

# Radiometer • UVC

## MODEL 8.0

### A Hand Held Digital UV Radiometer with Integral Sensor



#### Applications

- Germicidal Lamp Intensity and Aging
- Eye Wear UV Block Comparison
- Germicidal Lamp Fixture Light Leak

#### Features and Benefits

- Hand Held Integral Sensor
- Accurate Calibration
- NIST Traceable
- Compact and Durable
- LCD Readout

#### 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 around 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.

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- Lights should be replaced when output drops to about 70% of their original (new) readings.

### 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.

| Specifications        |                                      |
|-----------------------|--------------------------------------|
| Irradiation Range     | 0-1999 $\mu\text{W}/\text{cm}^2$ UVC |
| Response              | $254 \pm 8$ nm                       |
| Resolution            | $1 \mu\text{W}/\text{cm}^2$          |
| Conversion Rate       | 3.0 Readings/Sec                     |
| Display               | 3.5 Digit LCD                        |
| Digit Size            | 0.4 inch High                        |
| Operation Temperature | 32° F to 90° F                       |
| Operation Humidity    | 5% to 90% RH                         |
| Accuracy              | $\pm 10\%$ to NIST Ref. Meter        |
| Dimensions            | 4.2L x 2.4W x 0.9D (in.)             |
| Weight                | 4.5 OZ. (Including Battery)          |
| Power Source          | 9-Volt DC Battery                    |
| Lens                  | UV Glass                             |
| Diffuser              | None                                 |
| Detector              | SiC/Shortpass I.F.                   |
| Ordering Information  |                                      |
| Model 8.0             | UVC Radiometer                       |

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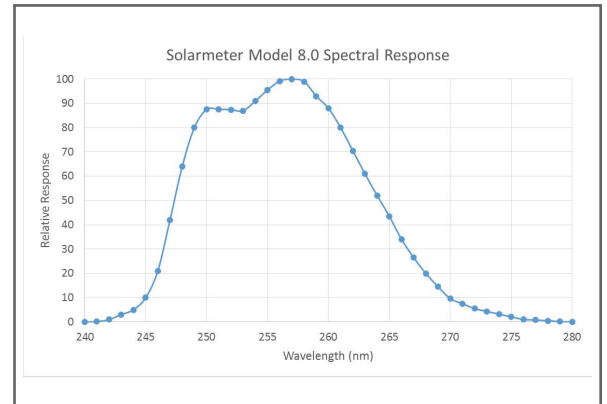


Fig. 1. Model 8.0 Spectral Response