

Solar Light's [Model PMA2122 Digital Germicidal UVC Sensor](#) provides fast and accurate irradiance measurements of the effective germicidal radiation. Ultraviolet radiation at 253.7nm has been used in germicidal applications for several decades. Microorganisms in air and water can be killed using UV or a combination of UV and ozone. The UVC-producing germicidal lamps in purification systems must be continually monitored to ensure that the bacteria are receiving a lethal dose of radiation. When properly monitored, these expensive lamps can be utilized to their maximum useful life before replacement. The PMA2122 sensors can also be used to ensure that replacement lamps are performing to specification. Several packages are available for different types of environments, including standard, low profile, and weatherproof.



Applications

- Water Treatment Plants
- Purification Systems
- Environmental Testing

Features and Benefits

- High Sensitivity
- Cosine Corrected
- NIST Traceable Calibration
- Ease of Use
- Selectable Units

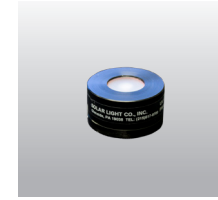




Standard Chassis - IP60
1.8" (45.8mm) High x 1.6" (40.6mm) Diameter



Weatherproof Standard Chassis - IP68
Can be submersed up to 3 meters deep
1.8" (45.8mm) High x 1.6" (40.6mm) Diameter



Low Profile Chassis - IP60
0.8" (21mm) High x 1.6" (40.6mm) Diameter

Options:

- Tripod Mounting Plate
- Weatherproof Chassis (submersible up to 3 meters)
- Low Profile Chassis
- OEM Chassis for High Quantity Applications
- Analog Model Also Available (Model PMA1122)

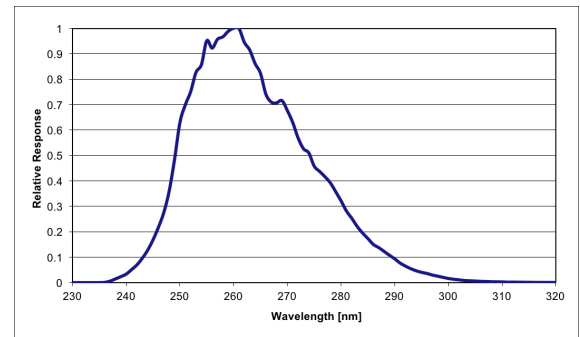


Fig. 1. Linear Spectral Response

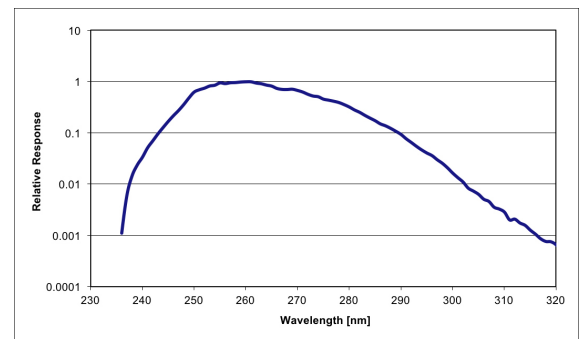


Fig. 2. Log Spectral Response

SPECIFICATIONS

Spectral Response	249-259nm, Figure 1
Range	*See model chart on the next page
Display Resolution	*See model chart on the next page
Operating Environment	32 to 120°F (0 to +50°C)
Temperature Coefficient	Negligible
Cable Length	*See cable length chart below
Dimensions and Weight	*See outline drawings

REFERENCES

ACGIH technical Affairs Office, 1330 Kemper Meadow Drive, Cincinnati, OH 45240

Part Number: 210010

Revision Level: C

Specifications subject to change without notice.

CABLE LENGTHS

Standard Chassis	6ft Straight Cable (1.82m) (Custom Lengths Available)
Weatherproof Chassis	15ft Standard Cable (4.57m) (Custom Lengths Available)
Low Profile Chassis	6ft Straight Cable (1.82m) (Custom Lengths Available)

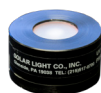
Partial Model Selection Chart



STANDARD CHASSIS - IP60		
Model	Range	Display Resolution
PMA2122	2,000 [$\mu\text{W}/\text{cm}^2$] or 20,000 [mW/m^2]	0.01 [$\mu\text{W}/\text{cm}^2$] or 0.1 [mW/m^2]
PMA2122G	20 [mW/cm^2] or 200 [W/m^2]	0.001 [mW/cm^2] or 0.001 [W/m^2]



