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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.

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A differential magneto thermal switch module.

A module for the measurement of: solar irradiation (W/m<sup>2</sup>), solar panel temperature (°C), solar panel current, load current, solar panel voltage and active power at mains voltage.



**Laboratory Instrument India**