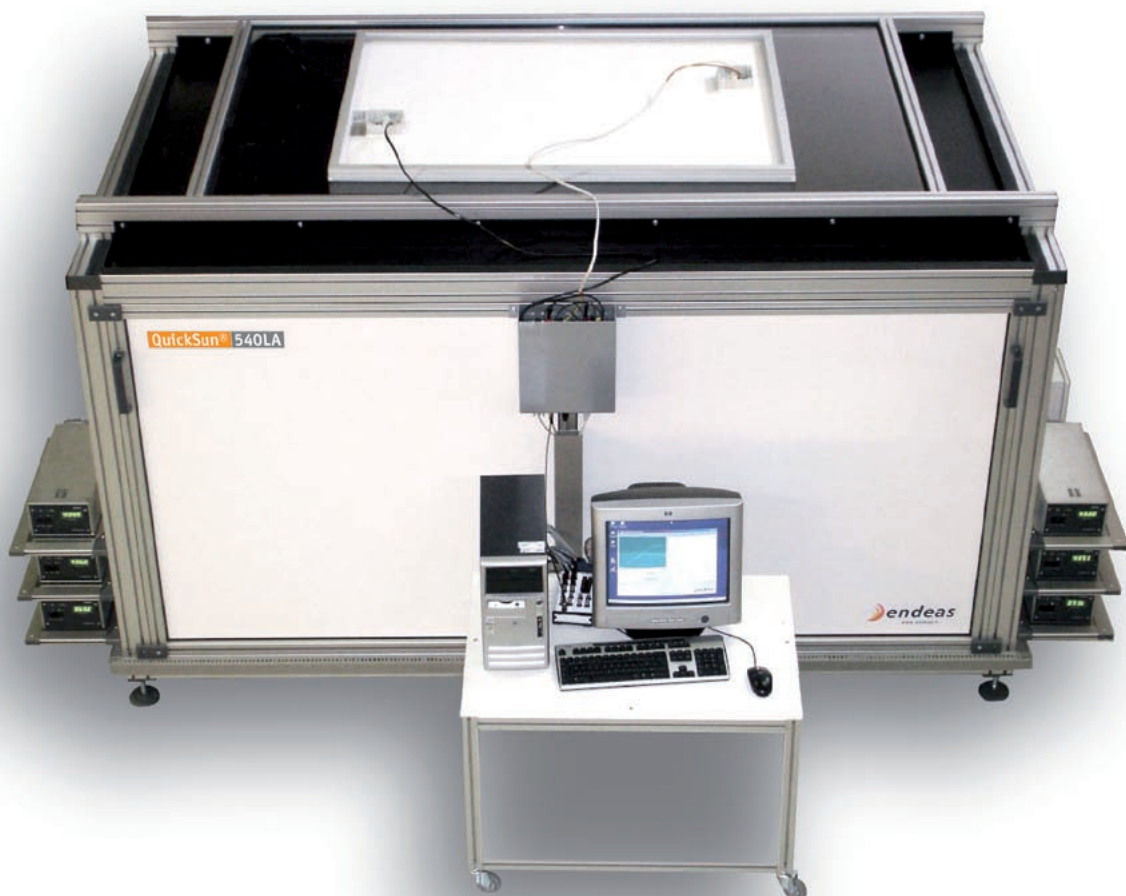


# QuickSun® 540LA

## 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 and dig I/O interfaces and database writing

## 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.
- 135 x 205 cm<sup>2</sup> test area version available on request.
- Mains 230 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 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 certified reference cell. Spectral response can be filtered to comply with thin film materials. Gain 25 mV @ 1000 W/m<sup>2</sup>, 25°C. Temperature measured and irradiance signal corrected accordingly.
- Module temperature** IC sensor (LM35) or optionally IR sensor. 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** Selected data can be  
 - exported as text file  
 - written to ODBC database  
 - collected with TCP interface
- Conformity** CE approved.

Specifications subject to change without notice.