

Sirius

Sirius Xenon Solar Simulators

Sirius solar simulators use short-arc xenon lamps with AM1.5G filtering, adjustable irradiance and a motorised shutter. Select a 40 × 40 mm or 60 × 60 mm illuminated field and the output direction required by the experiment.

Best for: Controlled solar illumination for cell characterisation and photochemical experiments.



0.2–1.2 sun Irradiance adjustment	40 / 60 mm square Illuminated area
≤ 2% Non-uniformity	±4° Beam divergence

Representative Sirius solar simulator views; output direction and illuminated area depend on the selected model.

Overview

A stabilised xenon source and spectral filter provide repeatable laboratory illumination. A lens-array homogeniser improves field uniformity, while a remote motorised shutter controls exposure.

The model-specific table gives ≤ 1% instability for the SS150A series and ≤ 2% for the SS300A series. Choose output direction and field size together when planning the sample fixture.

Features

- Continuously adjustable light intensity
- Remote shutter control and lamp operating-time counter
- Upward, downward and horizontal output options across the series

Applications

- Silicon, organic and perovskite solar-cell testing
- Photovoltaic materials research
- Light-driven reaction studies

Specifications and configuration

Optical performance	
Source	Short-arc xenon lamp
Spectrum	AM1.5G filtered output
Spectral match ratio	0.75–1.25 in the published model table
Irradiance	0.2–1.2 sun; maximum 1200 W/m ²
Spatial non-uniformity	≤ 2%
Temporal instability	≤ 1% (SS150A series); ≤ 2% (SS300A series)
Beam divergence	±4°

Available configurations

Model	Configuration
Sirius-SS150A	40 × 40 mm field; upward output.
Sirius-SS150A-D	40 × 40 mm field; downward output.
Sirius-SS150A-L	40 × 40 mm field; left-facing output.
Sirius-SS300A	60 × 60 mm field; upward output.
Sirius-SS300A-D	60 × 60 mm field; downward output.

Configuration and quotation

Share the sample size, wavelength range and required measurements to select the source, optics and acquisition modules.

info@precisometer.com

www.precisometer.com/spectroscopy/photoelectric-testing/sirius