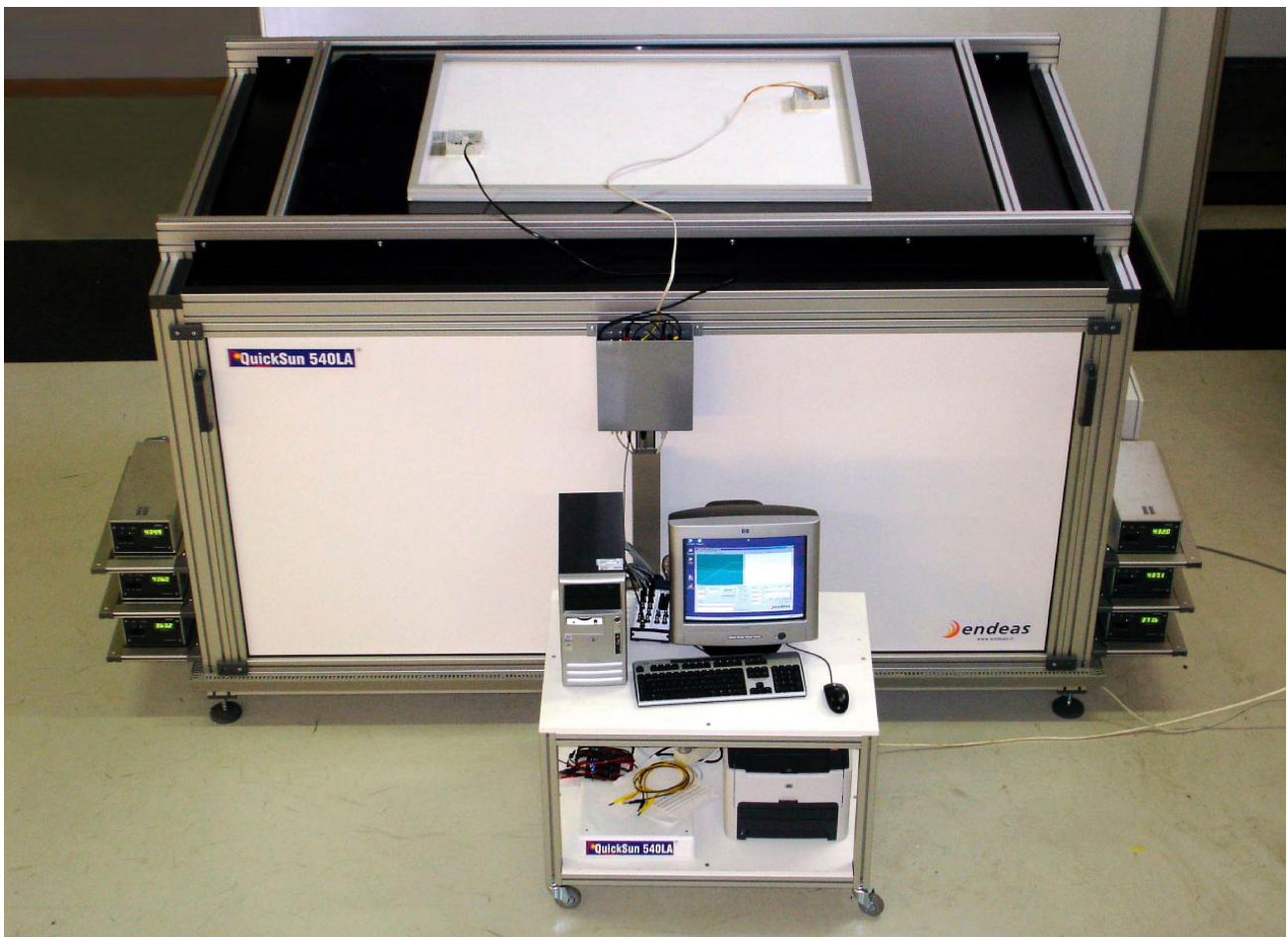


# QuickSun<sup>®</sup> 540LA

## In-Line Solar Simulator

QuickSun 540LA measures all module types with the size up to 110 x 190 cm<sup>2</sup> in face down position. 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. Measurement results can be written to a database or sent to a TCP-interface.

- Class A solar simulator according to IEC 904-9
  - Xenon flash with Class A spectrum
  - Class A (+/- 2 %) irradiance uniformity
  - 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/m<sup>2</sup>
- Superior productivity
  - 180 measurements per hour
  - Low cost-of-ownership
  - Straightforward factory integration with TCP interface



## SPECIFICATIONS, QuickSun 540LA

### Flash System

- Xenon flash filtered to conform to Class A spectrum.
- 6 pcs 800 Ws flash heads and generators.
- Lamp life typically more than 200 000 flashes.
- Irradiance uniformity over 110 x 190 cm<sup>2</sup> test area better than +/- 2%.
- Dimensions: 270(L) x 170(W) x 150(H), weight 320 kg.
- Mains 110 - 240 V<sub>ac</sub> / 16 A.


### 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 <sup>2</sup> with 1 W/m <sup>2</sup> resolution.
Power	Reproducibility better than +/- 0.5%. 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 <sup>2</sup> , 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"><li>- IV curve (512 points) with evaluated parameters.</li><li>- Only evaluated parameters.</li></ul>

**Conformity**     approved.

Specifications subject to change without notice.