

Multifunction Thermocouple/mV Calibrator



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)



OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.

To Order

Model No.	Description
CL300A	Thermocouple calibrator

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

Ordering Example: CL300A, thermocouple/millivolt calibrator. OCW-2, OMEGACARESM extends standard 1-year warranty to a total of 3 years.

Accessories

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