

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^{1/2} 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 ^{1/2} Digit , LED Display
▪ Standard Temperature Indicator	: Digital 3 ^{1/2} 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.