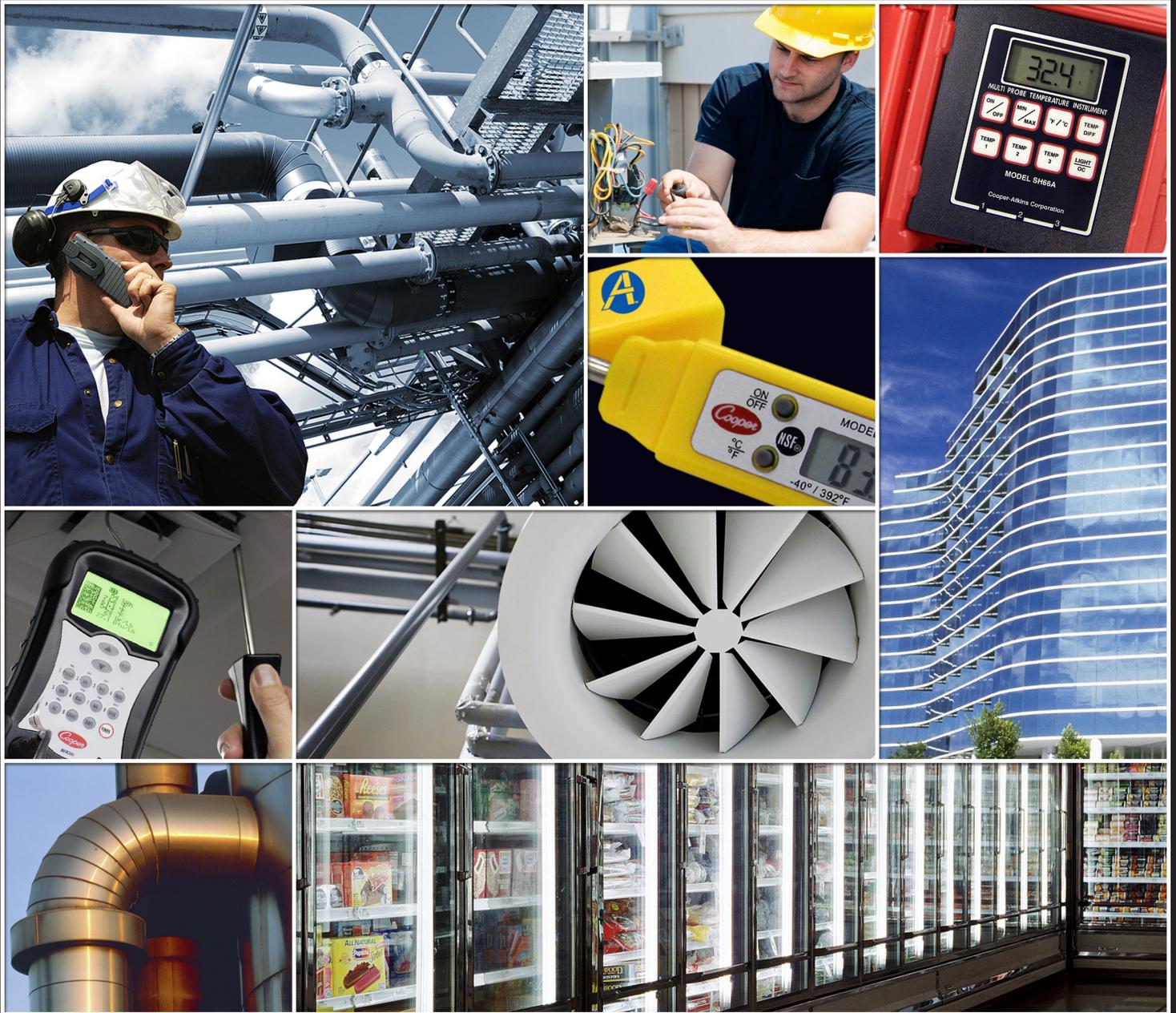


*Cooper*

**ATKINS**®

*Measuring Success Since 1885*



# INDUSTRIAL CATALOG

HVAC / R • Facilities • OEM

# Cooper-Atkins Corporation

Cooper-Atkins has built a solid reputation as a manufacturer and provider of quality temperature, time and humidity instruments. The inventor of the first bi-metal oven thermometer, David G. Cooper, founded The Cooper Thermometer Company in 1885. For over 125 years, Cooper-Atkins has been a leading manufacturer of indoor environment and innovative food safety solutions. We have a global reach and are a trusted resource for high-quality products and expert advice. The company continues to meet the needs of its customers by remaining focused on the education and promotion of important industry issues and by providing the highest level of service and customer satisfaction!

