Universal Dry Block Medium Temperature Calibrator

Portable/Benchton

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



DNV·GL

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 / $3.5~K\Omega$	

MEASUREMENT: RANGE, RESOLUTION & ACCURACY

Туре	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.

Туре	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



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

 Phone - Export Sales
 +91-44-6677 7025.
 Email : exports@nagman.com

www.nagman.com

NIE/TDS/MTC 650/2309/00

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