



# 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.



## 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				