

Solarmeter® Model 8.0

UVC Meter • 0-1999 $\mu\text{W}/\text{cm}^2$

Handheld Digital UVC Radiometer
with Integral Sensor



Applications

- Monitoring UVC Germicidal Lamp Intensity & Aging
- Testing Eyewear UVC Blocking Capabilities
- Measuring Germicidal Lamp Fixture Leakage

Features and Benefits

- Compact, Handheld, and Durable
- Simple Single-Button Operation
- NIST Traceable Accuracy
- LCD Display
- Made In USA

Sensor

Silicon Diode (SiC) Photodiode in hermetically sealed UV glass window cap. Interference filter blocks UV above 280nm as shown on Spectral Sensitivity Graph.

Meter Operation

To operate your Solarmeter, aim the sensor window located on the top panel of the meter directly at a UV source. Press and hold the push-button switch on the face of the meter. For best results take note of the distance the reading was taken from the UV source in order to ensure repeatable results.

Battery operation voltage is viable from 9V down to 6.5V. Below 6.5V, the numbers on the LCD display will begin to dim, indicating the need for battery replacement. Under typical service load, a standard 9V battery will last approximately 2 years.

Proper Usage of Solarmeter® Ultraviolet Radiometer

- When checking UVC sources, wear face, hand, and eye protection and cover any skin that may be exposed.
- Allow lights to warm-up prior to taking readings (at least 5 min).
- For individual light intensity, hold meter close to LED or lamp.
- For effective light intensity, hold meter at working distance from the light source.
- When checking aging of lights, keep measuring distance and locations constant.
- Lights should be replaced when output drops to about 70% of their original (new) readings.



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General

- Do not subject the meter to extremes in temperature, humidity, shock or dust.
- Use a dry, soft cloth to clean the instrument. Keep sensor free of oil, dirt, etc.

Note: Sensor is completely solar blind to UVB, UVA, visible and IR. Meter will read 000 pointing at non UVC sources including sun, flood lamps etc.

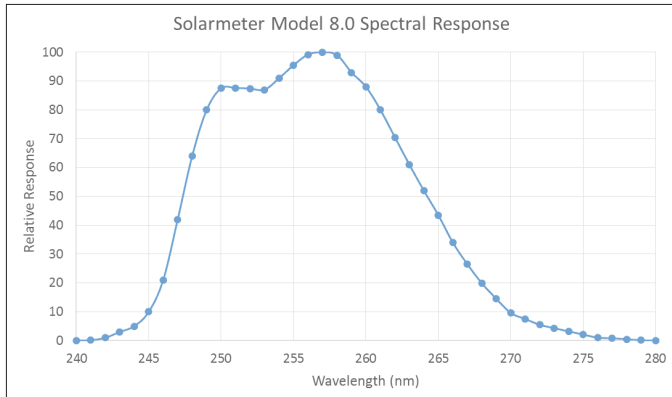


Fig. 1. Model 8.0 Spectral Response

SPECIFICATIONS

Model	8.0
Irradiation Range	0-1999 $\mu\text{W}/\text{cm}^2$ UVC
Response	246-262 nm UVC
Resolution	1 $\mu\text{W}/\text{cm}^2$
Conversion Rate	3.0 Readings / Sec
Display	3.5 Digit LCD
Digit Size	0.4" / 10.2 mm
Operational Temperature	32°F to 100°F / 0°C to 37.8°C
Operational Humidity	5% to 90% RH
Accuracy	$\pm 10\%$ Ref. NIST
Meter Dimensions	4.2L x 2.4W x 0.9D in / 106.7L x 61W x 22.9D mm
Remote Probe Dimensions	0.8H x 1.6D in / 210H x 40.6D mm
Weight	4.5 oz / 128g Including Battery
Power Source	9-Volt DC Battery
Lens	UV Glass
Diffuser	None
Detector	SIC Photodiode w/IF
Agency Approval	CE Mark

Rev: sm/sensors/model8.0_5/2018
Specifications subject to change without notice.

Solar Light Company, Inc. is recognized worldwide for over 50 years as America's premier manufacturer of precision ultraviolet light sources, solar simulators, and radiometers. Our standard 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, OEM instrumentation and monitors, and accelerated ultraviolet radiation degradation testing of materials.

