



## Calibration of Temperature Measuring System

### Model : SE-1010

**SINCOM SE-1010 Calibration of Temperature Measuring System** is an exceptional comprehensive trainer for studying the calibration of temperature measuring system using RTD temperature sensors. This comprehensive trainer features an instrumentation amplifier wired with a microcontroller-based system, allowing for accurate temperature measurement and its calibration process. The LED/LCD display provides clear temperature readings, Standard Digital Temperature Indicator for calibration process. Additionally, the trainer includes an electrical heating system for practical application and experimentation.

### Features

- ❖ Accurate Temperature measurement
- ❖ Standard Digital Temperature Indicator for Calibration Process
- ❖ Platinum RTD as a Temperature Sensor
- ❖ Microcontroller based system
- ❖ Wide Temperature Range measurement
- ❖ 3<sup>1/2</sup> Digit LED/LCD Temperature Display
- ❖ External Electrical Heating System
- ❖ In-Built Fixed 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 ±10%, 50Hz
▪ DC Power Supply	: Regulated ±12V /500mA ,+5V /500mA
▪ Temperature Sensor	: RTD PT 100
▪ Controller	: Micro controller based
▪ Temperature Display	: Red Color, 3 <sup>1/2</sup> Digit , LED Display
▪ Standard Temperature Indicator	: Digital 3 <sup>1/2</sup> Digit LED/LCD Display with sensor
▪ Temperature Range	: Upto 100° C
▪ Heating Source	: Electrical water Heating system
▪ Weight	: 3.0 kg (approx)
▪ Dimensions (mm)	: L 270 x W 390 x H 130
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-100°C, 80% RH

### Learning Scope

- To study temperature measurement & Calibration using RTD.
- To calibrate & measure the temperature using RTD and compare the results w.r.t. standard/ calibrated temperature indicator.
- To observe and note the variation in temperature displayed w.r.t. change in Temperature.

**Other Instruments Required :** Digital Multimeter

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