

RTD & THERMOCOUPLE CALIBRATOR

Portable/Handheld

Nagman 02+

SALIENT FEATURES

- Compact Model
- Light Weight Unit with Holster
- Easy to carry
- Sturdy Case with grip
- Basic Accuracy : $\pm 0.05\%$ Reading
- Capability to Measure & Simulate Voltage, Thermocouple, Resistance & RTD Readings
- Output Terminal Protection : 100mA fuse
- Temperature Co-efficient : $0.1 \times$ basic accuracy / $^{\circ}\text{C}$ (temperature range $< 18^{\circ}\text{C}$ or 28°C)



Typical Photo: Final Product Look May Vary.

SPECIFICATIONS

INPUT FUNCTIONS (Measurement)

Input	Range	Input range	Resolution	Accuracy
DCV	100mV	-110.000mV ~ 110.00mV	0.01mV	0.05%+0.03mV
	1V	-1.1000V~1.1000V	0.0001V	0.05%+0.3mV
	30V	-30.000V ~ 30.000V	0.001V	0.02%+2mV
OMH	500 Ω	0-550.00 Ω	0.01 Ω	0.05%+0.2 Ω
	5K Ω	0-5.5000k Ω	0.0001k Ω	0.05%+2 Ω
TC	R	0 $^{\circ}\text{C}$ ~ 1767 $^{\circ}\text{C}$	1 $^{\circ}\text{C}$	0 $^{\circ}\text{C}$ ~500 $^{\circ}\text{C}$: 2.5 $^{\circ}\text{C}$
	S	0 $^{\circ}\text{C}$ ~ 1767 $^{\circ}\text{C}$		500 $^{\circ}\text{C}$ ~ 1767 $^{\circ}\text{C}$: 2 $^{\circ}\text{C}$
	K	-100.0 $^{\circ}\text{C}$ ~ 1372.0 $^{\circ}\text{C}$	0.1 $^{\circ}\text{C}$	-100.0 $^{\circ}\text{C}$ ~0 $^{\circ}\text{C}$: 1.2 $^{\circ}\text{C}$
	E	-50.0 $^{\circ}\text{C}$ ~ 1000.0 $^{\circ}\text{C}$		0.0 $^{\circ}\text{C}$ ~ 1372 : 0.8
	J	-60.0 $^{\circ}\text{C}$ ~ 1200.0 $^{\circ}\text{C}$		-50.0 $^{\circ}\text{C}$ ~ 0 $^{\circ}\text{C}$: 0.9 $^{\circ}\text{C}$
	T	-100.0 $^{\circ}\text{C}$ ~ 400.0 $^{\circ}\text{C}$		0.0 $^{\circ}\text{C}$ ~ 1000.0 $^{\circ}\text{C}$: 1.5 $^{\circ}\text{C}$
	N	-200.0 $^{\circ}\text{C}$ ~ 1300.0 $^{\circ}\text{C}$	1 $^{\circ}\text{C}$	-60.0 $^{\circ}\text{C}$ ~ 0 : 1.0 $^{\circ}\text{C}$
	B	600 $^{\circ}\text{C}$ ~ 1820 $^{\circ}\text{C}$		0.0 $^{\circ}\text{C}$ ~ 1200.0 $^{\circ}\text{C}$: 0.7 $^{\circ}\text{C}$
	A	0 $^{\circ}\text{C}$ ~ 2500 $^{\circ}\text{C}$		-100.0 $^{\circ}\text{C}$ ~ 0 $^{\circ}\text{C}$: 1.0 $^{\circ}\text{C}$
	C	0 $^{\circ}\text{C}$ ~ 2310 $^{\circ}\text{C}$		0.0 $^{\circ}\text{C}$ ~ 400.0 $^{\circ}\text{C}$: 0.7 $^{\circ}\text{C}$
D	0 $^{\circ}\text{C}$ ~ 2310 $^{\circ}\text{C}$		-200.0 $^{\circ}\text{C}$ ~ 0 $^{\circ}\text{C}$: 1.5 $^{\circ}\text{C}$	
RTD	Pt100(385)	-200 $^{\circ}\text{C}$ ~ 800 $^{\circ}\text{C}$	0.1 $^{\circ}\text{C}$	0.0 $^{\circ}\text{C}$ ~ 1300.0 $^{\circ}\text{C}$: 0.9 $^{\circ}\text{C}$
	Pt200(385)	-200 $^{\circ}\text{C}$ ~ 630 $^{\circ}\text{C}$		600.0 $^{\circ}\text{C}$ ~ 800 $^{\circ}\text{C}$: 2.2 $^{\circ}\text{C}$
	Pt500(385)	-200 $^{\circ}\text{C}$ ~ 630 $^{\circ}\text{C}$		800 $^{\circ}\text{C}$ ~ 1820.0 $^{\circ}\text{C}$: 1.4 $^{\circ}\text{C}$
	Pt1000(385)	-200 $^{\circ}\text{C}$ ~ 630 $^{\circ}\text{C}$		0.0 $^{\circ}\text{C}$ ~ 1600 $^{\circ}\text{C}$: 2.0 $^{\circ}\text{C}$
	Cu50	-200 $^{\circ}\text{C}$ ~ 630 $^{\circ}\text{C}$		1600 $^{\circ}\text{C}$ ~ 2500.0 $^{\circ}\text{C}$: 2.4 $^{\circ}\text{C}$
On/Off detection	500 Ω	$\leq 50\Omega$ sounding	0.01 Ω	0.0 $^{\circ}\text{C}$ ~ 1600 $^{\circ}\text{C}$: 2.0 $^{\circ}\text{C}$

