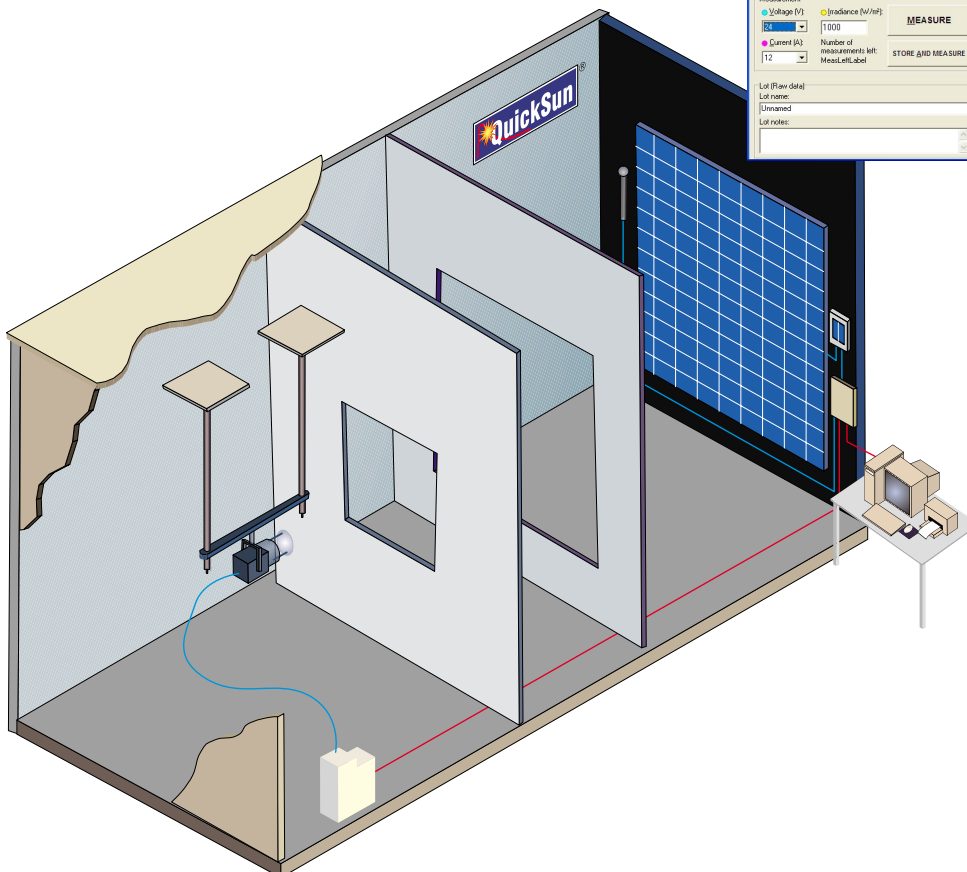
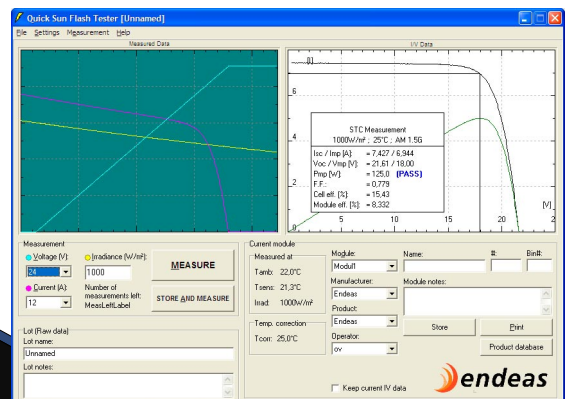


QuickSun[®] 700A

Large Area Solar Simulator

QuickSun 700A measures the IV characteristics of even the largest size PV modules whether they are made of thin film or crystalline material. The proprietary operation principle supports straightforward series resistance evaluation according to the IEC891 method and weak light IV characteristics measurements at any desired irradiance level. Installed either as a tunnel or a tower set up.

- Class A solar simulator according to IEC 904-9
 - Xenon flash tube with AM1.5G filter
 - +/- 2 % irradiance uniformity with proprietary optics
 - Irradiance and temperature corrections according to IEC 891
- Proprietary electronic load and data sampling system
 - Measurement reliability surpasses IEC 904-1
 - Irradiance level adjustable from 200 to 1200 W/m²
- Superior productivity
 - testing capacity 60 – 120 modules per hour depending on test area size
 - Low cost-of-ownership
 - Straightforward factory integration with TCP interface



SPECIFICATIONS, QuickSun 700A

Flash System

- Xenon flash filtered to conform to Class A spectrum.
- Lamp life typically more than 40 000 flashes.
- 6000 Ws flash head and generator, mains 115/230V_{ac}, 16 A.
- Irradiance uniformity better than +/- 2%.
- Test area / capacity alternatives:
 - 1) Test area 160 x 220 cm² / 60 measurements per hour, lamp to module distance 500 cm.
 - 2) Test area 130 x 160 cm² / 120 measurements per hour, lamp to module distance 400 cm.

Electronics Unit

Load:	HEXFET, sweep rate controlled by software.
Current	Maximum current range options 6, 12 and 25 A. Actual scales user adjustable from 0.25 to 6 A or from 0.5 to 12 A or from 1 to 25 A with an absolute measurement accuracy better than 0.2% as calculated from the selected scale.
Voltage	Maximum voltage range options 50, 100 and 200 V. Actual scales user adjustable from 1 to 50 V or from 1 to 100 V or from 2 to 200 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 biasing the module to real short circuit.
Irradiance level	Adjustable from 200 to 1200 W/m ² with 1 W/m ² resolution.
Power	Reproducibility better than +/- 0.25%. Absolute accuracy depends on the accuracy of the module used for the calibration of the system.
Monitor Cell	Crystalline silicon cell calibrated against the CEC JRC Ispra certified ESTI sensor. Gain 25 mV @ 1000 W/m ² , 25°C. Temperature measured and irradiance signal corrected accordingly.
Ambient temperature	IC sensor (LM35). Accuracy +/- 1°C within 10 - 40 °C.
Operation temperature	15 - 35°C.
Mains	115/230 Vac, 50/60 Hz.

Computer System

PC	Worldwide recognized office PC of the date with Windows XP Pro.
Printer	Laser printer.
Label printer	Available as an option.
Bar code scanner	Available as an option.
Data storage options	Windows™ compatible files: <ul style="list-style-type: none">- IV curve (512 points) with valuated parameters.- Only evaluated parameters.

Conformity CE approved.

Specifications subject to change without notice.