

# Solarmeter Model 9.6

Visible Red Light Meter • 0-199.9 mW/cm<sup>2</sup>

Handheld Digital Red Light Radiometer  
with Integral Sensor



## Applications

- Monitoring Red Fluorescent Lamp Intensity and Aging
- Monitoring Red Light / LED Intensity and Aging
- Monitoring Red HID Lamp Intensity and Aging
- Monitoring Collagen Stimulation Lamp Intensity and Aging
- Monitoring Wound Healing Lamp Intensity and Aging
- Measuring Photosynthetic Action Spectrum Red Band
- Measuring Outdoor Red Light

## Features and Benefits

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

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## Sensor

GaAsP Photodiode packaged in hermetically sealed glass window cap. Filter used to narrow bandwidth as shown on Spectral Response 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<sup>®</sup> Red Light Radiometer

- Wear tinted eye protection when checking intense light sources.
- 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.

**Proper Usage (continued)**

- If unsure of what new values were, replace an adjacent light with a new identical one and compare the two.
- 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.

**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.

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**Solarmeter Specifications**

Radiometer	
Model	9.6
Irradiation Range	0-199.9 mW/cm <sup>2</sup> Red Light
Peak Response	97% at 633 nm
Response	577-661 nm Red Light
Resolution	0.1 mW/cm <sup>2</sup>
Conversion Rate	3.0 Readings / Sec
Display	3.5 Digit LCD
Digit Size	0.4" / 10.2 mm
Operational Temperature	+32°-100°F / 0°-37.8°C
Operational Humidity	5% to 90% RH
Accuracy	±10% Ref. Nist
Dimensions	4.2L x 2.4W x 0.9D in / 106.7L x 61W x 22.9D mm
Weight	4.5 oz / 128 g Including Battery
Power Source	9-Volt DC Battery
Lens	UV Glass
Diffuser	Teflon
Detector	GaAsP Photodiode with Filter
Agency Approval	CE Mark

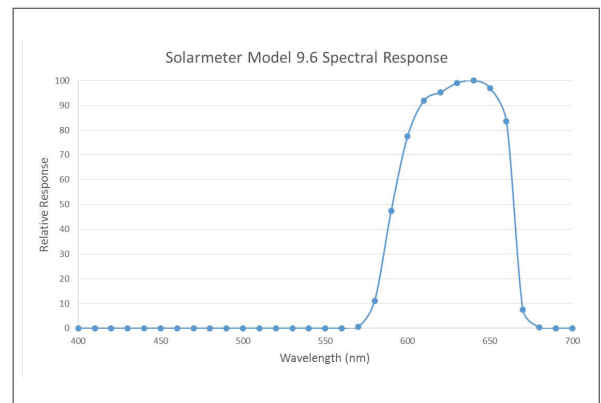


Fig. 1. Model 9.6 Spectral Response