Solar PV Plant Demonstrator

Model : SE-1108

SINCOM SE-1108 Solar PV Plant Demonstrator is a comprehensive trainer that demonstrates the generation of AC Power using Solar Energy under on grid and off grid mode. It has single phase inverter cum charging transformer with single Phase stabilized AC output voltage, digital controlled sine wave Inverter with overload protection, Relay changeover circuits, Automatic trickle Battery Charging circuit, LED indicator. This trainer incorporates Battery, Solar PV Panels, AC Load and Digital Voltmeter to provide precise measurements.

Features

- Solar panel with mount
- Single Phase MOSFET /IGBT Based Solar PV Inverter
- Digitally stabilized AC Output voltage
- Solar Cell Charge controller
- AC Load
- Square Front
- Fast response time
- High photo sensitivity
- $3^{1/2}$ Digit Digital AC Volt Indicator
- 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 ±10%, 50Hz
Fixed Regulated DC Power Supply	: +12V
Solar Panel	: One number with mount
Front	: Square/Rectangle
Solar Charge Controller	: 20A
Output AC Voltage	: 230V/50Hz
Output Cycle Nature	: Sine/Cosine
Output Frequency	: 50Hz
Output Power	: 1KW
Battery	: 12V
Battery Charging Voltage	: 12V
Output Control	: MOSFET/IGBT based Digitally control
AC Load	: Lamp Load
Digital AC Voltmeter	: AC 230V
Weight	: 5.0 kg (approx)
Dimensions (mm)	: L 444 x W 127 x H 539
Interconnections	: 2mm Banana sockets
Operating Temperature	: 0-50^{0}C, 80% RH

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Learning Scope

- To Study Principal of Solar PV Plant.
- To Study the Operation of Solar Inverter.
- To Study the operation of solar PV plant for ON Grid and OFF Grid mode.
- To Study the Charging Circuit of Solar Inverter.
- To Study the load change over Circuit of Solar Inverter.
- To observe & Note the waveforms at the different sections of Solar Inverter.
- To Observe & Note Battery Charging Voltage
- To Observe & Note the AC Output Voltage & frequency.

Other Instruments Required : Digital Multimeter, CRO with Attenuator Probe

Accessories Included : Solar Panel with stand, Battery, AC Load, Patch Cord and Details Instruction Manual.

Subject to Change