

Multifunction Thermocouple/mV Calibrator

TRODEKS®

CL300A



- ✓ **High Accuracy: $\pm 0.3^{\circ}\text{C}$**
- ✓ **Measures Inputs from 10 Common Thermocouple Types plus mV**
- ✓ **Accepts Miniplugs and Bare Wires**
- ✓ **Simple Decade Control of Output**
- ✓ **3 Setpoints for Each Thermocouple Type**
- ✓ **Min/Max Recall**
- ✓ **Input Protection to 240 Vac**
- ✓ **Protected by Rubber Boot; Carrying Case Optional**

The CL300A multifunction thermocouple/mV calibrator combines high accuracy with ease of use. Its accuracy of $\pm 0.3^{\circ}\text{C}$ ($\pm 0.5^{\circ}\text{F}$) includes all errors, at resolutions of 0.01°C or $^{\circ}\text{F}$ in measure mode and 0.1°C or $^{\circ}\text{F}$ in source mode. Features include min/max recall in measure mode, 3 setpoints per thermocouple type, a large knob for decade control of the output in source mode, and compatibility with both bare-wire and miniplug inputs.

Specifications

(1-Year at $23 \pm 5^{\circ}\text{C}$; % of Reading Unless Otherwise Noted)

Output Voltage

Range: -10 to 75 mV

Resolution: 1 μV

Accuracy: $\pm 0.007\%$ rdg, $\pm 10 \mu\text{V}$

Output Impedance: 1 Ω

Input Voltage

Range: -10 to 75 mV/thermocouple source/measure

Thermocouple Types:

J, K, T, E, R, S, B, L, U, C

Resolution

Source: $\pm 0.1^{\circ}\text{C}$ or $^{\circ}\text{F}$

Measure: $\pm 0.01^{\circ}\text{C}$ or $^{\circ}\text{F}$

Accuracy:

J: $\pm 0.5^{\circ}\text{C}$; -210 to -100°C ,

$\pm 0.3^{\circ}\text{C}$; -100 to 1200°C

K: $\pm 0.6^{\circ}\text{C}$; -200 to -100°C ,

$\pm 0.35^{\circ}\text{C}$; -100 to 1000°C ,

$\pm 0.5^{\circ}\text{C}$; 1000 to 1372°C

T: $\pm 0.7^{\circ}\text{C}$; -200 to -150°C ,

$\pm 0.3^{\circ}\text{C}$; -150 to 400°C

E: $\pm 0.5^{\circ}\text{C}$; -200 to -100°C ,

$\pm 0.3^{\circ}\text{C}$; -100 to 1000°C

R: $\pm 1.8^{\circ}\text{C}$; 0 to 250°C ,

$\pm 1.0^{\circ}\text{C}$; 250 to 1767°C

S: $\pm 1.8^{\circ}\text{C}$; 0 to 250°C ,

$\pm 1.0^{\circ}\text{C}$; 250 to 1767°C

B: $\pm 1.7^{\circ}\text{C}$; 600 to 1000°C ,

$\pm 1.2^{\circ}\text{C}$; 1000 to 1820°C

L: $\pm 0.5^{\circ}\text{C}$; -200 to -100°C ,

$\pm 0.4^{\circ}\text{C}$; -100 to 900°C

U: $\pm 0.7^{\circ}\text{C}$; -200 to 0°C ,

$\pm 0.3^{\circ}\text{C}$; 0 to 600°C

C: $\pm 0.4^{\circ}\text{C}$; 0 to 1000°C ,

$\pm 0.7^{\circ}\text{C}$; 1000 to 1800°C ,

$\pm 1.2^{\circ}\text{C}$; 1800 to 2316°C

Resolution: 1 μV

Accuracy: $\pm 0.007\%$ rdg, $\pm 10 \mu\text{V}$

Input Impedance: $> 1 \text{ M}\Omega$

CJC Temp Offset: $\pm 0.05^{\circ}\text{C}/^{\circ}\text{C}$ outside of $23 \pm 5^{\circ}\text{C}$

Warm-Up Time: 1 minute to specification

Environmental

Operating Temperature:

-10 to 55°C (14 to 131°F)

Storage Temperature:

-20 to 70°C (-4 to 158°F)

Power Requirement: 9 Vdc

Battery: 9V alkaline (included)

Optional Power: Ni-Cad battery, AC adaptor/charger

Mechanical

Dimensions:

144.7 H x 80.0 W x 36.3 mm D

(5.7 x 3.15 x 1.43")

Weight: 340 g (12 oz)

CL300A.



To Order

Model No.	Description
CL300A	Thermocouple calibrator

Comes complete with rubber boot, 9V battery, Type K thermocouple, operator's manual and calibration certificate.

Accessories

Model No.	Description
CL300A-CC	Soft carry case
PCL-BATT-9V	9V NICAD battery
PCL-ACA	AC charger 120 Vac