## History

During the 1960s, the Cooper Thermometer Company expanded its brand with the development of three cooking lines. The acquisition of the Croydon Thermometer Company further expanded the consumer product line into weather instruments. Two separate marketing groups were established for the consumer and industrial markets to advance these new product lines.

In 1984, The Cooper Thermometer Company purchased the Industrial Division of (Electro-Therm) Electromedics in Englewood, Colorado. This acquisition immediately launched Cooper into the digital thermometer business and the company officially became Cooper Instrument Corporation.

In 2001, Cooper Instrument Corporation acquired Atkins Technical, the leader in thermocouple technology and a company that served 19 of the top 25 restaurant chains worldwide.

In 2002, KTG, Inc. was acquired; a developer of wireless solutions (including temperature monitoring and food safety), handheld PDA applications (including inspections and training) and innovative software solutions. Now, as Cooper-Atkins Corporation, we are meeting customers' needs with the most comprehensive line of measurement solutions and customer satisfaction.

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Carol P. Wallace, President / CEO

Cooper-Atkins Corporation is certified as a Women's Business Enterprise by the Women's Business Enterprise National Council (WBENC). Carol P. Wallace has been the President and CEO of Cooper-Atkins Corporation since 1994 and is recognized by the WBENC for leading a successful and thriving women-owned corporation.



The WBENC is the largest, third-party certifier of businesses owned, controlled and operated by women in the U.S.

*"We will continue to provide our dedicated customers with affordable solutions for every temperature measurement challenge - from bi-metal pocket tests to hand-held thermocouple units to our high-tech wireless temperature monitoring systems. When foodservice professionals are faced with temperature challenges they will continue to look to Cooper-Atkins to provide solutions tailored to the needs of their business."* - **Carol P. Wallace**

# MFM300 Multi-Function Instrument

Lighten your load and increase your capabilities by using the MFM300!

It's your choice . . . you can use all of the following separate instruments and tools:

- Digital Thermometers
- Anemometers
- Sling Psychrometers
- Data Loggers
- Gauge Sets
- P-T Charts
- Psychrometric Charts

Or just use one . . . the MFM300!



The MFM300's Universal Jack system allows you to add the functions you need - when you need them.

- Three Thermistor Temperature Jacks (T1, T2, & T3) and Two Universal Input Jacks (U1 & U2)
- Instrument instantly recognizes all probes and accessories . . . no setup required.

The MFM300 Multi-Function Instrument is designed as a modular, expandable instrument, allowing the user to add accessories as needed. The MFM300 has the ability to measure, calculate and display the following:

- Temperature - 3 Zones - Delta T, Min, Max, and Average
- Pressure
- Superheat and Sub-cooling
- Humidity
- Psychrometrics
- Airflow
- Data Logging (requires optional GL300)
- Upgradable (requires optional 9362 PC Connection Cable)



**MFM300**  
Sales & Training CD

To request your FREE Sales and Training CD ROM (Included with every MFM300 and Kit) visit:  
[www.cooper-atkins.com/mfm.asp](http://www.cooper-atkins.com/mfm.asp)

