

# Flashlight Solar Simulator Sol 6x12



- Measures IV characteristics of PV modules—maximum power, open circuit voltage, short circuit current—at standard test conditions (STC, IEC standard 60904-1)
- Simulated sunlight spectrally filtered to AM 1.5 global, using Xenon flashlamps, intensity adjustable
- Suited for laboratory measurements and integration into production lines
- Temporal stability and spectrum at STC class A. spatial uniformity +/- 3%

AM 0 filtering optional

#### Light source:

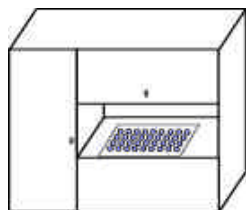
- Xenon flashlamp, spectrally filtered to AM 1.5
- Light intensity 200W/m<sup>2</sup> - 1100 W/m<sup>2</sup> (AM0: 1400 W/m<sup>2</sup>)
- Active side of module faces upward
- No module heating during measurement
- Module sizes up to 60cm x 120 cm

#### Data acquisition

- Measurement ranges: 0-100 V, 0-10 A or as desired (four ranges each, multiplier 1-2-4-8)
- Data acquisition 12 bit, 16 bit option
- Generation of module serial number, classification of power, printout of measurement documents, module labels
- Determination of diode model parameters, series/shunt resistance, dark IV (option)

#### Measurement technology

- During the flash plateau, an electronic load (option: bipolar supply) scans the IV characteristic. Special option for high capacity modules
- Measurement period ca. 3-12 ms (adjustable for high capacity modules)
- Correction of data with respect to module temperature, irradiance. Target conditions STC or desired test conditions



Option PP additional settings to influence measurement process, MS Office™ professional for database connectivity, high precision and stability data acquisition, etc.

#### Equipment dimensions:

- 220 cm x 95 cm x 225 cm (h) ( without PC), individual adaptations are possible
- Weight ca. 200 kg

#### Modul types

**(multi-) crystalline silicon, amorphous silicon , III/V semiconductors, CdTe, CIS.**  
**For thin film devices, measurement precision may be dependent on physical properties (e.g. time constants) of the constituent layers**

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