

Thermocouple Meters 2500/1370 Series

2500/1370 Series Type K Thermocouple Meters

- **2500 Meter** Range -100° to 2500°F
- **1370 Meter** Range -70° to 1370°C
- Meter options for °F or °C range, display type and power
- Meter accuracy is $\pm 0.2\%$ of reading ± 1 digit
- Maxi-Temp® automatically holds peak reading
- Accepts all type K probes with ANSI mini-connectors
- Microprocessor circuitry for thermocouple linearization

Heat-Prober® Thermocouple Thermometers and Probes are rugged and reliable instruments made for process and maintenance temperature measurements.

The pocket-sized microprocessor-based Heat-Prober Type K thermometer updates readings three times per second with an accuracy of $\pm 0.2\%$ of reading ± 1 digit in 1°F or °C resolution. The precision cold junction is compensated with a unique, permanently calibrated circuit.

The Wahl Maxi-Temp peak hold switch, available on all models, permits the Heat-Prober to hold and display the highest temperature reached. This function is ideal where the operator must concentrate on the probe when making the measurement and where an instantaneous transient peak is to be recorded. Maxi-Temp meters also can be switched to normal operation.

Advanced electronics are housed in ABS plastic, thoroughly tested for environmental integrity and subjected to 4-foot drop tests, battery life and running life tests. All units are calibrated with simulated EMF inputs and powered during a high-temperature burn-in cycle.

Model 2500M (-100° to 2500°F) features a bright .33" high red LED display for normal to low lighting conditions. It operates on a rechargeable 6.25V NiCad battery pack. Includes battery recharger/AC line adapter and Wrist Strap.

Model 1370M as above with -70° to 1370°C range.

Model TCMR-K °F/°C switchable.

Model 2500MX (-100° to 2500°F) features a .5" high red LCD display for normal to bright lighting conditions. It operates on a rechargeable 6.25V NiCad battery pack. Includes battery recharger/AC line adapter and Wrist Strap.

Model 1370MX as above with -70° to 1370°C range.

Model TCMR-KX °F/°C switchable.

Model 2500MVX (-100° to 2500°F) features a .5" high red LCD display for normal to bright lighting conditions and is powered by a replaceable single standard 9V battery. Includes Wrist Strap.

Model 1370MVX as above with -70° to 1370°C range.

Model TCMR-KVX °F/°C switchable.

See Meter specifications on page 12.

See page 12-13 for 2500/1370 Series meter, probe, and accessory money-saving kits.

See pages 14-17 for interchangeable thermocouple probes.



2500MX Type K Thermocouple Heat-Prober

NIST TRACEABLE THERMOCOUPLE CALIBRATORS



TA-70AFK Precision Calibrator in use with 2500MX Thermocouple Meter

This thermocouple meter accessory allows calibration over the meter's full range.

Useful for quick field diagnostics, it assures meter accuracy whenever a measurement is in question.

Accuracy is $\pm 0.3^\circ\text{F}/^\circ\text{C}$ or 0.2% of reading, whichever is greater.

User sends the *calibrator only* back to the factory for NIST Certification.

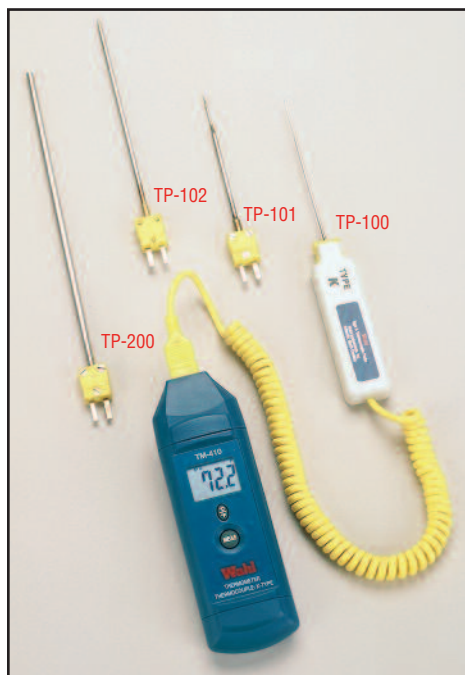
One Calibrator maintains NIST traceability for all in-house meters.