## Temperature

**Range:** -58° to 302°F / -50° to 150°C

**Accuracy:** ±0.3F° / 0.2C° or ±0.5% of reading, whichever is greater

**Resolution:** 0.1°

## Ambient Operating Conditions:

32° to 122°F / 0° to 50°C, 10% to 90%RH non-condensing

## Humidity

**Range:** 0% to 99%RH

**Accuracy:** ±2%RH

**Resolution:** 1%RH

**Dry-Bulb Range:** -40° to 185°F / -40° to 85°C

**Accuracy:** ±0.5F° / 0.3C°

**Resolution:** 0.1°

## Pressure

**Range:** 0 to 500 PSI using 5250 pressure probe

**Range:** 0 to 1000 PSI using 5200 pressure probe

**Accuracy:** ±1% Full-Scale

## Air Flow

**Velocity:** 100 to 6,000 FPM / 0.5 to 30 MPS

**Accuracy:** ±3% of Reading, +0.5% FS at 77F° / 25C°

**Resolution:** 1 FPM / 0.01 MPS

**Temperature Range:** 32° to 150°F / 0° to 65°C

**Accuracy:** ±2F° / 1C°

## Refrigerants

**P / T Data for 15 refrigerants already installed:**

R-11, R-12, R-22, R-123, R-134A, R-401A, R-401B, R-402A, R-402B, R-404A, R-408A, R-409A, R-410A, R-502, R-507

**Power:** Four AA, 1.5V Alkaline batteries included

**Battery Life:** 100 hours minimum

**Auto Shut-Off:** After 15 mins of non-use (can be disabled)

## Warranty

**Instrument:** 2 year (Extended warranty is available)

**Probes and Accessories:** 1 year



RoHS



Use the MFM300 to measure, calculate, and display critical system parameters.

# MFM300 Basic Kit & Accessories

## MFM300 Basic Kit Includes:

- MFM300 Multi-Function Expandable Instrument
- 1075 General Purpose Puncture Probe
- 4011 Pipe Strap Probe
- Heavy-duty carrying case with detachable shoulder strap



**MFM300** Multi-Function Expandable Instrument



**1075** General Purpose Puncture Probe



**4011** Pipe Strap Probe



The **MFM300** heavy-duty, carrying case has enough storage for all your probes and accessories. A detachable / adjustable shoulder strap is included.



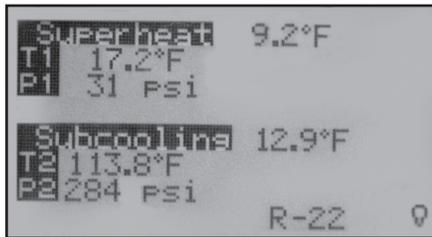
**Measure Temperature:** Accurately measure and display 3 temperatures simultaneously. View Min, Max, Average and Temperature Differential with a touch of a button.

## Measure Pressure and View Real-time Superheat Sub-Cooling Values:

The MFM300 replaces a manifold gauge set for dynamic pressure measurement. Choose from 500 PSI (5250) or 1000 PSI (5200) Pressure Probes. Connect a pressure probe to either of the universal jacks and the MFM300 can display dynamic superheat and sub-cooling values.



**5200 / 5250** Pressure Probes



**Calculate Superheat / Sub-Cooling:** Easily calculate superheat / sub-cooling by attaching a temperature probe to the refrigeration system. The pressure value (from a manifold gauge) can be manually entered, and the resulting superheat / sub-cooling value will be displayed.

## Measure Relative Humidity & Dry-bulb Temperature:

The MFM300 will display relative humidity and dry-bulb temperature measurements when a humidity probe (5029) is connected to either of the universal jacks.



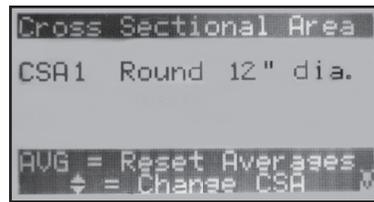
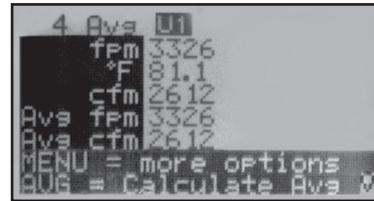
**5029** Humidity Probe

**Display Psychrometrics:** Press the **PSYC** button and psychrometrics are calculated from the current relative humidity and dry-bulb measurements. Requires at least one relative humidity probe (5029).

Psychrometric values displayed are:  
 • % RH, dry-bulb, wet-bulb, dew point, specific humidity, and enthalpy.



**Display CFM, CMS, FPM, and MPS:** Airflow and temperature can be displayed by using a Thermo-Anemometer Probe (5400) connected to either of the universal jacks.



**5400** Thermo-Anemometer Probe



Perform basic air balancing quickly and easily using the MFM300 and Thermo-Anemometer Probe (5400)

# MFM300 HVAC / R Kits

**Snapshot Feature:** Data that is being measured and displayed can be captured with the MFM300. Up to 100 data snapshots can be stored in the MFM300 and can be downloaded to a computer that has the MFM300 Toolbox application installed (9362 PC Connection Cable Required).

**Add or Change Refrigerants:** P-T data for 15 of the most popular refrigerants is programmed in the MFM300's memory. You may add or change P-T data for 5 additional refrigerants as new blends are developed, by using the MFM300 Toolbox application (9362 PC Connection Cable Required).

