

# Thermocouple Calibrator

CL130



Optional†

- Measure and Source Thermocouples
- Large, Easy-to-Read Display with Backlight
- Thermocouple Simulation (Manual or Auto)
- 3 Programmable Step and Ramp Routines
- Auto Step Simulation (0 to 100% or 25% Increments) with Definable LRV & URV

The CL130 thermocouple calibrator has been designed using the latest technology to provide reliable accuracy throughout its entire operating temperature range. The compact design makes the unit easy to carry and the intuitive user interface makes it easy to use. Temperature measurements/simulations are displayed on a large, easy-to-read liquid crystal display (LCD). This unit has two backlights: a green backlight which is user activated to improve readability in low light conditions, and an automatic red backlight which indicates an over-range condition. Twelve keys provide access to the functional modes and menus, including measure, simulate, setup, run, record, edit, and backlight activation.

## Specifications

**mV Range, Accuracy:** -15 to 80 mV, 0.005% Rdg ±6 mV  
**mV Temp. Effect:** ±2 µV/°C (Ref. Temp = 23°C)  
**Cold Junction Effect:** ±0.05°C/°C  
**Cold Junction Accuracy:** ±0.1°C at 25°C

## Thermocouple Range-Read and Source

Type	Range				Accuracy	
	°C		°F		°C	°F
<b>K</b>	-200	1372	-328	2501	0.4	0.7
<b>J</b>	-200	-165	-328	-265	0.3	0.5
	-165	1200	-265	2192	0.2	0.4
<b>T</b>	-200	-168	-328	-270	0.4	0.7
	-168	-86	-270	-123	0.3	0.5
<b>E</b>	-200	-179	-328	-290	0.3	0.5
	-179	15	-290	59	0.2	0.4
<b>N</b>	15	1000	59	1832	0.1	0.2
	-200	110	-328	230	0.3	0.5
<b>R</b>	110	1300	230	2372	0.2	0.4
	-50	27	-58	81	2.0	3.6
<b>S</b>	27	736	81	1357	1.0	1.8
	736	1768	1357	3214	0.5	0.9
<b>B</b>	-50	27	-58	81	2.0	3.6
	27	1179	81	2154	1.0	1.8
<b>B</b>	1179	1768	2154	3214	0.5	0.9
	250	295	482	563	3.0	5.4
	295	605	563	1121	2.0	3.6
	605	1301	1121	2374	1.0	1.8
<b>B</b>	1301	1820	2374	3308	0.5	0.9



SPHT-K-12 thermocouple probe sold separately.

CL130

## Resolution:

**Thermocouple Types E, J, K, N, T:** 0.1°C  
**Thermocouple Types B, R, S:** 1°C  
**mV:** 0.001 mV (1 µV)

## Environmental:

**Storage:** -40 to 85°C (-40 to 185°F)  
**Operating:** -10 to 50°C (14 to 122°F)  
**Humidity:** 10 to 90% RH  
**Maximum Input Voltage:** 30 Vdc

## Power Requirement

**Batteries:** 3 "AA" batteries (included), field replaceable

## Dimensions:

**Enclosure:** 165 H x 81 W x 28 mm D (6.5 x 3.2 x 1.1")

**Polycarbonate, Permanently Static Dissipative, ESD Protection Enclosure with Boot:**  
 173 H x 89 W x 33 mm D (6.8 x 3.5 x 1.3")

**AVAILABLE FOR FAST DELIVERY!**

**To Order** Visit [omega.com/cl130](http://omega.com/cl130) for Pricing and Details

Model No.	Description
<b>CL130</b>	Thermocouple calibrator
<b>CL130-NIST†</b>	Thermocouple calibrator with NIST traceable certificate of calibration

## Accessories

Model No.	Description
<b>CL130-CASE</b>	Carrying case for CL130
<b>CL-300-CABLE-(*)-2</b>	0.6 m (2') thermocouple cable, SMP male to spade lugs
<b>CL-300-CABLE-(*)-10</b>	3 m (10') thermocouple cable, SMP male to spade lugs

Comes complete with operator's manual, shock resistant holster, 3 "AA" alkaline batteries.

\* For **CL-300-CABLE**, insert one thermocouple type: J, K, T, E, R, S, B or N

**Ordering Example:** CL130-NIST, thermocouple/mV calibrator with NIST certificate. OCV-2 OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 3 years.



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

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