

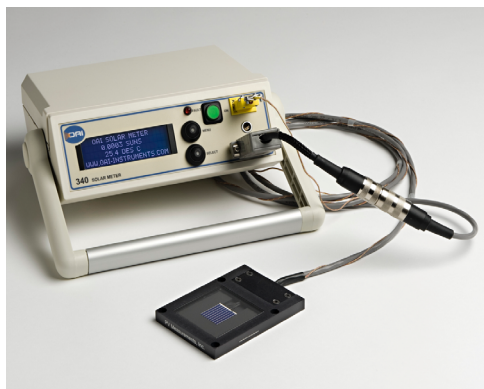


PV Test Division

**MEASURE
IRRADIANCE
OF HIGH SPEED
FLASH LAMPS**

TriSOL™

Solar Power Meter for Flash



Increase Production Uptime with OAI's Flash Meter & Calibrated Solar Reference Cell

Unique Features

- ◆ **Sample at speeds up to 4000 Hz for Flash Lamp Measurement**
- ◆ **Integrates with calibrated reference cell**
- ◆ **Display temperature readings in °F or °C**
- ◆ **Measure and display continuous or peak readings**
- ◆ **Connects to USB 2.0 port for data collection**
- ◆ **Displays reference cell characteristics, including cell type and size, window type, and temperature measurement device type**
- ◆ **Powered by standard wall current or convenient, rechargeable Lithium Ion battery pack**
- ◆ **Stores and displays average of recent peak measurements (user setable)**
- ◆ **Comes with 2 separate Thermal Measurement Connector types (k type thermocouples and rtd) - Designed for use with either type**

OAI's TriSOL Solar Power Meter for Flash is a versatile measurement tool for measuring the irradiance in "suns" of Flash Solar Simulators used in production of solar panels. In the production line, this meter calibrates the flash solar simulator allowing for constant and repeatable irradiance output. By sampling at speeds up to 4000 Hz, the flash pulse temporal profile can be recorded in the meter's memory and downloaded to a USB 2.0 port on a PC for further analysis. Because the meter can be battery operated, multiple production flash solar simulators can be tested and compared in a short amount of time; thus leading to greater production line consistency and throughput.

OAI provides the TriSOL Flash Power Meter along with a calibrated solar reference cell. The Solar reference cell, equipped with a thermocouple, is assembled in accordance with IEC - 60904-2. Certification is by NIST to the ISO-17025 standard and is traceable to National Renewable Energy Lab (NREL).

With over 35 years of proven light source technology, OAI's TriSOL family of products deliver repeatable, reliable, cost effective solutions for a wide range of solar simulation and testing. Other TriSOL products include Solar Simulators, I-V Testers, and Test fixtures. All products are supported by OAI's global service and application engineering network.

OAI Solar Power Meter for Flash



The OAI Solar Energy Meter measures solar simulator irradiance in "sun" units, with one sun equaling 1000 W/m² at 25 °C at Airmass 1.5 Global conditions. This device is ideal for calibrating Flash production and regular solar simulators under standard conditions. The OAI Solar Power Meter features two separate Thermal Measurement Connector types (k-type thermocouples and rtd) -Designed for use with either type. The meter also provides an external connection for different calibrated reference cells and temperature sensor types.

SPECIFICATIONS

Meter Dimensions	8.07" (W) x 3.12" (H) x 5.85-6.64" (D)
Weight	2.23 lb (with battery)
Operating Temperature	10 °C - 40 °C
Operating Humidity	0 – 90% RH Non-Condensing
Irradiance Display	
Range	0 – 6.000 Sun (1.5 Global Air)
Accuracy	±0.05% @ 1.0000 Sun ±0.0010 @ 24 °C ±0.05% @ 0.1000 Sun - 1.4815 Sun @ 24 °C ±0.09% @ 1.4815 Sun - 2.9630 Sun @ 24 °C ±0.50% @ 3.0000 Sun - 6.0000 Sun @ 24 °C
Resolution	0.0001 Sun @ 0 – 1.4815 Sun 0.001 Sun @ 1.430 - 6.000 Sun
Settling Time	<1 sec. for <0.25% (= 6τ)
Sampling Rate	4000 Readings / second
Auto Ranging	2 Ranges
Temperature Display	
Temperature Range	0 – 200 °C
Accuracy for TC	±1.5 °C Typical ±1.8 °C Max @ 22 – 28 °C ±0.5 °C Typical ±2.5 °C Max @ 10 – 40 °C
Resolution	0.01 °C
Settling Time	<1 sec. for <0.20% (= 6τ)
Sampling Rate	5 Readings / second
AC/DC Adapter	
AC Power	100-240V AC, 1.5A, 50-60 Hz
DC Power Input	24V, 2.7A
Compliance	UL, CE IV, RoSH, Indoor Dry Location Use Only

Preliminary specifications are subject to change without notice

685 River Oaks Parkway
San Jose, CA 95134 USA
Phone (408) 232-0600 • Toll free (800) 843-8259
Fax (408) 433-9904 • sales@oainet.com