# SOLAR® LIGHT

### Digital Sensors Total Irradiance Sensor PMA2158

Measures Full Spectrum Irradiance from Homogenizer-Equipped Multiport<sup>®</sup> Solar Simulators

Solar Light's **Model PMA2158 Digital Total Irradiance Sensor** is designed specifically for use with Homogenizer-Equipped Multiport<sup>®</sup> Solar Simulators in compliance with ISO and FDA regulations. The sensor may be used with any Solar Light PMA-Series Radiometer or DCS-Series Automated Dose Controller. For testing per ISO 24442:2011(E) and ISO/CD 24444, total irradiance (UV, VIS, and near-IR) must not exceed 1600 W/m<sup>2</sup>. For testing per the FDA Final Rule, total irradiance (UV, VIS, and near-IR) must not exceed 1600 W/m<sup>2</sup>. For testing per the FDA Final Rule, total irradiance (UV, VIS, and near-IR) must not exceed 1500 W/m<sup>2</sup>. These regulations are in place to avoid strong irradiance levels, which may lead to an excessive feeling of heat or pain in the irradiated skin of subjects.



#### Applications

- In Vivo, UVA and SPF Testing
- Ensure Compliance to ISO/FDA Total Irradiance Limits

#### **Features and Benefits**

- Excellent Long-Term Stability
- NIST Traceable Calibration
- Radiometric Units







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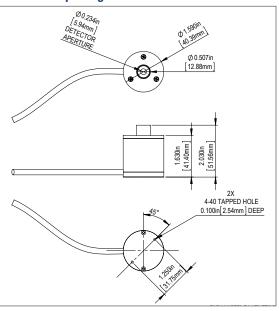
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SPECIFICATIONS	
Spectral Response	Calibrated Spectral Response, 250-1800 nm
Range	2,000 [W/m <sup>2</sup> ] or 200 [mW/cm <sup>2</sup> ]
<b>Display Resolution</b>	0.01 [W/m <sup>2</sup> ] or 0.001 [mW/cm <sup>2</sup> ]
<b>Operating Environment</b>	32 to 120°F (0 to +50°C)
Temperature Coefficient	Negligible
Cable Length	6ft. (1.82m) Straight Cable
Dimension and Weight	*See Outline Drawing Below

Part Number: 210121 Revision Level: C Specifications subject to change without notice.

#### Liquid Light Guide Sensor 2158



Est. Weight: 4 oz. (113 g)



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Since 1967, Solar Light Company, LLC has been recognized worldwide as America's premier manufacturer of Precision Solar Simulators and Light Sources, Light Measurement Instrumentation, UV Transmittance Analyzers, Meteorological Instrumentation, and Digital and Analog Sensors. Our advanced line of UV, visible, and IR radiometers and light meters measure laboratory, industrial, environmental, and health related light levels with NIST traceable accuracy. Column ozone, aerosol, and water vapor thickness measurements, in addition to long-term global ultraviolet radiation studies all over the world are performed using our atmospheric line of instrumentation. Solar Light also provides NIST traceable spectroradiometric analyses, calibrations for light meters and light sources, accelerated ultraviolet radiation degradation testing of materials, and OEM instrumentation and monitors. Please visit our website for more details, specifications, and pictures!



**State Of The Art Solar Simulators** available in 150-1000+ watt UV or AM variations for a variety of applications including PV Cell Testing, Materials Testing, Pre-Irradiation for *In Vitro* Broad Spectrum Sunscreen Testing, SPF Testing, and much more.



**Multi-Functional Professional Grade Radiometers** available with and without data logging, and compatible with over 130 Solar Light PMA-Series Sensors to measure UV, Visible and IR wavelengths. Specialty Meters also available to measure UV Radiation, SUV/UVA, Scotopic/Photopic Spectra, and much more.



**Advanced NIST-Traceable Sensors** for accurate measurement of UVA, UVB, UVA+B, UVC, Visible, IR, Photostability, Temperature, and Custom Wavelength – well over 130 models in both digital and analog configurations, all compatible with our Radiometers.



**Ultraviolet Transmittance Analyzers** available as complete integrated turnkey systems to meet the latest ISO24443 requirements.



**Handheld Ozonometers and Sunphotometers** for fast and dependable Column Ozone, Aerosol, and Water Vapor Thickness measurements, in addition to long-term global ultraviolet radiation studies.