**Update Your System:** Nobody wants to waste time or money on a system that will become outdated. The MFM300 will never become obsolete! New accessories and upgrades will continuously be added to the MFM300 System. Stay current by downloading the latest MFM300 updates using the MFM300 Toolbox application installed on a PC (9362 PC Connection Cable Required).

9362  
PC Connection Cable



**MFM300 Toolbox Program - FREE download at:**  
[www.cooper-atkins.com/mfm.asp](http://www.cooper-atkins.com/mfm.asp)

## GL300

### Data Logging Kit:

Collect and view logged temperature data on the MFM300.

Download to your PC via the PC Connection Cable (9362).



## MFM300-KIT1 Air Conditioning

- Assists in determining system efficiency
- Instantly displays psychrometrics
- Performs basic air balancing

**Includes:** MFM300 Multi-Function Expandable Instrument

- 1075 General Purpose Puncture Probe
- 4011 Pipe Strap Probe
- 5400 Thermo-Anemometer
- 5029 Humidity Probe
- Carrying Case With Detachable Strap

## MFM300-KIT2 General Purpose HVAC / R

- Expands MFM300 capability to include humidity & Psychrometric readings
- Instantaneously calculates superheat / sub-cooling As pressure and temperature change

**Includes:** MFM300 Multi-Function Expandable Instrument

- 1075 General Purpose Puncture Probe
- 4011 Pipe Strap Temperature Probe
- 5200 Pressure Probe (1000 Psi)
- 5029 Humidity Probe
- Carrying Case With Detachable Strap

## MFM300-KIT3 Real-Time Superheat / Sub-Cooling

- Eliminates manual input of pressure readings
- Speed & accuracy improved greatly over traditional Analog gauge sets
- Dynamic superheat / sub-cooling instantaneously displayed

**Includes:** MFM300 Multi-Function Expandable Instrument

- 1075 General Purpose Puncture Probe
- 4011 Pipe Strap Temperature Probe
- 5250 Pressure Probe (500 Psi)
- 5200 Pressure Probe (1000 Psi)
- Carrying Case With Detachable Strap

## MFM300-KIT4 Deluxe

- Maximize the capabilities of the MFM300!

**Includes:** MFM300 Multi-Function Expandable Instrument

- 1075 General Purpose Puncture Probe
- 4011 Pipe Strap Probe
- 5400 Thermo-Anemometer Probe
- 5250 Pressure Probe (500 Psi)
- 5200 Pressure Probe (1000 Psi)
- 5029 Humidity Probe
- Carrying Case With Detachable Strap

## MFM300-KIT4 Deluxe



# Thermistor Instruments & Provers

## SH66A 3-Zone Temperature Instrument

For applications when multiple temperature measurements are needed, this is the instrument to use. Features include: a backlit display for dark environments; a sealed keypad which protects the instrument from spills and dust; and a battery eliminator jack. Simultaneously measure suction and liquid line temperatures, as well as temperatures across condensing coils, evaporator coils and ambient temperatures. View temperature differential between zones 1 and 2 and review min / max temperatures from all three zones.

### SH66A:

- 1075 General Purpose Puncture Probe
- 2010 Air Probe
- 4011 Pipe Strap Probe
- NIST traceable

## SRH77A 3-Zone Temperature / Humidity Instrument

When temperature and relative humidity measurements are critical, the SRH77A is the expert's choice. Features include: a backlit display for dark environments; sealed keypad which protects the instrument from spills and dust; and a battery eliminator jack. View temperature differential, %RH, and wet-bulb. You will find this to be an accurate and fast service tool. The bright blue, durable carrying case makes this tool easy to find when on location or in the back of a service truck.

### SRH77A:

- 1075 General Purpose Puncture Probe
- 4011 Pipe Strap Probe
- 5028 Slim Humidity Probe
- NIST traceable



## 4005I

### Cordless Pipe Clamp Temperature Instrument

Includes 2.5" / 64 mm Retractable General Purpose Puncture Probe. Measure temperature of pipes up to 1.375" / 35 mm diameter.

