

# Calibrator/Thermometer

CL3515R



Standard

- ✓ USB and RS232 Interface with Windows® Software
- ✓ 11 Types of Thermocouples: K, J, T, E, R, S, N, L, U, B, and C (in °C, °F, or K), and mV Signal Output
- ✓ NIST-Traceable Calibration Certificate with 7 Data Points (Included)
- ✓ 2 Channels for Thermocouple Temperature Measurement (T1 and T2) with Offset Adjustment
- ✓ Ergonomic Rotary Knob Allows for One-Handed Operation

The CL3515R is a portable calibrator/thermometer with a 4-digit LCD. It is designed to use external Type K/J/T/E/R/S/N/L/U/B/C thermocouples as temperature sensors. TRODEX offers a complete selection of thermocouples, or we can custom-design parts to meet your specifications. The thermometer features a dual thermocouple input and an adjustable thermocouple offset. The thermocouple types comply with the NIST monograph 175, revised to ITS-90 standards.

## Specifications

### Thermocouple (Resolution) Measurement Range\*:

- K:** (0.1°) -200 to 1372°C (-328 to 2501°F)
- J:** (0.1°) -210 to 1200°C (-346 to 2192°F)
- T:** (0.1°) -250 to 400°C (-418 to 752°F)
- E:** (0.1°) -250 to 1000°C (-418 to 1832°F)
- R:** (1°) 0 to 1767°C (32 to 3212°F)
- S:** (1°) 0 to 1767°C (32 to 3212°F)
- N:** (0.1°) -200 to 1300°C (-328 to 2372°F)
- L:** (0.1°) -200 to 900°C (-328 to 1652°F)
- U:** (0.1°) -200 to 600°C (-328 to 1112°F)
- B:** (1°) 600 to 1820°C (1112 to 3308°F)
- C:** (1°) 0 to 2316°C (32 to 4200°F)

\* According to temperature standard ITS-90.

CL3515R shown with 2 Type K thermocouples (included).



### Accuracy:

#### Thermocouple Types K/J/T/E/L/U:

- ±(0.05% rdg + 0.5°C) -50 to 1372°C
- [±(0.05% rdg + 1.0°F) -58 to 2501°F]
- ±(0.05% rdg + 1.0°C) -50 to -250°C
- [±(0.05% rdg + 2.0°F) -58 to -346°F]

#### Thermocouple Type N:

- ±(0.05% rdg + 1.0°C) -50 to 0°C
- [±(0.05% rdg + 2.0°F) -58 to 32°F]
- ±(0.05% rdg + 0.5°C) 0 to 1300°C
- [±(0.05% rdg + 1.0°F) 32 to 2372°F]

#### Thermocouple Types R/S/B/C:

- ±(0.05% rdg + 2°C) 0 to 1767°C
- [±(0.05% rdg + 4°F) 32 to 3212°F]

#### Thermocouple Simulation Range:

- Resolution: 0.1° (1° for R/S/B/C)
- Accuracy\*: ±(0.3°C + 10 µV)

\* Accuracy is specified for operating temperatures from 18 to 28°C (64 to 82°F) for 1 year, not including thermocouple error.

#### mV Range: -25 to 75 mV

Resolution: 10 µV

Accuracy: ±0.025% + 1 digit

#### Temperature Coefficient:

0.1 times the applicable accuracy specification per °C from 0 to 18°C and 28 to 50°C (32 to 64°F and 82 to 122°F)

Display: 4-digit LCD with max reading of 19999

Input Connector: Miniature thermocouple connector (SMP type)

Power: 9V battery (included)

Battery Life: 17.5 hours nominal with low-battery indicator

#### Dimensions:

192 H x 91 W x 52.5 mm D (7.5 x 3.5 x 2.1")

Weight: 320 g (0.7 lb)

#### Environmental

Ambient Operating Ranges:

0 to 50°C (32 to 122°F), <80% RH

Storage Ranges:

-20 to 60°C (-4 to 140°F), <70% RH

## To Order

Model No.	Description
CL3515R	Thermocouple calibrator
SC-HH500	Soft case
RSC-J-1-4-4	Type J retractable cable [0.3 m (1') expands to 1.5 m (5')] with 2 SMP-M
RSC-T-1-4-4	Type T retractable cable [0.3 m (1') expands to 1.5 m (5')] with 2 SMP-M
RSC-E-1-4-4	Type E retractable cable [0.3 m (1') expands to 1.5 m (5')] with 2 SMP-M
RSC-K-1-4-4	Spare Type K retractable cable [0.3 m (1') expands to 1.5 m (5')] with 2 SMP-M
88013K	Surface probe up to 815°C (1500°F)
KTSS-HH	Immersion probe

Comes complete with 2 Type K beaded thermocouples [max temperature 260°C (500°F)], 9V battery, TAS transition adaptor, 1 Type K cable, 2 PC interface cables, software and operator's manual.

Ordering Example: CL3515R, thermocouple calibrator.

K-49

Exclusively

### Free Thermocouples Included!

All CL3515R models include 2 free 900 mm (36") Type K insulated beaded wire thermocouple with subminiature connector and wire spool caddy.  
Order a Spare! Model No. SC-TT-K-30-36