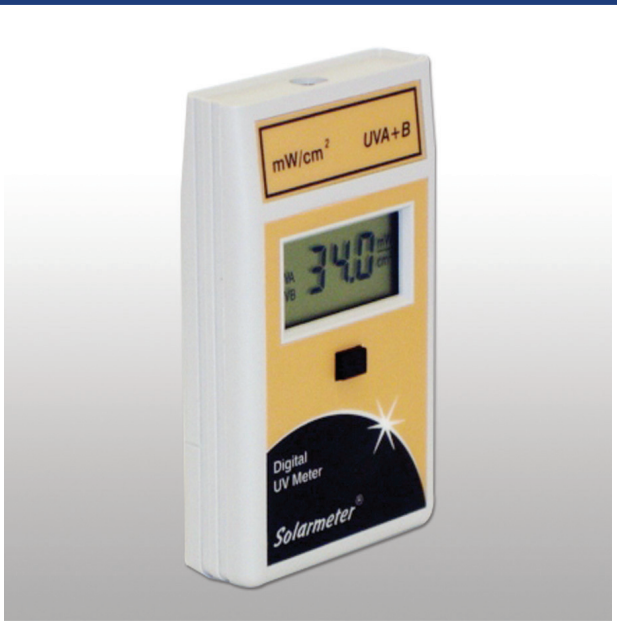
Radiometer • UVA & UVB
MODEL 5.0



A Hand Held Digital UVA & UVB Radiometer with Integral Sensor

Applications
- Lamp UV Intensity and Aging
- Acrylic Shield Transmission
- Eye Wear UVB Block Comparison
- Window Film/Tint Transmission

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

Sensor
The sensor consists of a GaAsP photodiode chip and a UV filter. It is completely insensitive to visible light longer than 400nm and infrared radiation because its spectral response only covers the UV region from 260-400nm. Applications include solar UV detection as a spectral response is well matched to the solar UV spectrum.

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 push-button switch on face of unit. Am sensor window in top panel of meter directly at UV source. Note reading on LCD and record if considered.

Battery operation voltage is 9V down to 6.5V. Below 6.5V the LCD numbers will begin to dim, indicating the need for a battery replacement. Under “typical” service load, the battery should last about 2 years.

Proper Usage of Solarmeter® Ultraviolet Meter for Lamp Aging Tests
- Wear eye protection when checking UV lamps (Glasses that provide wrap around protection are ideal).
- Allow lamps to warm-up prior to taking readings (at least 5 minutes).

SOLAR®
LIGHT

SOLARMETER® • UVMINDER®
MULTIPORT® • MICROTOPS®

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Lamp Aging

- When checking lamp aging, make sure to use the same location and distance to ensure accurate readings.
- Lamps should be replaced when output drops to about 70% of their original (new) readings.

Curing Lamps

- For curing lamps, hold the meter at the distance you intend your work piece to be cured.

Tanning Lamps

- To take the overall reading at the center of the tanning bed, place meter pointing up with canopy closed.
- To take individual lamp readings, hold the meter against the acrylic with canopy open.
- If you are unsure of original lamp values, replace two adjacent lamps identical new ones and compare.
- This meter is primarily "seeing" the UVA "browning" rays. For erythemal readings use Model 7.0 MED/hr meter.

Acrylic Testing

- For acrylic testing, take readings with and without acrylic at a fixed distance. Model 6.0 is best for acrylic tests.

General

- When comparing different types of lamps consider readings to be relative rather than absolute.
- Lamps that peak near 365 nm (newer designs) will read higher than lamps that peak near 350 nm.
- 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.

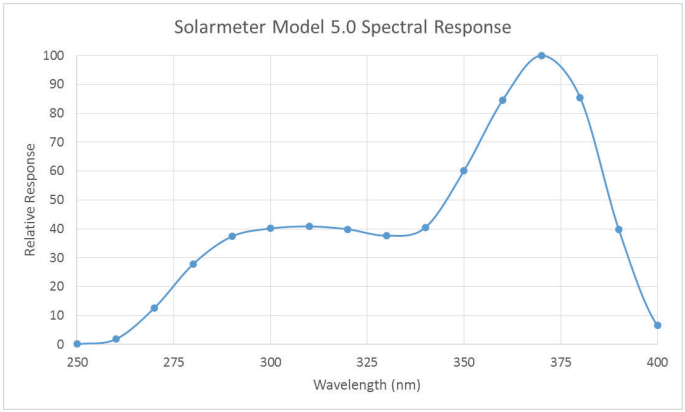

Fig. 1. Model 5.0 UVA & UVB

Specifications	
Irradiation Range	0-199.9 mW/cm² Total UV
Response	280-400nm (UVB through UVA)
Resolution	0.1 mW/cm²
Conversion Rate	3.0 Readings/Sec
Display	3.5 Digit LCD
Digit Size	0.4 inch high
Operation Temperature	32° F to 100° F
Operation Humidity	5% to 80% RH
Accuracy	±5% to NIST Ref. Meter
Dimensions	4.2L x 2.4W x 0.9D (in.)
Weight	4.5 OZ (incl. batt.)
Power Source	9-Volt DC Battery
Lens	UVT Acrylic Diffuser
Ordering Information	
Model 5.0	UVA & UVB Radiometer

SM/Sensors/Model 5.0_09/2015

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