- Single-handed use
- Spring-loaded probe to ensure repeatability
- Auto shut-off after 5 minutes of non-use
- Mode button: min, max, and hold
- 4005I nylon, belt-pouch (included)



Quickly takes pipe surface temperatures

	SH66A	SRH77A	TM99A	40051
<b>Temperature Range:</b>	-40° to 300°F -40° to 150°C	-40° to 300°F -40° to 150°C	-40° to 302°F -40° to 150°C	-20° to 300°F -29° to 149°C
<b>Accuracy:</b>	±0.3F° / 0.2C° OR ±0.5% Rdg. whichever is greater	±0.3F° / 0.2C° OR ±0.5% Rdg. whichever is greater	±0.3F° / 0.2C° OR ±0.5% Rdg. whichever is greater	Clamp: ±3F° / 2C° from 14° to 212 F° -10° to 100C° Probe: ±3F° / 2C°
<b>Humidity Range:</b>	-	10 to 95% RH	-	-
<b>Humidity Accuracy:</b>	-	±2% from 20 to 80% RH ±3% below 20% and above 80% RH	-	-
<b>Resolution:</b>	0.1°F / °C	0.1°F / °C, 0.1% RH	0.1°F / °C	0.1°F / °C
<b>Display - LCD:</b>	2" x .875" / 51 mm x 22 mm	2" x .875" / 51 mm x 22 mm	.5" / 12.7 mm	.25" x .875" / 6.35 mm x 22mm
<b>Backlight:</b>	Yes	Yes	Yes	No
<b>Min / Max:</b>	Yes	Yes	Yes	Yes
<b>Hold:</b>	No	No	Yes	Yes
<b>Ambient Operating Range:</b>	0° to 130°F Up to 90% RH non-condensing	0° to 130°F Up to 90% RH non-condensing	32° to 122°F / 0 to 50°C	0° to 120°F Up to 90% RH non-condensing
<b>Case Material:</b>	Polyethylene	Polyethylene	Polyethylene	Plastic
<b>Weight:</b>	1 lb 5 oz / 595 g	1 lb 5 oz / 595 g	5 oz	5 oz / 142 g
<b>Power:</b>	(1) 9V Alkaline	(1) 9V Alkaline	TM99A (2) AAA Alkaline	(1) 1.5V LR44
<b>Auto Shut-off:</b>	Yes (after 15 mins)	Yes (after 15 mins)	Yes (after 5 mins)	Yes (after 5 mins)
<b>Battery Life:</b>	90 hours	90 hours	1800 hours	90 hours
<b>Regulatory Listings:</b>	CE RoHS	CE RoHS	CE RoHS	RoHS
<b>Warranty:</b>	5 year inst. / 1 year probe	5 year inst. / 1 year probe	5 year inst. / 1 year probe	1 year

**TM99A Series  
Thermistor Temperature Instrument**

Choose from the basic **TM99A** or **TM99A-V**.

- NIST traceable

**TM99A:**

- 1075 General Purpose Puncture Probe
- 9339 soft, carrying / storage pouch

**TM99A-V:**

- 1050 Blunt-tip veterinary probe
- 9339 soft, carrying / storage pouch



TM99A

**9320 / 9321  
Prover Calibration Box**

Test and validates the calibration accuracy of Cooper-Atkins Thermistor Instruments. The 9320 simulates four preset fahrenheit temperatures of -10°F, 32°F, 72°F and 140°F. The 9321 simulates four preset Celsius temperatures of -25°C, 0°C, 20°C, and 60°C. • 1 year warranty



# Thermistor Probes

All Thermistor Temperature Probes are interchangeable with all Cooper-Atkins Thermistor Instruments.

## Needle Probes

	1013	1014	1030	1050	1052	1075	1078	6000
<b>Description:</b>	Meat-Packing Puncture Probe	17" Puncture Probe	Screw-in Puncture Probe	Blunt-tip Veterinary Probe	Needle Probe	General Purpose Puncture Probe	7.25" Puncture Probe	18" Flexible Thermistor Probe
<b>Temperature Range:</b>	-40° to 300°F -40° to 149°C	-40° to 300°F -40° to 149°C	-40° to 300°F -40° to 149°C	-40° to 300°F -40° to 149°C	-40° to 300°F -40° to 149°C	-40° to 300°F -40° to 149°C	-40° to 300°F -40° to 149°C	-25° to 200°F -32° to 93°C
<b>Max Tip Temperature:</b>	300°F / 149°C	300°F / 149°C	300°F / 149°C	300°F / 149°C	300°F / 149°C	300°F / 149°C	300°F / 149°C	200°F / 93°C
<b>Max Cord Temperature:</b>	200°F / 93°C	200°F / 93°C	400°F / 204°C	200°F / 93°C	200°F / 93°C	200°F / 93°C	200°F / 93°C	200°F / 93°C
<b>Response Time (liquid):</b>	6 seconds	100 seconds	20 seconds	6 seconds	4 seconds	6 seconds	6 seconds	50 seconds
<b>Shaft Length:</b>	3.75" / 95 mm	17" / 430 mm	2.5" / 64 mm	3.5" / 89 mm	2.9" / 74 mm	3.75" / 95 mm	7" / 178 mm	18" / 457 mm
<b>Shaft Diameter:</b>	.140" / 4 mm	.25" / 6 mm	.165" / 4 mm	.125" / 3 mm	.041" / 10 mm	.041" / 10 mm	.140" / 4 mm	.156" / 4 mm
<b>Cord Length:</b>	6' / 1.8 m polyurethane (uncoiled)	6' / 1.8 m polyurethane (uncoiled)	6' / 1.8 m teflon (straight)	6' / 1.8 m polyurethane (uncoiled)	12' / 3.7 m PVC (straight)			
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year

