

# Solar Cell Tester

## Sol 21x21cm<sup>2</sup>



OPTOSOLAR

- *Measures IV characteristics of solar cells—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, i intensity adjustable*
- *Suited for laboratory measurements and integration into production lines*
- *Uniformity, temporal stability and spectrum at STC class A.*

### Light source:

- Xenon flashlamp, spectrally filtered to AM 1.5
- Light intensity 400W/m<sup>2</sup> - ca. 1400 W/m<sup>2</sup>
- Illumination from above
- No cell heating during measurement
- Cell sizes up to 210 mm x 210 mm

### Data acquisition

- Measurement ranges: 0-2 V, 0-20 A or as desired (four ranges each, multiplier 1-2-4-8)
- Data acquisition 12 bit, 16 bit option
- Generation of cell serial number, classification of power, printout of measurement documents, data storage in data base., etc.

### Measurement technology

- During the flash plateau, an electronic load scans the IV characteristic. Measurement duration 8-24 ms
- Correction of data with respect to module temperature, irradiance. Target conditions STC or other desired test conditions



Option PP: additional settings to influence measurement process, high precision and stability data acquisition etc.

Option:

Special database system for customer/project handling in BIPV, database connectivity,

### Equipment dimensions:

- 130 cm (h) x 40 cm x 40 cm (lamp), 60 cm x 30 cm x 40 cm (each measurement electronics and supply), all without PC, individual adaptations are possible
- Weight 40 kg

### Cell 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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