



M130

Thermocouple Calibrator

The M1 Series of handheld calibrators from Meriam Process Technologies combines form, fit and function to deliver precision measurement for field, plant or lab use.

Features

- Measure and source thermocouples
- Large, easy to read display with backlight
- Shirt pocket convenience
- Cold junction compensation
- T/C simulation (manual or auto)
- 3 programmable auto step routines (Units, T/C Type, LRV, URV, STEPS & DWELL TIME)
- 3 programmable auto ramp routines (Units, T/C Type, LRV, URV, STEPS UP/DOWN TIME, DELAY)
- Auto step simulation (0-100% or 25% increments) with definable LRV & URV

M130 Advantages

Thermocouple Types

Type B, E, J, K, N, R, S, T and millivolts

Accuracy

$\pm 0.005\%$ Reading $\pm 6 \mu\text{V}$

Engineering Units

Displays the temperature of a T/C in $^{\circ}\text{C}$, $^{\circ}\text{F}$, $^{\circ}\text{R}$, K and millivolts.

Record Mode

Store up to 240 temperature measurements.

- Automatic – the current value is automatically stored every 5 seconds, for up to 20 minutes.
- Manual – the current value is stored each time the Units key is pressed, up to 240 times.

Backlight

A green backlight is user activated via the backlight key. A red backlight is automatically activated during an over range condition.

Auto Shutoff

To conserve battery life, the M130 will automatically power off after 30 minutes of keypad inactivity.

Low Battery Indication

BAT icon is displayed when batteries require replacement. Approximately 2 hours of run time remains when BAT appears.



Ordering Information

M130

Includes protective red rubber boot, 3 AA batteries, shorting plug and user's manual

Optional Accessories:

9A84 T/C Wiring kit with connectors (E, J, K, N, T, R/S, B and simulation cable)

9A000053 ABS plastic carrying case

Z1065 NIST Traceable Certificate with Data

Base Unit

- Lightweight and ergonomic 12 ounces
- 6.0" x 3.0" x 1.0"
- ESD Dissipative polycarbonate

Keypad

- Sealed membrane type with 12 dome style contact buttons

Power

- 3 AA batteries providing over 100 hours of continuous use.

Connections

- Standard mini-T/C connector

Certifications

- CE Mark (standard)
- NIST Traceable Certificate with Data (optional)

Temperature Specifications

- Storage: -40°F to +185°F (-40°C to +85°C)
- Operating: 14°F to +122°F (-10°C to +50°C)

Measurement & Simulation Accuracy Table

| T/C Type | ± 3.0°C Accuracy | ± 2.0°C Accuracy | ± 1.0°C Accuracy | ± 0.5 °C Accuracy | ± 0.4 °C Accuracy | ± 0.3 °C Accuracy | ± 0.2 °C Accuracy | ± 0.1 °C Accuracy |
|----------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| E | | | | | | -200 to -179°C | -179 to 15 °C | 15 to 1000 °C |
| J | | | | | | -200 to -165 °C | -165 to 1200 °C | |
| K | | | | | -200 to 1372°C | | | |
| N | | | | | | -200 to 110 °C | 110 to 1300 °C | |
| T | | | | | -200 to -168°C | -168 to -86 °C | -86 to 346 °C | 346 to 400 °C |
| R | | -50 to 27 °C | 27 to 736 °C | 736 to 1768 °C | | | | |
| S | | -50 to 25 °C | 25 to 1179 °C | 1179 to 1768°C | | | | |
| B | 250 to 295 °C | 295 to 605 °C | 605 to 1301 °C | 1301 to 1820 °C | | | | |