**1013**  
Meat-Packing Puncture Probe



**1014**  
17" Puncture Probe with Heavy-Duty Cord



**1030**  
Screw-in Probe with 1/8" NPT Fitting



**1050**  
Blunt-Tip Veterinary Probe



**1052**  
Needle Probe (use with Pete's Plugs)



**1075**  
General Purpose Puncture Probe



**1078**  
7.25" Puncture Probe



## Surface Probes

## Air Probes

	3010	4005	4011	4040	7010	2007	2010	5005	5028
<b>Description:</b>	Plastic Shaft Probe	Pipe Clamp Probe	Pipe Clamp Probe	Fast Response Surface Probe	Air / Surface Probe	Handheld Air Probe	Air Probe	Air Probe	Slim Temp / Humidity Probe
<b>Temperature Range:</b>	-40° to 200°F -40° to 93°C	-14° to 212°F -10° to 100°C	-25° to 212°F -32° to 100°C	-40° to 300°F -40° to 149°C	-40° to 200°F -40° to 93°C	-40° to 300°F -40° to 149°C	-40° to 200°F -40° to 149°C	-40° to 300°F -40° to 149°C	0° to 150°F -18° to 66°C
<b>Humidity Range:</b>	-	-	-	-	-	-	-	-	10 to 95% RH
<b>Max Tip Temperature:</b>	200°F / 93°C	200°F / 93°C	212°F / 100°C	300°F / 149°C	200°F / 93°C	300°F / 149°C	200°F / 93°C	300°F / 149°C	150°F / 66°C
<b>Max Cord Temperature:</b>	200°F / 93°C	200°F / 93°C	200°F / 93°C	200°F / 93°C	200°F / 93°C	400°F / 204°C	200°F / 93°C	200°F / 93°C	200°F / 93°C
<b>Response Time:</b>	15 seconds	2 seconds	-	15 seconds	20 seconds	6 seconds	20 seconds	-	30 seconds
<b>Shaft Length:</b>	3" / 76 mm	-	-	3.5" / 89 mm	0.160" / 4 mm	4" / 102 mm	0.5" / 13 mm	4" / 102 mm	4.9" / 125 mm
<b>Shaft Dia.</b>	.156" / 4 mm	-	-	.310" (Tip) 8 mm	.5" / 13 mm	.140" / 4 mm	.160" / 4 mm	.125" / 3 mm	.25" / 6 mm
<b>Cord Length:</b>	6' / 1.8 m polyurethane (uncoiled)	10' / 3 m TPE (uncoiled)	12' / 3.7 m polyurethane (uncoiled)	6' / 1.8 m polyurethane (uncoiled)	6' / 152 mm PVC cord (straight)	10' / 3.0 m teflon (straight)	12' / 3.6 m polyurethane (straight)	6' / 1.8 m polyurethane (uncoiled)	6' / 1.8 m PVC (coiled)
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year



**4005**  
Pipe Clamp Probe (Maximum 1-3/8" Ø Pipe Clamp Opening)

**2010**  
Air Probe



**4011**  
Pipe Strap Probe (Strap, 11" Long x 1/2" Wide Approx.)



**4040**  
Fast Response Surface Probe



**5028**  
Slim Temp / Humidity Probe



**9010 10 ft. / 9015 50 ft. Extension Cable**



# Thermocouple Instruments

The **EconoTemp™** series employs state-of-the-art technology in economy thermocouple instruments. Designed with a powerful microprocessor and a unique memory which stores calibration settings, it will never need recalibration. A rubber boot protects the ABS plastic housing delivering impact ratings not found in other economy models. Supplied with a 9368 Wall-mount bracket.

