

## Open Loop Control System

**Model : SE-1020**



**SINCOM SE-1020 Open Loop Control System** is a highly adaptable and comprehensive trainer that is specifically designed for studying the impact of an open loop control system on the temperature of a heater load. This system includes an RTD temperature sensor, OP-AMP based circuitry, a digital temperature indicator, and an electrical heater load. Additionally, it offers the convenience of setting the reference temperature input, allowing for precise control and analysis.

### Features

- ❖ Platinum RTD as a Temperature Sensor
- ❖ 3<sup>1/2</sup> Digit Digital Temperature Indicator
- ❖ Open Loop Temperature control system
- ❖ Reference Input Adjust
- ❖ Wide Temperature Range
- ❖ External Electrical Heating System
- ❖ In-Built Fixed and 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, $\pm 12V$ /500mA
▪ Variable DC Power Supply	: Variable 0 to 5V
▪ Temperature Sensor	: RTD PT 100
▪ Control System	: Open Loop Temperature control system
▪ Reference Input Adjust	: Variable 5V
▪ Temperature Range	: Upto 100°C
▪ Temperature Display	: Digital 3 <sup>1/2</sup> Digit LED Display
▪ AC Heater Load Control By	: Relay Driver



An ISO 9001:2015 Co.

▪ Heating Source	: Electrical Heating system
▪ Weight	: 3.0 kg (approx)
▪ Dimensions (mm)	: L 245 x W 320 x H 115
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-100°C, 80% RH

### Learning Scope

- To study the Open loop control system.
- To study the Temperature of AC Heater in Open loop mode.
- To Observe and note the ON/OFF condition of AC Heater at the set value in Open loop.

**Other Instruments Required :** Digital Multimeter

**Accessories Included :** Electrical Heating System, RTD, Set of Patch Cords, Detail Instruction Manual.