# Solar Simulator Lab

## Nvis 6005E

A Solar Simulator Lab provides illumination Spectrum approximately similar to Sunlight. The Solar simulator is used to provide controlled test facility inside laboratory.

To find the characteristics of a Solar cell or Solar panel, we need to expose them to Sun light. It is very difficult to measure Solar cell or Solar panel output when there is less Sun light due to clouds. A Solar Simulator allows us to test Solar system independent from current weather conditions and time of day.


## Features

- Complete system to study fundamentals of Solar Simulation
- Digital display for Voltage and Current measurement
- Quartz Halogen Lamp as a Light source
- Programmable Temperature Controller
- Heater for heating test of Solar cell
- Variable Intensity available for testing

## Technical Specifications

| | | |
|---|---|---|
| Supply Voltage | : | 220V AC ±10%, 50Hz |
| **Solar Cell** | | |
| Open Circuit Voltage (Voc) | : | 2V DC |
| Short Circuit Current (Isc) | : | 180mA |
| Quartz Halogen Lamp | : | 220V, 50Watt (2 nos.) |
| Voltmeter | : | 0-20V |
| Ammeter | : | 0-2000mA |
| Intensity Control | : | Variable (In five steps) |
| Temperature Controller | : | up to 99°C |
| Heater | : | 25 Watt |
| Load Resistance | : | 0-100 10 turn |
| | : | 0-10 1 turn |
| Fuse | : | 1Amp |
| Weight | : | 9kg (Approximate) |
| Dimension (mm) | : | L 260 x B225 x H 500 |