

SCS600

SCS600 Solar Cell Quantum Efficiency System

SCS600 measures spectral response and quantum efficiency with reflective optics, camera-assisted alignment and AC/DC acquisition. Xenon, tungsten-halogen and dual-source configurations support different wavelength ranges.

Best for: Spectral characterisation of silicon, organic, perovskite and tandem solar cells.

**250–1700 nm**

Published measurement range

To 2500 nm

Dual-source option

≤ 1 mm

Minimum spot

AC & DC

Acquisition

Overview

SCS600 measures EQE, IQE, IPCE and spectral responsivity and calculates short-circuit current density. Reflective optics limit chromatic changes in the measurement spot, with camera monitoring for alignment.

Bias light and electrical bias support device-dependent measurements. A glovebox accessory and a dedicated tandem-cell enclosure are available for experiments requiring controlled environments or selective subcell illumination.

Features

- Camera view of the illumination spot and sample
- Bias-light and bias-voltage measurements
- LBIC capability and AC/DC signal acquisition

Applications

- Photovoltaic spectral response and current-density calculation
- Tandem-cell subcell characterisation with suitable bias light
- Glovebox and vacuum-environment measurements with accessories

Specifications and configuration

Measurement and optics	
Measurements	EQE, IQE, IPCE, spectral responsivity, integrated Jsc and LBIC
General measurement range	250–1700 nm; extended coverage depends on source and reference detectors
Minimum spot diameter	≤ 1 mm
Optical design	Reflective measurement optics with camera monitoring
Sources	Xenon, tungsten-halogen or dual source
Bias	Optical bias and electrical bias supported
Source-meter options	2612B and 2636B configurations available

Available configurations

Model	Configuration
SCS600-XE	Xenon source; published repeatability ≤ 2% at 200–400 nm, ≤ 1% at 400–1000 nm and ≤ 1.5% at 1000–1700 nm.
SCS600-TH	Tungsten-halogen source; published repeatability ≤ 1% at 400–1000 nm and ≤ 1.5% at 1000–1700 nm.
SCS600-XT	Dual source; published repeatability extends to 2500 nm. Figures are measured using the corresponding reference detectors at saturation.

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/scs600