



## SOLAR SIMULATOR REA11



Year 1  
study

2 to 3  
participants

Space required  
1.5x1x3m

### Features

- Full Equatorial Solar Heat Flux
- 2 x banks of 2.4kW output
- Extruded frame
- 220/240V version
- 110/130V version (supplied with transformers)

### Description

In countries where solar radiation cannot be relied upon, the Optional Solar Simulator allows the RE540 unit and solar panel to be investigated in detail under controlled conditions. The full equatorial solar heat flux can be simulated with the optional REA11. The solar simulator consists of 2 banks of 6 x 400W floodlights that are arranged in 2 banks of 6 lamps giving 2 x 2.4kW output. 1 x top bank of 6 lamps (2.4kW), 1 x Lower bank of 6 lamps (2.4kW). The lamps are supplied by two separate power leads and power circuits. Each circuit has an individual RCCB and switch/circuit breaker. This allows the two power leads to be connected to two separate mains outlets. In most countries a single power outlet in a laboratory is capable of supplying up to 2.4kW, hence the arrangement.

### Related Laws/Applications

- Controlled conditions
- Solar Heat Flux

### Technical Specification

- 2 banks of 6 x 400W floodlights
- 2.4kW per bank
- 2 x Power leads
- 2 x Mains switches
- 2 x RCCB fitted

### Essential Ancillaries

- RE540 – Photovoltaic Trainer, or
- RE551 – Flat Plate Solar Energy Collector

### Recommended Ancillaries

- REA1 – Deep Cycle Lead Acid GEL Battery
- REA4 – Water Pump
- REA5 – Single Phase Inverter
- RE540C – Additional 80W Solar Panel

**What's in the Box?**

- 1 x RE540E
- 2 x Power leads
- 2 x Transformer (115V only)
- Packing list
- Test sheet
- Wiring diagram

**You might also like**

- RE510 – Educational PEM Fuel Cell
- RE551 – Flat Plate Solar Energy Collector
- RE570 – Horizontal Axis Wind Turbine
- RE580 – Combined Wind and Solar Generator Demonstrator

**Weights & Dimensions**

- 2100(L) x 410(W) x 1100(H) mm (approx.)
- Net Weight: 29 kg (approx.)
- Gross Weight: 103 kg (approx.)
- Packing Case Dimensions: 2.2(L) x 0.71(W) x 1.2(H) m

**Essential Services**

- Two off 220-240 Volts, Single Phase, 50/60Hz (With earth/ground) fused supplies. Line current up to 13A.
- Two off 110-120 Volts, Single Phase, 60Hz (With earth/ground) fused supplies. Line current up to 26A.

**Ordering information**

To order this product, please call PA Hilton quoting the following codes:

REA11/230

REA11/115

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS