

RE 210 SOLAR ELECTRICITY



GENERAL DESCRIPTION

This is a bench mounted unit designed for a study of electricity generation from sunlight, storage and use of energy.

The unit consists of a solar panel on a tilting and rotating base, an inverter, a regulator, a storage battery, load circuit, a fan, lamp load, voltmeters and ammeters.

The panel is mounted on a tilting and rotating base.

Instruction manual is also included.

EXPERIMENT CAPABILITIES

- Current-voltage characteristics of solar panel.
- Effect of shading on performance.
- Effect of panel inclination on performance.
- Working principles of load regulator (current reversal, low unloading and overloading protection)
- Principles of inverter.

TECHNICAL DATA

- Solar panel : Monocrystalline, 60 W rating.
- Regulator : 1 ea.
- Battery : 1 ea.
- Inverter : 1 ea.
- Rheostat : 1 ea.
- Voltmeters : DC(1) and AC(1)
- Ammeters : DC(1) and AC(1)
- Lamp loads : 5 ea.
- Others : Power outlet and lead wires.
- Software for data display and analysis by computer (separately supplied).
- Power supply : 220V, 1 Ph, 50 Hz.

OPTIONAL EQUIPMENT

- Light source : 500 W quartz lamp with stand.
- RE210-050 Computer Interface
This includes computer interface unit with voltage and current sensors for DC.
- Other optional equipment, please contact manufacturer (essom@essom.com)

Net (unpacked) shipping dimensions WxLxH
Net weight

: 70 x 110 x 60 cm
: Approx. 45 kg

