



## 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)
- 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

|                             |  |  |
|-----------------------------|--|--|
| <b>Range:</b>               | 50°C (122°F) above amb. to 650°C (1202°F) * Specifications subject to change * |  |
| <b>Stability:</b>           | ±0.5°C   | <b>Dimensions (WxHxD)</b><br>160 x 350 x 370mm<br>(6.3" x 13.8" x 14.6") |
| <b>Accuracy:</b>            | ±0.6°C   | <b>Weight:</b><br>9Kg (19.8 lbs)   |
| <b>Heating Speed:</b>       | 30 min. (to maximum)   | <b>Measuring Units:</b> °C or °F   |
| <b>Cooling Speed:</b>       | 40 minutes (to 100°C)  | <b>Power Supply:</b> Switch Selectable:<br>115V or 230V AC<br>50/60Hz    |
| <b>Stabilization Time:</b>  | 15 minutes   |  |
| <b>Display Accuracy:</b>    | ± 0.1°C  |  |
| <b>Well Depth:</b>          | 110mm  | <b>Power Consumption:</b> 1200 Watts                                     |
| <b>Well Dia.:</b>           | 25mm   | <b>Warranty:</b> 1 Year Warranty   |
| <b>Switch Test /Supply:</b> | Provided / 5VDC (open)   |  |

|   |  |
|---|--|
| <b>TC Types:</b> J, K, R, S, N Res. 0.01, Accy. 0.05% F.S | <b>mV:</b> 0 to 100mV Res. 0.01/.1, Accuracy 0.05% F.S |
| <b>RTD:</b> Pt100 Res. 0.1, Accy. 0.05% F.S               | <b>V:</b> 0 to 10V Res. 0.001, Accuracy 0.05% F.S      |
| <b>mA:</b> 0 to 25mA Res. 0.001, Accy. 0.05% F.S          | <b>Ω:</b> 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, 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"