NIST Certification is optional with Calibrator

THERMOCOUPLE CALIBRATOR MODELS		
Model	Type	Calibration Points
TA30AFK	K	Discontinued
TA50AFK	K	100°F - 155°F - 200°F - 250°F - 300°F
TA70AFK	K	130°F - 650°F - 1300°F - 1900°F
TA70ACK	K	70°C - 400°C - 800°C - 1200°C
TA70AFT	T	Discontinued

This product has been Discontinued

TM410 Thermocouple Food Service Thermometer



TM410 with TCL329K Extension Handle allows use of interchangeable probes with one handle and cord set. See page 15 for probe descriptions.

The Wahl **TM410 Type K Thermocouple Digital Heat Prober® Thermometer** is economical and compact. It provides the highest accuracy at the lowest price of any Thermocouple Instrument on the market today.

- Accuracy of $\pm 1.0^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$) in an operating range of 32° to 200°F (0° to 93°C)
- Meets and exceeds FDA Requirements (Food Code requires $\pm 2^\circ\text{F}$)
- Optional probes plug into the top of TM410 for easy single-handed use
- Optional TCL329K Extension Handle for extended reach
- Built in pocket/belt clip on back of unit
- Reduced dirt-harboring crevices for easy cleaning
- $^\circ\text{F}$ and $^\circ\text{C}$ Switchable

Wahl TP Probes (shown left with TM410, described on page 15) are specially manufactured with food service in mind to give fast and accurate results. They can be inserted into the TM410 for single handed operation and are durable enough to withstand the rigors of a busy kitchen. Probes can be safely passed through the dishwasher for ease of cleaning. Accuracy is maintained regardless of which probe is attached, assuring greater certainty of safe food temperature, and tighter control over the quality of the finished product.



TM410 shown in use with NIST Certified TA50AFK Calibrator, page 10.

This product has been Discontinued

TM500 Thermocouple Meter

The Wahl **TM500** Heat Prober Meter offers value with exceptional features. The TM500 has advanced microprocessor functions, dual display and dual probe capability for more advanced testing in critical process and laboratory applications.

- **TM500 Type J** Range of -328°F to 1922°F (-200°C to 1050°C).
- **TM500 Type K** Range of -328°F to 2498°F (-200°C to 1370°C).
- Large LCD and Dual probe input accepts one or two Type J or Type K Thermocouple probe(s) with standard ANSI mini-connectors.
- Selectable temperature scale, Fahrenheit or Celsius readings.
- Main LCD displays the temperature reading from either selected probe or the temperature difference between the two.
- Third LCD displays time or timing duration (hours, minutes, seconds) of MAX/MIN or AVERAGE temperature events.
- "Recording" mode allows data storage for MAX, MIN, and AVERAGE temperatures reached over a time period.
- "Set" mode allows entry of reference and alarm points.
- Supplied with water and shock resistant rubber boot, built-in easel stand, 9V battery, and two Type K test probes.

See Specifications for both Meters above on page 12.

See page 13 for Thermocouple Meter, probe, and accessory money-saving kits.

See pages 14-17 for interchangeable thermocouple probes.



