
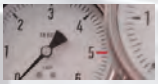


Beta TC-100

Precision Thermocouple Calibrator

Accuracy by any measure

The TC-100 Thermocouple Calibrator provides high accuracy source and measurement of ten common thermocouples, as well as mV. The TC-100's accuracy of ±0.3°C for Type J T/Cs includes all errors, at resolutions of ±0.01°C or °F in measure mode and ±0.1°C or °F in source mode.

Features including MIN/MAX re-call in measure mode, three setpoints per thermocouple range, a large knob for decade control of the output in source mode, and the ability to accept bare T/C wires in addition to mini-plug inputs, makes the TC-100 an accurate, easy-to-use instrument for all your thermocouple calibration needs.

The TC-100 accepts both Mini-plug AND bare thermocouple wires

General Features

- High accuracy ±0.3°C (Type J T/C – all errors combined)
- Ten (10) common T/C types plus mV
- Accepts both T/C mini-plug and bare T/C wires
- Simple decade control of output
- Three (3) setpoints for each T/C type
- MIN/MAX recall in measure mode
- Input protection to 240 VAC
- Supplied as shown with neoprene sleeve case

Beta TC-100

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SPECIFICATIONS (1 year at 23 °C ±5 °C; % of reading unless otherwise noted)

INPUT VOLTAGE		
Ranges		-10 to +75.000 mV
Resolution		1 µV
Accuracy		±0.007 % of rdg, ±10 µV
Input Impedance		> 1 MegOhm
OUTPUT VOLTAGE		
Ranges		-10 to +75.000 mV
Resolution		1 µV
Accuracy		±0.007 % of rdg, ±10 µV
Input Impedance		> 1 Ohm
Thermocouple Source/Measure		
Types		J, K, T, E, R, S, B, L, U, C
Range		mV
Resolution	Source	±0.1°C or °F
	Measure	±0.01°C or °F
Accuracy	J	±0.5 °C; -210 °C to -100 °C ±0.3 °C; -100 °C to +1,200 °C
	K	±0.6 °C; -200 °C to -100 °C ±0.35 °C; -100 °C to +1,000 °C ±0.5 °C; +1,000 °C to +1,372 °C
	T	±0.7 °C; -200 °C to -150 °C ±0.3 °C; -150 °C to +400 °C
	E	±0.5 °C; -200 °C to -100 °C ±0.3 °C; -100 °C to +1,000 °C
	R	±1.8 °C; 0 °C to 250 °C ±1.0 °C; 250 °C to +1,767 °C
	S	±1.8 °C; 0 °C to 250 °C ±1.0 °C; 250 °C to +1,767 °C
	B	±1.7 °C; 600 °C to 1,000 °C ±1.2 °C; 1,000 °C to 1,820 °C
	L	±0.5 °C; -200 °C to -100 °C ±0.4 °C; -100 °C to +900 °C
	U	±0.7 °C; -200 °C to 0 °C ±0.3 °C; 0 °C to +600 °C
	C	±0.4 °C; 0 to °C 1,000 °C ±0.7 °C; 1,000 °C to +1,800 °C ±1.2 °C; +1,800 °C to +2,316 °C
CJC Temp. Offset		±0.05 °C/°C outside of 23 ±5 °C
WARM-UP TIME		1 minute to specification
ENVIRONMENTAL		
Operating Temperature		-10 °C to +55 °C
Storage Temperature		20 °C to 70 °C
POWER REQUIREMENTS		**9 VDC**
Batteries		9 V alkaline; 006P/ IEC 6F22/NEDA1604 Optional NiCad / AC adapter/charger
MECHANICAL		
Dimensions		144.7 H x 80.0 W x 36.3 D mm
Weight		340 grams
OPTIONAL ACCESSORIES		Carrying Case; Model LCA-05A

Notes: 1. Temperature standard ITS-90.

Temperature Probes & Kit

A variety of temperature probe configurations are available for use with Thermocouple Calibrators.

All are Type-K, and feature ±2.2 °C/±0.75% or ±3.9 °F/±0.75% accuracy.

TP Kit includes probes:
TP-K01 through TP-K06

TP-K01 — Bead Probe
-50 °C to 200 °C; -58 °F to +392 °F

TP-K02 — Immersion Probe
-50 °C to 700 °C;
-58 °F to +1,292 °F

TP-K03 — Surface Probe
-50 °C to 400 °C; -58 °F to +752 °F

TP-K04 — Piercing Probe
-50 °C to 600 °C; -58 °F to +1,122 °F

TP-K05 — Surface Probe
-50 °C to 400 °C; -58 °F to +752 °F

TP-K06 — Air & Gas Probe
-50 °C to 800 °C; -58 °F to +1,504 °F.

Need a high performance loop calibrator?

Consider the LC-100.

With accuracy of ±0.015% of reading and 0.001 mA resolution, the LC-100 furnishes significantly extended performance over any competitive calibrator. A % Error function eliminates manual error calculations.
The LC-100 simulates, powers and measures two-wire transmitters, and can remotely calibrate 4-20 mA devices.

All devices can be supplied with a UKAS accredited calibration certificate from our laboratory.

UKAS CALIBRATION
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