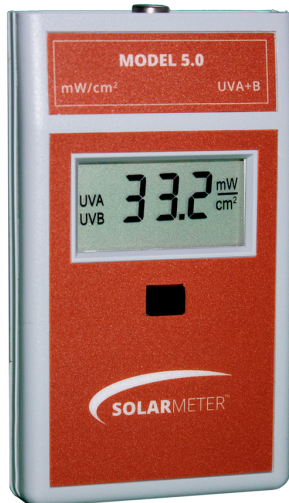


SOLARMETER™

MODEL 5.0

Total UV (A+B) Meter • 0-199.9 mW/cm²

Handheld Digital UVA & UVB Radiometer
with Integral Sensor



APPLICATIONS

- Monitoring UV Lamp Intensity and Aging
- Testing Acrylic Shield Transmission
- Monitoring PUVA Therapy Lamp Intensity and Aging
- Testing Eyewear UV Blocking Capabilities
- Measuring Outdoor UV
- Testing Window Film/Tint Transmission
- Choose Standard Model 5.0 For Outdoor / High Intensity Applications
- Choose Sensitive Model 5.7 For Indoor / Low Intensity Applications



ENVIRONMENT



OUTDOOR
ACTIVITIES

FEATURES AND BENEFITS

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

SENSOR

The semiconductor UV sensor consists of a GaAsP photodiode chip which is completely insensitive to visible light longer than 400nm and infrared radiation, since its spectral response covers only the UV region from 280 to 400nm. Applications include solar UV detection (as the spectral response is well matched to the solar UV spectrum) and tanning lamps peaking near 365nm ("new era" fluorescent and "high pressure" HID.)

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

- Wear eye protection when checking UV lamps. Glasses that provide wrap around protection are ideal.
- Allow lights to warm-up prior to taking readings (at least 5 min).

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 50% of their original (new) readings.

100 East Glenside Avenue
Glenside, PA 19038 USA

SolarMeter.com

1.215.517.8700

SOLARMETER™

ISO 9001
2015



MODEL 5.0

Total UV (A+B) Meter • 0-199.9 mW/cm²

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 erythral readings use Model 7.0 MED/hr meter.

ACRYLIC TESTING

- For acrylic testing, take readings with and without acrylic at a fixed distance.

GENERAL

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

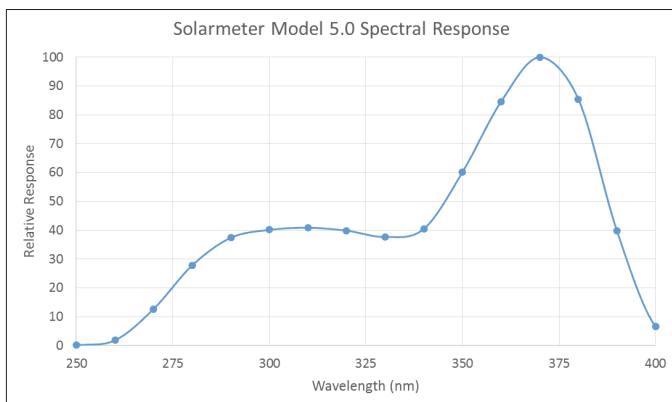


Fig. 1. Model 5.0 Spectral Response

SPECIFICATIONS

MODEL	5.0
IRRADIATION RANGE (STANDARD MODEL)	0-199.9 mW/cm ² Total UV
IRRADIATION RANGE (MODEL 5.0HP FOR HIGH PRESSURE LAMPS - SPECIAL ORDER MODEL)	0-1999 mW/cm ² Total UV
IRRADIATION RANGE (MODEL 5.0SF FOR SCIENCE FAIR APPLICATIONS - SPECIAL ORDER MODEL)	0-199.9 W/m ² Total UV
RESPONSE	280-400 nm (UVB through UVA)
RESOLUTION	0.1 mW/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 80% RH
ACCURACY	±5% 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	Acrylic
DIFFUSER	Teflon
AGENCY APPROVAL	CE Mark

REV B | MODEL 5.0 | Jan 2021
Specifications subject to change without notice.

SOLARMETER™ by Solar Light Company Inc. is the industry standard for UV and visible light radiometers that measure both indoor and outdoor light sources. Our NIST Traceable meters are used to monitor lamp irradiance and aging for UV sterilization, reptile husbandry, indoor tanning, red/blue light phototherapy, UV curing and UV Index.

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