



An ISO 9001:2015 Co.

## Solar Inverter Trainer

### Model : SE-1104

**SINCOM SE-1104 Solar Inverter Trainer** is a comprehensive trainer that demonstrates the generation of AC Power using Solar Energy. It has single phase inverter cum charging transformer with single Phase stabilized AC output voltage, Transistorized digital controlled sine wave Inverter with overload protection, Relay changeover circuits, Automatic trickle Battery Charging circuit, LED indicator. This trainer incorporates Battery, Solar Panels, AC Load and Digital Voltmeter to provide precise measurements.

### Features

- ❖ Solar Cell panel with mount
- ❖ Single Phase MOSFET Based 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 DC 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 $\pm$ 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	: 300VA
▪ Battery	: 12V
▪ Battery Charging Voltage	: 12V
▪ Output Control	: MOSFET 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°C, 80% RH



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## Learning Scope

- To Study Principal of Inverter.
- To Study the Operation of Solar Inverter.
- 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.