	32311-K	32322-K
<b>Temperature Range:</b>	-40° to 500°F -40° to 260°C	-40° to 1000°F -40° to 538°C
<b>Accuracy:</b>	±2F° / ±1C°	±1.0F° / ±0.5C°
<b>Resolution:</b>	1°F / °C	0.1°F / °C
<b>Housing:</b>	ABS	ABS
<b>Hold:</b>	No	No
<b>Backlight:</b>	No	No
<b>Waterproof:</b>	No	No
<b>Power:</b>	(3) 1.5V AAA	(3) 1.5V AAA
<b>Battery Life:</b>	4500 hours	1500 hours
<b>Auto Off:</b>	10 min.	10 min.
<b>Wall Mounting Bracket:</b>	Yes	Yes
<b>Weight:</b>	6 oz / 170 g	6 oz / 170 g
<b>Regulatory Listings:</b>	CE  RoHS	CE  RoHS
<b>Warranty:</b>	5 year	5 year

**32311-K  
EconoTemp™**

**32322-K  
EconoTemp™ Plus**  
 • High temperature range  
 • 10th degree resolution



**94020-K  
EconoTemp™ Combo Pack**  
 • 32311-K Thermocouple Instrument  
 • 50337-K Direct Connect DuraNeedle Probe



**93230-K  
EconoTemp™ Combo Pack**  
 • 32311-K Thermocouple Instrument  
 • 50336-K DuraNeedle Probe



# AquaTuff™ Thermocouple Instruments

The **350 AquaTuff™** Series Thermocouple Instruments are highly accurate with an IPX7 waterproof standard rating. **Wrap&Stow™** integral probe and cable storage enclosure designs are available where the probe is factory calibrated to the instrument. The AquaTuff™ Series Thermocouple Instruments have a unique memory chip that stores calibration settings. They are highly accurate, NIST traceable and most importantly, as the AquaTuff™ name implies, extremely durable and IPX7 waterproof rated for even greater reliability in harsh environments. The AquaTuff™ 35100-K or 35200-K allows for maximum versatility since the instrument can be used with any Type K Thermocouple probes.

**35100-K**  
AquaTuff™



**35132**  
AquaTuff™ Wrap&Stow™  
with DuraNeedle™ Probe  
35132-N (NSF Model)



**35135**  
AquaTuff™ Wrap&Stow™  
with Angled Surface Probe



**35140**  
AquaTuff™ Wrap&Stow™  
with MicroNeedle Probe  
35140-N (NSF Model)



## 9319 and 9319C Provers

Test and validate the calibration accuracy of Type K Thermocouple Instruments.

The 9319 simulates three preset temperatures of 32°F, 100°F, or 160°F.

The 9319C simulates three preset temperatures of 0°C, 25°C, or 60°C.

- NIST traceable
- 1 year warranty



## AquaTuff™ 351 Series

	35100-K	35132 / N	35135	35140 / N
<b>Temperature Range:</b>	-100° to 999°F -73° to 537°C	-100° to 500°F -73° to 260°C	-100° to 500°F -73° to 260°C	-100° to 500°F -73° to 260°C
<b>Accuracy:</b>	±0.5F° / ±0.3C°	±0.9F° / ±0.5C° [1]	±0.5F° / ±0.3C° [4]	±0.9F° / ±0.5C° [1]
<b>Resolution:</b>	0.1°F / °C	0.1°F / °C	0.1°F / °C	0.1°F / °C
<b>Housing:</b>	ABS	ABS	ABS	ABS
<b>Hold:</b>	No	No	No	No
<b>Backlight:</b>	No	No	No	No
<b>Waterproof:</b>	Yes	Yes	Yes	Yes
<b>Power:</b>	(2) 1.5V AAA	(2) 1.5V AAA	(2) 1.5V AAA	(2) 1.5V AAA
<b>Battery Life:</b>	1800 hours	1800 hours	1800 hours	1800 hours
<b>Auto Off:</b>	10 min.	10 min.	10 min.	10 min.
<b>Wall Mounting Bracket:</b>	Optional	Optional	Optional	Optional
<b>Weight:</b>	5 oz / 142 g	7 oz / 199 g	8 oz / 227 g	7 oz / 199 g
<b>Regulatory Listings:</b>	CE   RoHS	CE   RoHS	CE   RoHS	CE   RoHS
<b>Warranty:</b>	5 year	5 year inst. / 1 year probe	5 year inst. / 1 year probe	5 year inst. / 1 year probe

### NOTE:

Refer to page 9 for information on EconoTemp™ Series instruments.