TM500 shown with TC869 45° Spring Articulated Surface Probe

TM500 CALIBRATOR	
Type K Range	-328° to 2498°F and -200° to 1370°C
Type J Range	-328° to 1922°F and -200° to 1050°C
Resolution	0.1° , $^\circ\text{F}$ or $^\circ\text{C}$
Meter Accuracy	$\pm 0.05\%$ reading $\pm 0.6^\circ\text{F}$ (0.3°C) @ $-58^\circ/2498^\circ\text{F}$ (-50° to 1370°C) $\pm 0.05\%$ reading $\pm 1.4^\circ\text{F}$ (0.7°C) @ $-58^\circ/328^\circ\text{F}$ (-50° to 200°C)
Power	One standard 9V, NEDA 1604 or equiv.
Display	5 Digit LCD
Meter Size	7-5/8" x 3-5/8" x 2-1/8" (190 x 92 x 54mm)

Calibration Services Available

(800) 421-2853 • FAX (828) 658-0728 • www.palmerwahl.com

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Thermocouple Meter Specifications

See our TM602 Thermocouple Thermometer and
TM630 Thermocouple and RTD Thermometer featured on page 3

Thermocouple Meter Specifications								
Model	2500M	2500MX	2500MVX	1370M	1370MX	1370MVX	TM410	TM500
Range	-100°/2500°F			-70°/1370°C			-40°/1999°F -40°/1092°C	-328°/2498°F -200°/1370°C
Digital Display	LED	LCD	LCD	LED	LCD	LCD	LCD	Dual LCD
F/C Switch	Optional			Optional			Yes	Yes
Resolution	1°			1°			1.0° or 0.1°	0.1°
Meter Accuracy	±0.2% ±1 digit			±0.2% ±1 digit			±1.0°F @ 32°/200°F (±0.5°C @ 0°/93°C) 0.3% reading, ±2°F @ -40°/32°F (-40°/0°C) 0.3% reading, ±2°F @ 200°/1999°F ±0.4°C @ 93°/1092°C	±0.05% reading ±0.6°F (0.3°C) @ -58°/2498°F (-50°/1370°C) ±0.05% reading ±1.4°F (0.7°C) @ -58°/-328°F (-50°/-200°C)
Thermocouple Type	K			K			K	J, K
Peak Hold	Yes			Yes			No	Yes
Ambient Operating Range	-20°/120°F -29°/49°C		0°/120°F -18°/49°C	-20°/120°F -29°/49°C		0°/120°F -18°/49°C	32°/122°F 0°/50°C	32°/122°F 0°/50°C
Power	6.25V NiCad Recharge Pk		9V	6.25V NiCad Recharge Pk		9V	Three 1.5V AAA	9V
AC Power	Yes		No	Yes		No	No	No
Battery Life	8 hours	50 hours	50 hours	8 hours	50 hours	50 hours	140 hours	100 hours
Low Battery Ind	Yes			Yes			Yes	Yes
Recharger Included	7.5V @ 100 mA 110 or 220 V AC		N/A	7.5V @ 100 mA 110 or 220 V AC		N/A	N/A	N/A
Size	6" x 3" x 1"			6" x 3" x 1"			6" x 2" x 3/4"	7.5" x 4" x 2"
Weight	10.5 oz. (298 grams)			10.5 oz. (298 grams)			3.6 oz. (102 grams)	15.5 oz. (439 grams)

THERMOCOUPLE METER ACCESSORIES	
DA-4	Silicone Paste
DA-6	Belt-Clip Meter Case with Hand Strap
DA-10	Nylon Safety Wrist Strap
MA-150	Battery Recharger, 110V AC 50/60Hz
MA-150E	Battery Recharger, 220V AC 50/60Hz, European connector
TA-60	Shock-Proof attache-style Instrument Case
11681-1	Spare NiCad Battery Pack
12232	Standard 9V Alkaline Battery
12234-02	3V, Lithium, coin Cell Battery for TA30 and TA50
12235	7.5V, Alkaline, Multi-Cell Battery for TA50 and TA70
METER OPTIONS	
NIST-12	Certificate with 3 Standard Calibration Points between 32°F (0°C) & 500°F (250°C). Meter calibration includes one probe.
NIST-12-1	Certificate with 3 User-specified Calibration Points between -40°F (-40°C) & 600°F (315°C). Meter calibration includes one probe.



Sample Meter Kit sold on pages 7 and 13. Kit includes Meter, Carrying Case, Calibrator, Wrist Strap, Recharger and Probe.