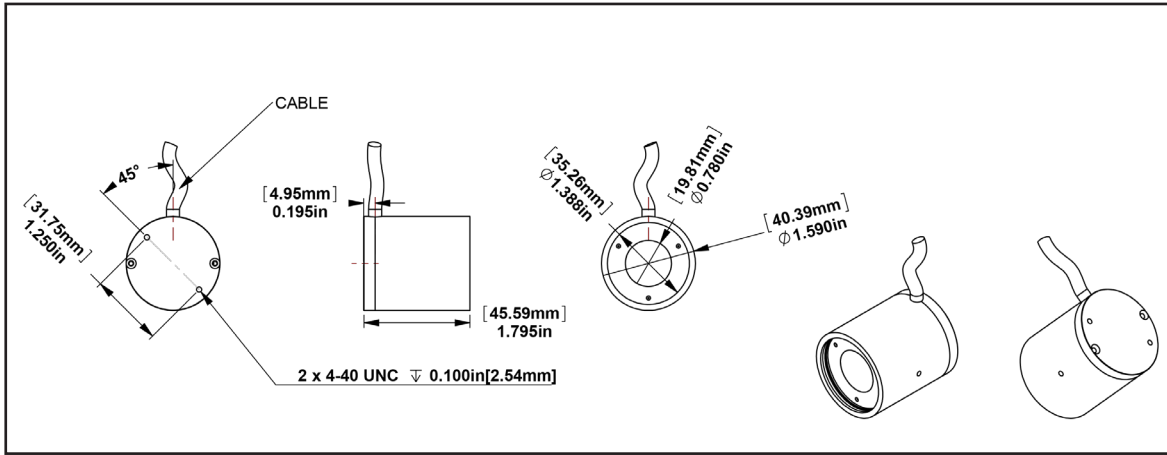
WEATHERPROOF CHASSIS - IP68		
Model	Range	Display Resolution
PMA2122-WP	2,000 [$\mu\text{W}/\text{cm}^2$] or 20,000 [mW/m^2]	0.01 [$\mu\text{W}/\text{cm}^2$] or 0.1 [mW/m^2]
PMA2122G-WP	20 [mW/cm^2] or 200 [W/m^2]	0.001 [mW/cm^2] or 0.001 [W/m^2]



LOW PROFILE CHASSIS - IP60		
Model	Range	Display Resolution
PMA2122-F	2,000 [$\mu\text{W}/\text{cm}^2$] or 20,000 [mW/m^2]	0.01 [$\mu\text{W}/\text{cm}^2$] or 0.1 [mW/m^2]

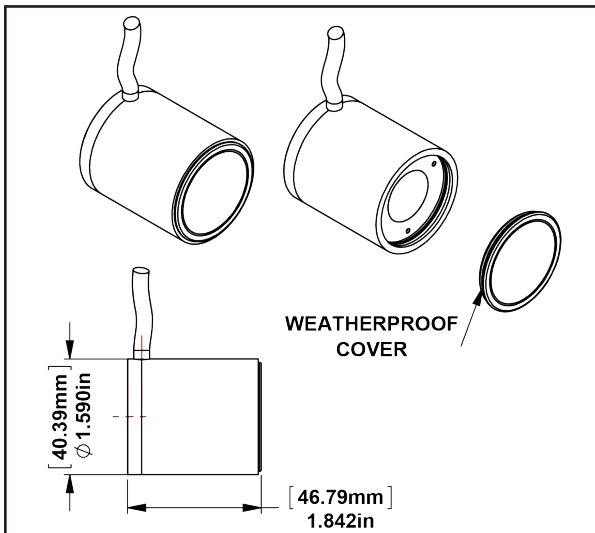
Custom ranges, cable lengths, and cable types are available upon request – please consult factory for details

Standard Chassis



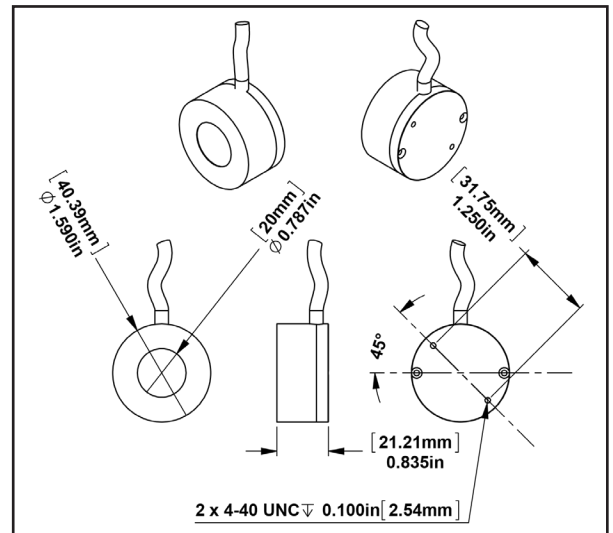
Est. Weight: 4 oz. (113 g)

Weatherproof Chassis



Est. Weight: 4.2 oz. (119 g)

Low Profile Chassis



Est. Weight: 2.2 oz. (62 g)

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.