

Solar simulator



Product Name : **Oriel Sol3A Class AAA Solar Simulators**

Product Type : Solar Simulator

Product Model : Sol3A

Brands : Newport

Applications : Photovoltaic Energy, Optical Communication, New Materials & New Energy Research

Photovoltaic standards mandate that Class AAA solar simulators meet demanding requirements in three key performance areas: spectral match to the solar spectrum, spatial non-uniformity of irradiance, and temporal instability of irradiance. There are three standards that define solar simulator performance.

Class AAA Standards and Specifications:

Organization	IEC	JIS	ASTM
Performance Parameter	60904-9-2007	C 8912	E92-05
Spectral Match (fraction of ideal percentage)	0.75 - 1.25	0.75 - 1.25	0.75 - 1.25
Non-Uniformity of Irradiance	2.0%	<±2%	2%
Temporal Instability	0.5% STI <2.0% LTI	<±1%	2%

Oriel Class AAA Solar Simulator Key Components:

Illuminator Housing: The illuminator housing provides a safe enclosure for the lamp. Its powder coated flat black finish provides a durable surface that also minimizes stray light. It is equipped with safety interlock systems to ensure operator and system safety.

Integrated Shutter: The Oriel Sol3A Solar Simulator includes an upgraded shutter for production-environment operation. The newly designed shutter for the Class AAA systems is a rugged, single-blade shutter designed for >1 million cycles.

Xenon Arc Lamp: The Oriel Sol3A Solar Simulator source is a CW system. This enables testing of all cell materials unlike flash-lamp based systems that are limited by the response time of the material allowing the cell to be soaked at a constant light level prior to testing. The lamp is an ozone-free xenon short arc lamp.

Air Mass 1.5G Filter: The combination of lamp and air mass filter produces the characteristic Class AAA spectra. Our Air Mass 1.5G Filter retains its optical properties under the conditions encountered without degradation of the filter.

Keithley 2400:



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Keithley's Series 2400 Source Measure Unit (SMU) Instruments are designed specifically for test applications that demand tightly coupled sourcing and measurement. All SourceMeter models provide precision voltage and current sourcing as well as measurement capabilities.

Contact Us

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