Technical Datasheet

OUTPUT FUNCTIONS (Simulation)

Input	Range	Output range	Resolution	Accuracy
DCV	100mV	-10.000mV ~ 110.00mV	0.01mV	0.05%+0.03mV
	1V	-0.1000V~1.1000V	0.0001V	0.05%+0.3Mv
OMH	400Ω	0°C ~ 400.0°C	0.1 Ω	0.05%+0.2Ω
	4KΩ	0°C ~ 4.000°C	1Ω	0.05%+2Ω
TC	R	0°C ~ 1767°C	1°C	0°C ~ 100°C : 1.5°C
	S	0°C ~ 1767°C		10°C ~ 1767°C : 1.2°C
	K	-200°C ~ 1372°C	0.1°C	-200°C ~ 400°C : 0.5°C
	E	-200.0°C ~ 1000°C		400°C ~ 1372.0°C : 0.7°C
	J	-200.0°C ~ 1200°C		-200°C ~ -100°C : 0.6°C
	T	-200.0°C ~ 400°C		-100.0°C ~ 1000.0°C : 0.4°C
	N	-200.0°C ~ 1300°C		-200°C ~ -100°C : 0.6°C
	B	600.0°C ~ 1820°C		-100.0°C ~ 1200.0°C : 0.7°C
	A	0°C ~ 2500°C	1°C	-250.0°C ~ 400.0°C : 0.6°C
	C	0°C ~ 2310°C	1°C	-200°C ~ 900°C : 0.7°C
	D	0°C ~ 2310°C	1°C	900.0°C ~ 1300.0°C : 0.8°C
	RTD (3W)	Pt100(385)	-200.0°C ~ 800.0°C	0.1°C
Pt200(385)		-200.0°C ~ 630.0°C	800.0°C ~ 1820.0°C : 1.1°C	
Pt500(385)		-200.0°C ~ 630.0°C	0.0°C ~ 1600°C : 2.0°C	
Pt1000(385)		-200.0°C ~ 630.0°C	1600.0°C ~ 2500.0°C : 2.4°C	
Cu50		-50.0°C ~ 150.0°C	0.0°C ~ 1600°C : 2.0°C	

STANDARD INCLUSIONS

- Basic Instrument
- 1.5V AA Batteries – 2 Nos.
- Operation Manual
- Test Leads
- Traceable Calibration Certificate

OPTIONAL (ADD-ON) ITEMS

- Calibration Certificates are issued in Accordance with our Scope as granted by NABL per ISO/IEC 17025:2017 Standards

Manufactured by



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NAGMAN INSTRUMENTS AND ELECTRONICS PRIVATE LIMITED

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

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