# Dry Block UTC Series Temperature Calibrator





## **Application**

Ideal for calibration of thermocouples, RTDs, gauges, thermometers, switches, transmitters, etc.

#### **FEATURES**

Dry Block . Graphical Display . Microcontroller Based . Feather Touch Key Pad . Fast Heating & Cooling . Reads Set temperature and device input simultaneously . Good Stability . Loop Power Supply for Transmitters . Facility to check Temperature Switch Test . Measurement Facility for RTD, Thermocouple, mV, V, mA, Ohms . Internal Cold Junction Compensation



Carrying Case

# Multi-Hole Insertion Tube

#### **Measurement Specification**

Parameter	Range	Resolution	Accuracy <sup>1</sup>	
mA	0 to 25 mA	0.001 mA	±0.025% of Reading + 10 μA	
mV	0 to 1000.0 mV	0.01 mV	±0.025% of Reading + 0.25 mV	
Volts	0 to 10.000 V	0.001 V	±0.025% of Reading + 3 mV	
Ohms	0 to 400 Ohms	0.01 Ohms	±0.025% of Reading + 0.1 Ohm	
RTD (Pt 100) <sup>3</sup>	-200 to 850°C	0.1℃	±0.025% of Reading + 0.3Ĉ	

#### Thermocouple<sup>2</sup>Types

Т	-200 to 400°C	0.1°C	±0.025 % of Reading + 1°C		
J	-200 to 1200°C	0.1°C	±0.025 % of Reading + 1°C		
K	-200 to 1372°C	0.1°C	±0.025 % of Reading + 1°C		
N	-200 to 1300°C	0.1°C	±0.025 % of Reading + 1°C		
R	300 to 1760°C	1°C	±0.025 % of Reading + 2°C		
S	300 to 1760°C	1°C	±0.025 % of Reading + 2°C		

Note 1: Accuracy specifications include effect of non-linearity, hysteresis and repeatability at 23 $\pm$ 5°C Note 2: Thermocouple measurement accuracy does not include CJC sensor accuracy (CJC error  $\pm$ 1.0°C)

Note 3: Measurement by 3 wire at an excitation current of 1mA  $\,$ 

### **Technical Specification**

Model	Range	Accuracy <sup>1</sup>	Bath Stability	Stabilisation Time	Heating Time	Cooling Time
350 UTC	50 to 350°C	±0.4°C	±0.05°C	15 Min.	50 to 350°C	350 to 100°C
					18 to 20 Min.	30 to 35 Min.
650 UTC	50 to 650°C	±0.6°C	±0.05°C	20 Min.	50 to 650°C	650 to 100°C
					30 to 32 Min.	40 to 45 Min.

Resolution **0.1°C** 

Units °C / °F Switchable

Display Graphical with LED Backlight

Power Supply  $230V AC \pm 5\% / 50Hz$ ,

1.2 KW for 650UTC & 500 W for 350UTC

Transmitter Supply 24V DC ± 10% (Loop Powered)

Block Diameter 25.4 mm
Block Depth 120 mm
Insertion Tube Depth 110 mm

Display Stability ±0.2°C

Radial Uniformity ±0.3°C with similar probes

Fixed Steps for

temp. setting in & 50, 150, 300, 450, 600

Switch Test Continuity check with OPEN / CLOSE indication

#### **Standard Delivery**

- 1. Instrument: 1 no.
- 2. Power Cable: 1 no.
- 3. Carrying Case: 1 no.
- 4. Test Lead (2 wire): 1 no.
- 5. Test Lead (3 wire) : 1 no.
- 6. Insertion Tube:
  - Dual Hole 1 x 1/4" + 1 x 12.5 mm, Dual Hole - 1 x 1/4" + 1 x 8.2 mm
- 7. Insertion Tool: 1 no.
- 8. Spare fuses : 6A 2 nos.
- 9. User Manual: 1 no.
- 10. Traceable Calibration Certificate

#### **Optional**

- RS232 with RnD Cal-T Software
- Insertion Tube of size: 1 x
   1/4" + 1 x 10 mm, 2 x
   1/4" + 2 x 5 mm
- 110 VAC Power Supply
- Accredited (NABL)
   Calibration
  - Certificate as per ISO/IEC 17025:2005 Standard

Current terminal input protection: Fuse 100mA / 250V Safety protection: Thermal cutout for bath temperature above 660°C

System Fuse: 6 A 250 V Size: 155 mm (W) x 240 mm (H) x 350 mm (D)

Weight: 8 kgs.