

Industrial Thermocouple Calibrator

The only multi-thermocouple handheld calibrators made in the U.S.A. that offer superior accuracy for J, K, T, & E thermocouples, 500-hour battery life, and a 3-year warranty.



FEATURES

- Laboratory Accuracy $\pm 5 \mu\text{V}$
- Resolution: 0.01°
- 10x Battery Life
- Simultaneous Source / Measure
- MIL-STD Durability
- Easy One Hand Operation
- Calibration Report Included
- Meets SAE AMS 2750E requirements as a secondary standard instrument
- Made in USA

NEW CHALLENGES require new tools. TEGAM has rethought temperature calibrators to offer you the performance you need today without complicating your work. The new 940 Series provides laboratory grade calibrations in a highly portable package that goes to the work-site with ease. Industries that measure temperature are being pushed to achieve better results for both quality and product safety. **TEGAM** has responded by designing an instrument that leads its class in terms of accuracy, battery life, convenience and ease of use.

When you venture out into the field or plant to perform service work, you need a **durable** tool that you can count on. TEGAM has over 30 years of experience building hand held instruments for challenging environments. That's why we designed the 940 series to meet MIL-PRF-28800F for shock, drop and vibration tests. The keypad is a sealed design that rejects fluids and dirt without compromising tactile feedback. No matter how good the tool is, it is useless with dead batteries. We gave the 940 Series exceptional **10X battery life** of its competitors with 3 AA batteries so that you aren't disappointed in the field.

More **stringent calibration requirements** drive the need for better tools. Tighter process controls and quality standards mean your old calibrator doesn't measure up anymore. TEGAM has designed the most accurate calibrator in a portable package. While it is difficult to recreate the temperature controlled environment that a lab provides, you can use an instrument that delivers **laboratory grade accuracy** with clear specifications that let you determine the exact level of field performance you do achieve. TEGAM's new 940 Series calibrators compensate for the ambient temperature. This allows you to perform calibrations with confidence in diverse conditions.

A highly capable instrument can often imply complexity. TEGAM engineers appreciate **simplicity** and designed the 940 Series to be easier to use than the competitors. Our goal was to make the technician productive when they first picked up the instrument. With one key, the user can perform a 10% / 90% calibration without reading the manual. Another key increments 0%/25%/50%/75%/100% for rapid 5 point checks. Setting any specific temperature is equally easy as are step and ramp modes.

Like all TEGAM products, the 900 Series calibrators are designed, assembled and tested in the United States. TEGAM backs this durable instrument with a standard **3-year warranty** to assure you that your investment is sound.

When the Measurement Matters, Be Certain with TEGAM.

Specifications

Source / Measure Accuracy	±0.003% (Rdg) ±5 µV	18 to 28 °C	
Resolution	1 µV, 0.01°	Range	-15mV – 85mV
Cold Junction Error	±0.15°C		
Display	5-Digit Auto-Resolution (0.1/0.01) with Backlight and Function Annunciators		

Source / Measure Accuracy* over range of 18 to 28°C (64.4 to 82.4°F) | CJC error included

TC Type	°C Range	°C	TC Type	°C Range	°C
J	-200 to -160	±0.7 to ± 0.5	T	-260 to -190	±2.6 to ±0.7
	-160 to -110	±0.4		-190 to -120	±0.6 to ± 0.5
	-110 to 10	±0.3		-120 to -70	±0.4
	10 to 1200	±0.2		-70 to 80	±0.3
K	-230 to -160	±1.2 to ±0.6	E	80 to 400	±0.2
	-160 to -90	±0.5 to ± 0.4		-240 to -150	±1.2 to ±0.4
	-90 to 380	±0.3		-150 to -100	±0.4
	380 to 665	±0.2		-100 to 20	±0.3
	665 to 1372	±0.3		20 to 1000	±0.2

* See Graphs in Manual for Detailed Accuracies

Connector Type	Mini-TC	
Temperature Units	°C, °F, mV	
Probe Zero Function	Resolution 0.1 °C/°F	
Reading Rate	3/sec. for Readings and TREND indicators	
Battery Type	3 AA (IEC LR6, ANSI 15) Alkaline	
Battery Life	500 Hours	
Statistics	Min, Max, Avg, Rng, and Std Dev	

Operating Environment:

Temperature	-20 to 55 °C	-4 to 131 °F
Humidity	5 to 95%, 10 to 30 °C	
Altitude	0 to 4600 m	0 to 15,092 ft.
Vibration	Random 10-500 Hz, 0.03 g ² /Hz	
Shock	30g Half Sine	
Drop	4 drops from 1 m to concrete	
Compliance, Electrical	CE, MIL-PRF-28800F Class 2	
Compliance, Substances	RoHS 2 Directive 2011/65/EU Compliant, REACH	
Dimensions	193 X 84 X 28 mm	7.6 X 3.3 X 1.1 in.
Weight	362.9 g	12.8 oz
Warranty	3 year Parts & Workmanship	
Calibration Guarantee	2 year	

Ordering Information	Model	Description	More Info
Calibrator	940A	Thermocouple Calibrator	
Included Accessories	3 AA Batteries, Quick Start Guide, Tilt Stand/Magnetic, Calibration Report		
Optional Accessories	911-911 9K002MTC36 940-912K 940-912J 940-912T 940-912E 940-912U 940-912R/S 940-912N 940-913	Foam-Filled Hard Carry Case 3' Type K Wire Probe Calibration Adapter Cable <i>Available in Type K, J, T, E, U, R/S, or N :</i> Includes a 3' calibration cable terminated with a male MTC and 1/4" spade lug; a standard thermocouple connector; and a standard to male mini adapter. Calibration Kit includes four 3' cal cables of each Type K, J, T & E terminated with a male MTC connector and copper alligator clips; a 9K002MTC36 3' Type K wire thermocouple sensor; all packaged in a 911-911 foam-filled hard carry case.	
Available Probes	See TEGAM Temperature Probe Selection Guide for available wire, immersion, piercing, gas, pipe clamp and surface type probes.		