QuickSun® 200A
String Simulator

QuickSun 200A String Simulator is a new cost-efficient tool for improving yield and maximizing module power. It provides a full I-V curve for strings as large as 20 x 200 cm^2 with a maximal rate of 360 measurements per hour. All the essential performance parameters are included, with the possibility for series resistance evaluation according to the IEC 60891 standard.

- Class CAA solar simulator according to IEC 60904-9
  - Class A (+/- 2 %) irradiance uniformity
  - irradiance and temperature corrections according to IEC 60891
  - Xenon flash with Class C spectrum
- Proprietary electronic load and data sampling system
  - measurement reliability surpasses IEC 60904-1
  - irradiance level adjustable from 200 to 1200 W/m^2
  - Windows^{TM} compatible data handling and saving options
- Superior productivity
  - 360 measurements per hour
  - low cost-of-ownership
  - straightforward factory integration

SPECIFICATIONS QuickSun 200A

Flash System

- Xenon flash conforming to Class C spectrum.
- 3 pcs 800 Ws flash heads and generators.
- Lamp life typically more than 200 000 flashes.
- Irradiance uniformity over 20 x 200 cm^2 test area better than +/- 2%.
- Dimensions: 280(L) x 55(W) x 175(H), weight 90 kg.
- Mains 110-240 V_{ac}

Software

- System requirements: Windows XP operating system, 512 Mb RAM, Pentium processor, serial port connection.
- Measurement data stored directly into an external database (Microsoft Office Access and MySQL supported), or exported in standard text format.
- TCP interface with full functionality for automation and remote operation.
- Optional digital I/O interface allowing communication with a PLC for fully automated applications.

Electronics Unit

Load:	HEXFET, sweep rate controlled by software.
Current	Maximum current range options 10, 20 and 40 A. Actual scales user adjustable from 0.5 to 10 A or from 1 to 20 A or from 2 to 40 A with an absolute measurement accuracy better than 0.2% as calculated from the selected scale.
Voltage	Maximum voltage range 50 V. Actual scales user adjustable from 1 to 50 V with an absolute measurement accuracy better than 0.2% as calculated from the selected scale.
4-wire	Parallel voltage sensing terminals for excluding the losses in current carrying cables.
Bias	Adjustable internal current power source for reaching the real short circuit.
Irradiance level	Adjustable from 200 to 1200 W/m^2 with 1 W/m^2 resolution.
Power	Reproducibility better than +/- 0.5%.
Monitor Cell	Crystalline silicon cell with temperature compensation.
Ambient/String temperature	IC sensor (LM35). Accuracy +/- 1°C within 10–40 °C.
Operation temperature	15–40°C.
Mains	115 / 230 V_{ac}, 50/60 Hz.
Conformity	CE approved.

Specifications subject to change without notice.