

Temperature ON/OFF Controller using Thermistor

Model : SE-1040



SINCOM SE-1040 Temperature ON/OFF Controller using Thermistor is an exceptional user-friendly trainer designed for studying temperature measurement and ON/OFF control of heating loads. It utilizes Thermistor technology to ensure precise temperature readings and control. With its microcontroller-based system, this comprehensive trainer offers accurate temperature measurement and control capabilities. The LED seven segment display provides clear temperature readings, while users can fluently set the temperature cut-off and control the electrical heater load.

Features

- ❖ Accurate Temperature measurement and ON/OFF control action
- ❖ Thermistor as a Temperature Sensor
- ❖ Microcontroller based system
- ❖ Wide Temperature Range
- ❖ 3 1/2 Digit LED Temperature Display
- ❖ Easy setting of Temperature Cut-Off by Push Switches.
- ❖ Heater Load control
- ❖ 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 \pm 10%, 50Hz
▪ DC Power Supply	: Regulated \pm 12V /500mA ,+5V /500mA
▪ Temperature Sensor	: Thermistor
▪ Controller	: Micro controller based



An ISO 9001:2015 Co.

▪ Heater Load Control By	: Relay Driver
▪ Temperature Setting By	: 03 Push Switches
▪ Temperature Display	: Red Color, 3 ^{1/2} Digit , LED Display
▪ Temperature Measuring Range	: Upto 100°C
▪ Temperature ON/OFF Setting 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 using Thermistor.
- To observe and note the variation in temperature displayed w.r.t. change in Temperature.
- To Study ON/OFF Temperature Controller action.
- To observe & Note temperature shown by the temperature sensor and it's ON & OFF controlling of Heater Load w.r.t. Pre-decided Temperature.

Other Instruments Required : Digital Multimeter

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