

Solar Light's [Model PMA2114 Digital UVA Sensor With Beam Splitter Adapter](#) allows direct coupling with the beam-splitter on the subject stop available for our legacy 15S-Series and modern 16S-Series Solar Simulators. Its spectral response covers the 320 to 400nm range. The measured irradiance is displayed in [mW/cm²] or [W/m²]. Consequently, the integrated dose is shown in [Joules/cm²] or [kJoules/m²]. The PMA2114 has a resolution of 0.1 [mW/cm²] and a full scale of 400 [mW/cm²] allowing measurement of very weak and very strong signals using the same sensor. The effect of stray light is negligible.



Applications

- Clinical Studies
- Phototherapy
- UVA Protection Factor *in vivo* Testing
- UVA Protection Factor *in vitro* Testing

Features and Benefits

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

Common Sources of UVA Include:

- Low Pressure Fluorescent Lamps
- High Pressure Mercury and Metal Halide Lamps
- High Pressure Xenon Lamps
- Sunlight
- Solar Light Model 601 Multiport[®] Solar Simulator
- Solar Light Model 16S Singleport with LLG

SPECIFICATIONS	
Spectral Response	320-400nm, Figure 1
Range	400 [mW/cm ²] or 4,000 [W/m ²]
Display Resolution	0.1 [W/cm ²] or 1 [mW/cm ²]
Operating Environment	32 to 120°F (0 to +50°C)
Temperature Coefficient	Negligible
Cable Length	6 ft. Straight Cable (1.82m)
Dimensions and Weight	*See Outline Drawing
REFERENCES	
The biological effects of UV-A radiation - Edited by F. Urbach and R.W. Gange, Praeger Publishers, New York, 1986	
Nichodemus F., "Self study manual on optical radiation measurements", NBS Technical Note 910-1 (1976)	

Part Number: 210003

Revision Level: D

Specifications subject to change without notice.

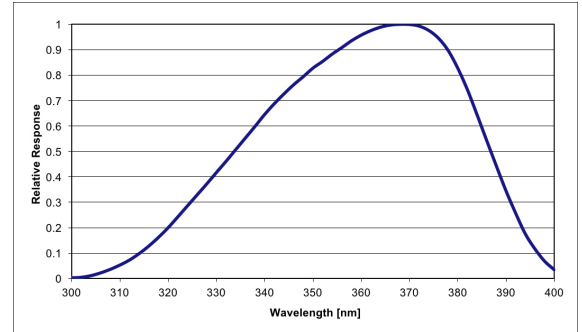


Fig. 1. Linear Spectral Response

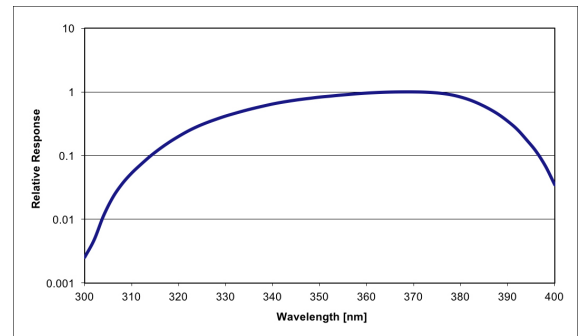
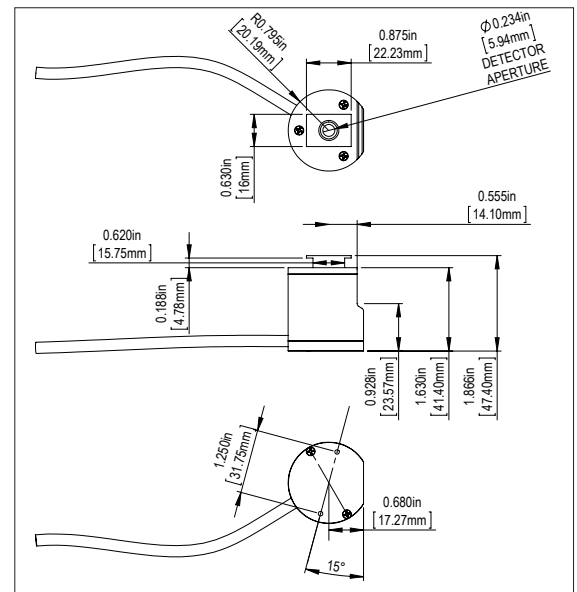


Fig. 2. Log Spectral Response

Sensor With Beam Splitter PMA2114



Est. Weight: 4 oz. (113 g)

Measures Ultraviolet Radiation 320-400nm from
DCS Subject Stop-Equipped Single Port Simulator

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.