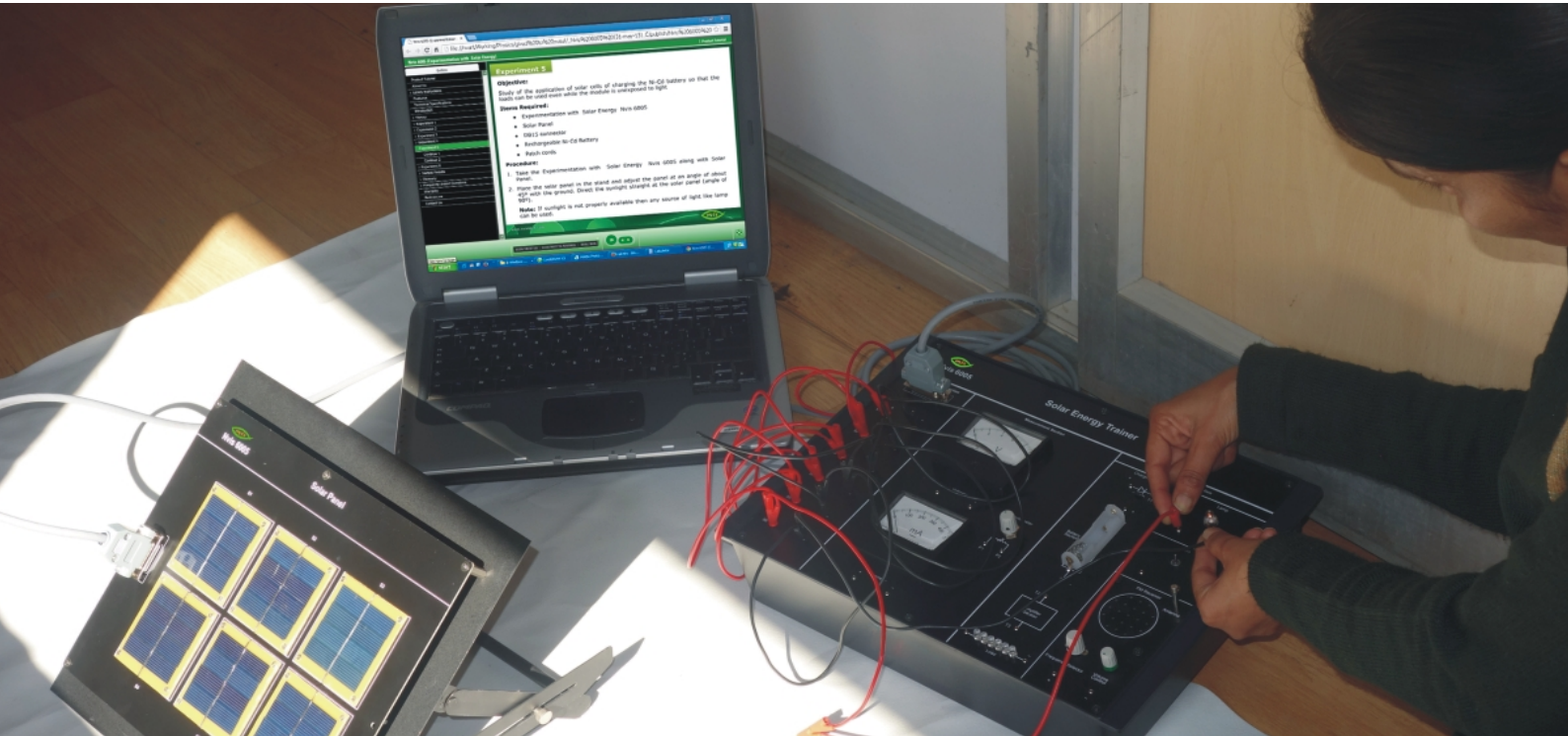




Experimentation with Solar Energy

Nvis 6005



Experimentation with Solar Energy Nvis 6005 is a versatile training system to be used in laboratories. It introduces the basic concept of solar cell (photovoltaic cell) of converting sunlight directly into electrical energy. The system works as a live demonstration unit of solar cells in terms of its concepts and applications. This system is provided with Solar Energy Trainer and a Solar Panel.

Features

- Complete training system to study the fundamentals of photovoltaic system
- The system has two modes for study: Characteristics and Application Modes
- On board voltmeter and ammeter are provided to measure the voltage and current respectively, during various modes of operation
- Charging the batteries using solar energy
- Weather proof solar cells
- Portable and light weight
- Online product tutorial

Scope of Learning

- Calculation of voltage and current of solar cells in series
- Calculation of voltage and current of solar cells in parallel
- Study of V-I curve and power curve of solar cells to find out maximum power point (MPP)
- Calculation of efficiency of solar cells
- Application of solar cells in domestic purposes :
 - Charging of battery in load and no load condition
 - Operating bulb, fan and radio

Technical Specifications

Solar Panel : Consists of 6 solar cells

Maximum Voltage of each solar cell:1.5V

Maximum Current of each solar cell:150mA

Voltmeter : 0-10V

Ammeter : 0-500mA

Potentiometer : 5K

2 AA Rechargeable NiCd Battery : 1.2V

Bulb : 1.2V, 270mA

Fan : 1.5V, 400mA

FM Band Radio : 12V

Dimension (mm) : W 365 x D 265 x H 120



Subject to change - Version 2.0

Designed & Manufactured in India by

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