

Solar Cell Characteristics

Model : SE-1101



SINCOM SE-1101 Solar Cell Characteristics is remarkable trainer for examining the operation, characteristics and parameters of a solar cell in varying conditions with the facility to apply artificial variable intensity light source.

Features

- ❖ Solar Cell panel with mount
- ❖ Different Resistive Loads
- ❖ Load Bank selector Rotary switch
- ❖ Square Front
- ❖ Fast response time
- ❖ High photo sensitivity
- ❖ Current controlling resistor in series
- ❖ Artificial light radiation source 100W Lamp with intensity control
- ❖ In-Built Variable regulated DC Power Supply
- ❖ Presents a multi-color Circuit Diagram printed on the front panel of the white board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- ❖ Interconnections by 2mm high quality banana sockets and pins.

Technical Specifications

▪ AC Mains Power Supply	: 230V \pm 10%, 50Hz
▪ Fixed Regulated DC Power Supply	: +5V /500mA
▪ Variable DC Power Supply	: Variable 0 to +12V
▪ Solar Panel	: One number with mount
▪ Solar Cell	: 6V/12V
▪ Power	: 3W-10W
▪ Light Source	: 100W Lamp with Variable Intensity control
▪ Front	: Square/Rectangle
▪ Load Bank	: 5 Resistive load with rotary selector switch
▪ Maximum Forward Current	: 200mA



An ISO 9001:2015 Co.

- Maximum Output Voltage : 6V/12V
- Current Controlling Resistor : MFR 100Ω, ±5% in series
- Weight : 3.0 kg (approx)
- Dimensions (mm) : L 220 x W 270 x H 110
- Interconnections : 2mm Banana sockets
- Operating Temperature : 0-50°C, 80% RH

Learning Scope

- To study the operation of Solar Cell.
- To Study the Illumination Characteristics.
- To study the V-I Characteristics of Solar Cell w.r.t. applied variable light Input.
- To study the Power- Load characteristics for the variation of Power and load current w.r.t. change of load resistors for a constant light input.
- To Study the Aerial Characteristics.

Other Instruments Required : Digital Multimeter

Accessories Included : Solar modules with stand, Light source 100W with intensity control, Set of Patch Cord and Details Instruction Manual.