

## Digital Thermocouple Test Set and Calibrators



# 7709 EP

### FEATURES

- Measures temperature for J, K, R, S & T type of thermocouples.
- Simulates mV signal for calibration of J, K, R, S & T type of thermocouples.
- Measures and simulates resistance from 0.1 ohm to 1.0K ohm.
- Temperature linearization of 1 °C over the entire range of thermocouple.

### DESCRIPTION

Digital Thermocouple Test Set and Calibrator Type 7709 EP is an EPROM; (Erasable Programmable Read-only-Memory) based design. The instrument can accept J, K, R, S and T type of thermocouples in the same equipment. The instrument is ideal to measure temperatures with J, K, R, S and T type of thermocouples as well as for the calibration of temperature, indicators employing these thermocouples. Excellent linearization of the order of 1 °C is attained over the complete range of thermocouple.

4 Digits Digital Thermocouple Test Set and Calibrator is a versatile equipment in the area of thermal engineering. **The instrument is ideal to calibrate temperature gauges, thermocouples, platinum resistance thermometers, temperature controllers and recorders.** The instrument can also be used as a thermocouple simulator. A calibrated stable potential source, continuously variable from 0 to  $\pm 100$  mV, is provided with the test set. The potential variation can be done with a resolution of 1°C. Similarly temperature sensed by a thermocouple in a furnace can be monitored with

### TECHNICAL SPECIFICATION

Display	: 4 Digits LED
Temperature	: Ambient to 750°C for J Type
Mesurement	: Ambient to 1350°C for K Type Ambient to 1700°C for R Type Ambient to 1700°C for S Type Ambient to 400°C for T Type
Calibration facility	: For the calibration of: J, K, R, S and T type of temperature indicators & RTD indicators
Simulation facility	: 0 to $\pm 100$ mV for any thermocouple or RTD with digital readout in corresponding degree celcius
Accuracy	: $\pm 1^\circ\text{C} + 1$ Digit
Resolution	: 1°C
Ambient temperature compensation	: Automatic
Digital display	: in °C
Power	: 230 V $\pm$ 10% AC, 50 Hz

### WHEATSTONE BRIDGE FACILITY (for the calibration of RTDs & Resistance Measurement)

Resistance Range	: 0.1 $\Omega$ to 1.0 K $\Omega$
Resolution	: 0.1 $\Omega$
Accuracy	: $\pm 0.5\%$ up to 10 $\Omega$ $\pm 0.1\%$ from 10 $\Omega$ to 1.0K $\Omega$
Switch configuration	: Silver plated rotary switches
Housing	: Table top metallic cabinet.
Dimensions	: 48(L) x 35(B) x 13(H) cm.
Weight	: Approx. 7.5kg.

Most Versatile Instrument in Its Class and Cost