



# 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  $\pm 6 \mu V$

### Engineering Units

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

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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				



### Ordering Information

**Model Number & Description**  
M130 - Includes protective red rubber boot, 3 AA batteries, shorting plug and user's manual

**Optional Accessories**

- Z9A84 T/C Wiring kit with connectors (E, J, K, N, T, R/S, B and simulation cable)
- Z9A000053 ABS plastic carrying case
- Z1055 NIST Traceable Certificate with Data

### Specifications

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)