measured data to the ideal values results in classification of the solar simulator lamp from A through D. The Light Monitor also measures UVabc regions below 400nm using both U.S. and European standards.

As photovoltaic cell manufacturers are driven to obtain higher production volumes and increased cell uniformity requirements, high performance solar simulation is a necessity. There are many companies offering high performance solar simulator lamps; these lamps provide the cell manufacturer measurement uniformity, comparability, and traceability. Likewise, organizations such as IEC, JIS, and ASTM have developed standards that define solar simulator performance in three key performance areas: spectral match to the solar spectrum, spatial uniformity of irradiance, and temporal stability.

SpectraWiz® also includes a multitude of radiometric and spectral analysis tools and calculations. User customizable SpectraWiz® LabVIEW programs and Excel programs for operation from Visual Basic Automation are included with every system. StellarNet miniature spectrometer systems are designed rugged with permanent alignment and no moving parts for shockproof and portable reliability. Plug and play USB-2 connection and powering options allows for ultimate measurement flexibility in any testing environment.

