Solarmeter[®] Model 6.5

UV Index Meter • 0-199.9 UV Index

Handheld Digital UV Index Radiometer with Integral Sensor



Applications

- Monitoring Reptile Lamp Intensity and Aging
- Monitoring UV Lamp Intensity and Aging
- Monitoring Instantaneous UV Index
- Measuring Solar Intensity In Terms Of UV Index
- UV Index Tracking Over Time

Features and Benefits

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







Sensor

For Reptile or Tanning UV Lamps and Sun

Silicon Carbide (SiC) Photodiode under hermetically sealed UV glass window cap, with Eeff (Erythemally Effective) filter and diffuser. Ideal for reptile and tanning lamp applications, as well as sunlight.

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® UV Index Radiometer

To obtain instantaneous UV index, the following instructions will provide the most consistent and accurate results:

- Stand clear of buildings, trees, etc. to obtain a "full sky" field of view.
- Hold the meter vertically out in front of your body.
- Press and hold button on the front of the meter. This value represents the instantaneous UV index.
- The highest UVI values typically occur when the sky is a deep blue color, and sometimes when the sun is between scattered white "puffy" clouds. Take extra precaution under these conditions to reduce sunburn potential.



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Proper Usage (continued)

Note that various cloud and haze conditions reduce the UV index. When partly cloudy, take readings often, and average clear with cloudy readings to correlate with actual UV index. Take care in hazy or slightly overcast conditions, because although the direct UV reads less than when sky is clear, the diffuse UV can be higher as seen by pointing the meter in various directions.

- Do not subject the meter to extremes in temperature, humidity, shock or dust. If accidentally exposed to extreme humidity or damp conditions, abnormally high readings may occur. Allowing the meter to dry out naturally or placing it in a bag with silica gel will restore normal function.
- Use a dry, soft cloth to clean the instrument. Keep sensor free of oil, dirt, etc.







Fig. 2. Model 6.5 Spectral Response (Logarithmic)

SPECIFICATIONS	
Model	6.5
Irradiation Range	0-199.9 UV Index
Response	280-400 nm Diffey Erythemal Action Spectrum
Resolution	0.1 UV Index
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 80% RH
Accuracy	±10% Ref. NIST
Meter Dimensions	4.2L x 2.4W x 0.9D in / 106.7L x 61W x 22.9D mm
Weight	4.5 oz / 128g Including Battery
Power Source	9-Volt DC Battery
Lens	UV Glass
Diffuser	Teflon
Agency Approval	CE Mark

Rev: sm/sensors/model6.5_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.