

# Universal Dry Block Medium Temperature Calibrator

**Portable/Benchtop**
**MTC 650**
**Measurement Capability**

*Precision Dry Block Calibrator with Interchangeable Thermowells*

*Ideal for quick / fast Site Calibration of RTDs / Bi-Metal Thermometers, Temperature Switches / Indicators etc. in Industrial & Marine Applications*

*High Accuracy, Resolution & Stability with Measurement Capability for mV / V / mA, Resistance TC (ISA Types J, K, R, S, N, B, T), RTD (Pt100:IEC Standard) Signals*

## SALIENT FEATURES

Advanced – Micro-controller based Technology
Heavy Duty Portable / Bench-top Model
High Accuracy, Resolution & Stability
Fast & heat cooling
128 x 64 Graphic Display
Measurement Capability for TC, RTD, mV/mA/V & Resistance Signals
Touch Membrane Keypad
Switch Test Contact Measurement
Interchangeable Single hole Thermowell Inserts
Computer Interface & Calibration Software



## SPECIFICATIONS

Range	50°C to 650°C			
Resolution	0.1°C			
Accuracy	±0.6°C			
Stability	±0.05°C			
Stabilisation Time	15 to 20 Minutes			
Temperature Readout	°C / °F Selectable			
Well Diameter	30 mm			
Immersion Depth	110 mm			
Heating Time (Ambient to max.)	20 Minutes approx.			
Cooling Time max. (to 100°C)	42 Minutes			
Switch Test facility	Provided			
Interchangeable Thermowells	Multihole to suit 2 x ¼" & 1 x ½" Probes. Other Sizes available as optional			
Housing / Mounting	Bench-top			
Power Supply	230V AC, 50 Hz			
Instrument Dimensions (L x D x H)	160 x 365 x 350 mm			
Instrument Weight (approx.)	11 Kg.			
Measurement Capability	Thermocouples	ISA Types J, K, R, S, N, B, T	RTD	Pt100 IEC Std.
	mA	0 to 25 mA	mV	0 to 100 / 1000 mV
	Volt	0 to 10 V	Resistance	0 to 500Ω / 3.5 KΩ

## MEASUREMENT : RANGE, RESOLUTION & ACCURACY

Type	Range	Resolution	Accuracy
mV (Low)	0 to 100	0.01	±0.05% F.S.
mV (High)	0 to 1000	0.1	±0.05% F.S.
Volts	0 to 10	0.001	±0.05% F.S.
mA	0 to 25	0.001	±0.05% F.S.
Ohms	0 to 500	0.01	±0.05% F.S.
KOhms	0 to 3.5	0.0001	±0.05% F.S.
RTD Pt100	-100 to 800	0.1	±0.05% F.S.

Type	Range	Resolution	Accuracy
TC Type J	-100 to 1200	0.1	±0.1% F.S.
TC Type K	-60 to 1260	0.1	±0.1% F.S.
TC Type R	150 to 1700	0.1	±0.1% F.S.
TC Type S	170 to 1700	0.1	±0.1% F.S.
TC Type N	0 to 1300	0.1	±0.1% F.S.
TC Type B	920 to 1820	0.1	±0.1% F.S.
TC Type T	0 to 400	0.1	±0.1% F.S.

## STANDARD INCLUSIONS

- Basic Instrument
- Test Leads
- Mains Cable
- Insertion Tubes (2x1/4" & 1x1/2" probes)
- Tool for Insertion Tubes
- Spare Fuses
- Computer Interface
- "MTCCal" Calibration Software
- Traceable Calibration Certificate
- Instruction Manual
- Carrying Case

## OPTIONAL (ADD-ON) ITEMS

- Additional Thermowells / Insertion Tubes (to choose from) :  
Single hole standard sizes to suit 1/8", 1/4", 3/8", 1/2", 3/4" & 3, 4, 5, 6, 7, 8, 10, 12, 13, 15, 17, 19 & 21 mm probes  
Multihole (Typical) : (1x6 + 1x8) or (3x6) or (1x10 + 1x4) mm
- Power Supply 110V AC, 60 Hz
- Calibration Certificates are issued in Accordance with our Scope as granted by NABL per ISO/IEC 17025:2017 Standards

*Manufactured by*



Since 1972

## NAGMAN INSTRUMENTS AND ELECTRONICS PRIVATE LIMITED

**AN ISO 9001:2015 CERTIFIED COMPANY**

170/1a2, Chennai Bangalore Highway Road, Sembarambakkam, Chennai – 600 123. INDIA.

**Phone - Domestic Sales** 044-6677 7024, 044-6677 7005 **Email :** [mktgchennai@nagman.com](mailto:mktgchennai@nagman.com)

**Phone - Export Sales** +91-44-6677 7025. **Email :** [exports@nagman.com](mailto:exports@nagman.com)

**[www.nagman.com](http://www.nagman.com)**



Specifications subject to change owing to continuous development. Contact us for latest Datasheet.

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