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Product Name:

Solar Energy Modular Trainer With Connection To Mains

Product Code: LBNY-0005-18400027



Description:

Training Objectives:

Measuring the mains voltage

Measuring the electricity delivered to the mains grid

Measuring the electricity produced by the solar panel and delivered/taken from the mains grid.

Changing the inclination of the solar panel

Changing the azimuth of the solar panel

Measuring the load current, voltage, power and energy

Setting the solar panel to the most irradiated position

Covering the solar panel with different materials

Calculating the inner resistance of the solar panel

Obtaining the solar panel current voltage curve

Obtaining the solar irradiation data

Obtaining the solar panel voltage irradiation curve

Technical Specification:

A load module. It includes two mains voltage lamps, dichroic 35W and LED 3W, with independent switches.

A power rheostat, 6 A, 80 W.

A photovoltaic inclinable module, 90W, 12V, complete with a cell for measuring the solar irradiation and with a temperature sensor.

A supporting frame for the modules.

An electric energy measurement module in kW/h.

A network distributor.

A differential magneto thermal switch module.

A module for the measurement of: solar irradiation (W/m2), solar panel temperature (°C), solar panel current, load current, solar panel voltage and active power at mains voltage.



Laboratory Instrument India