



## MTC 650 Microprocessor based Temperature Calibrator

### Mid-Range Dry Block Temperature Calibrator

Ideal for fast site calibration of:

Thermocouples, Resistance Thermometers, Temperature transmitters, thermostats, etc.

- Range: 50°C to 650°C (122°F to 1202°F)
- Accuracy:  $\pm 0.6^\circ\text{C}$
- Can measure TC, RTD, mV/mA/V, and  $\Omega$  signals
- 128 x 64 Graphic Display
- Touch Membrane Keypad for quick access to selections
- Interchangeable Thermowell Inserts
- Single & Multi-hole Inserts Available
- Includes: 1/4" & 1/2" Inserts
- Heating Speed: 30 min. (to max.)
- Cooling Speed: 40 min. (to 100°C)
- NIST Calibration Certification Included



Accurate

Easy to use

Efficient

Fast

Multifunction

Portable

Reliable

Sturdy



**E Instruments International**

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## MTC 650 Microprocessor based Temperature Calibrator

### Mid-Range Dry Block

The **MTC 650 Calibrator** is a portable source that offers fast temperature calibration in an easy to use design for medium temperatures ranges (50°C above amb. to 650°C) applications.

**Measuring Capabilities**  
for TC, RTD, mV/mA/V, & Ω

**Touch Membrane Keypad**  
Allows quick access to selections

**Accuracy:**  
± 0.6°C



### Applications

The MTC 650 is designed to verify and calibrate temperature sensors, thermometers, and process transmitters both in the laboratory and in the field!

**Range:**  
50°C above amb. to 650°C

**Stability:**  
± 0.5°C

**Display Resolution:**  
0.1 °C

### MTC 650 Mid-Range Dry Block Specifications

**Range:** 50°C (122°F) above amb. to 650°C (1202°F) \* Specifications subject to change \*

**Stability:** ±0.5°C

**Dimensions (WxHxD)**  
160 x 350 x 370mm  
(6.3" x 13.8" x 14.6")

**Accuracy:** ±0.6°C

**Weight:**  
9Kg (19.8 lbs)

**Heating Speed:** 30 min. (to maximum)

**Measuring Units:** °C or °F

**Cooling Speed:** 40 minutes (to 100°C)

**Power Supply:** Switch Selectable:  
115V or 230V AC  
50/60Hz

**Stabilization Time:** 15 minutes

**Display Accuracy:** ± 0.1°C

**Well Depth:** 110mm

**Power Consumption:** 1200 Watts

**Well Dia.:** 25mm

**Warranty:** 1 Year Warranty

**Switch Test /Supply:** Provided / 5VDC (open)

**TC Types:** J, K, R, S, N Res. 0.01, Accy. 0.05% F.S

**mV:** 0 to 100mV Res. 0.01/.1,  
Accuracy 0.05% F.S

**RTD:** Pt100 Res. 0.1, Accy. 0.05% F.S

**V:** 0 to 10V Res. 0.001,  
Accuracy 0.05% F.S

**mA:** 0 to 25mA Res. 0.001, Accy. 0.05% F.S

**Ω:** 0 to 500Ω/3.5KW,  
Accuracy 0.05% F.S

### Working Standard Reference Accessories

**2160** - TC S 1400°C Working Reference Standard Probe

**2168** - TC K 1100°C Working Reference Standard Probe

**2184** - Pt100 Class A Working Reference Standard Probe

### Model No. **Ordering Information**

**MTC 650** MTC 650 unit w/ RS232 I/F with cable & Caltemp Software, AC Cable, Switch Test Cable, 1/4" & 1/2" Insert probes, Insertion Tube Tool, Manual, Spare Fuses, NIST Calibration Certificate

- 1 120V 50/60Hz US Plug
- 2 230V 50/60Hz with Schuko Plug
- 3 230V 50/60Hz with UK Plug
- 4 230V 50/60Hz with European Plug

### MTC 650 Accessories

- MTC 650-CC - Carrying Case
- MTC 650-18P - Single Hole Insert: 1/8"
- MTC 650-14P - Single Hole Insert: 1/4"
- MTC 350-38P - Single Hole Insert: 3/8"
- MTC 650-12P - Single Hole Insert: 1/2"
- MTC 650-34P - Single Hole Insert: 3/4"
- MTC 650-78P - Single Hole Insert: 7/8"

### Note:

Single Hole mm Inserts available upon request: 3, 4, 6, 7, 8, 10, 12, 19, & 21mm  
Additional Multi-hole Inserts available upon request  
Examples: 1x 6mm + 1x 8mm  
3x 6mm  
1x10mm + 1x 4mm  
1x 1/8" + 1x 3/16"  
1x 5/16" + 1x 3/8"