All EconoTemp™ Series and AquaTuff™ Series units are NIST traceable.

[1] Total System Accuracy™ (probe and instrument) over entire range.

[2] Tenth degree from -40° to 495°F / -40° to 257°C; whole degree remainder of range.

[3] Tenth degree / whole degree resolution, selectable.

[4] Accuracy spec for instrument only. Surface probe temperature error for flat, clean, oiled surfaces with 1kg pressure are typically within +1.5°C and -3.5°C without thermostat cycling.

**35200-K  
AquaTuff™**



**35232  
AquaTuff™ Wrap&Stow™**  
with DuraNeedle™ Probe  
35232-N (NSF Model)



**35235  
AquaTuff™ Wrap&Stow™**  
with Angled Surface Probe



**35240  
AquaTuff™ Wrap&Stow™**  
with MicroNeedle Probe  
35240-N (NSF Model)



**35340  
AquaTuff™ Wrap&Stow™ ITS™\***  
with MicroNeedle Probe

\*ITS™ (Intelligent Temperature Stabilization) feature, 250 Readings, Forward / Back Scroll, Normal Mode, ITS™ Mode or Memory Modes



**AquaTuff™ Series Wrap&Stow™ Probes**

**DuraNeedle Probes** are best used to measure insertion and immersion temperatures. They are quick and durable for dependable performance, and are included with the 35132 and 35232. To order replacement DuraNeedle Probes, use model number 55032 and 55032-N for NSF model.



**MicroNeedle Probes** are designed to provide the greatest response with minimal impact on the product, and are included with the 35140 and 35240. To order replacement MicroNeedle Probes, use model number 55040 and 55040-N for NSF model.



**Surface Probes** are designed for use on any flat surface. Probe self-adjusts to the surface, giving superior contact and is included with the 35135 and 35235. To order replacement Surface Probes, use model number 55035.



**AquaTuff™ 352 / 353 Series**

	35200-K	35232 / N	35235	35240 / N	35340
<b>Temperature Range:</b>	-100° to 999°F -73° to 537°C	-100° to 500°F -73° to 260°C	-100° to 500°F -73° to 260°C	-100° to 500°F -73° to 260°C	-100° to 500°F -73° to 260°C
<b>Accuracy:</b>	±0.5°F / ±0.3°C	±0.9°F / ±0.5°C	±0.5°F / ±0.3°C	±0.9°F / ±0.5°C [1]	±0.9°F / ±0.5°C [4]
<b>Resolution:</b>	0.1°F / °C [3]	0.1°F / °C [3]	0.1°F / °C [3]	0.1°F / °C [3]	0.1°F / °C [3]
<b>Housing:</b>	ABS	ABS	ABS	ABS	ABS
<b>Hold:</b>	Yes	Yes	Yes	Yes	No
<b>Backlight:</b>	Yes	Yes	Yes	Yes	No
<b>Waterproof:</b>	Yes	Yes	Yes	Yes	Yes
<b>Power:</b>	(2) 1.5V AAA	(2) 1.5V AAA	(2) 1.5V AAA	(2) 1.5V AAA	(2) 1.5V AAA
<b>Battery Life:</b>	1800 hours	1800 hours	1800 hours	1800 hours	1800 hours
<b>Auto Off:</b>	10 min.	10 min.	10 min.	10 min.	10 min.
<b>Wall Mounting Bracket:</b>	Optional	Optional	Optional	Optional	Optional
<b>Weight:</b>	5 oz / 142 g	7 oz / 199 g	8 oz / 227 g	7 oz / 199 g	7 oz / 199 g
<b>Regulatory Listings:</b>	CE  RoHS	35232 CE  RoHS 35232-N CE  RoHS	CE  RoHS	35240 CE  RoHS 35240-N CE  RoHS	CE  RoHS
<b>Warranty:</b>	5 year	5 year inst. / 1 year probe	5 year inst. / 1 year probe	5 year inst. / 1 year probe	5 year inst. / 1 year probe

**IPX7  
Waterproof**

All the AquaTuff™ instruments are IPX7 waterproof rated and durable for harsh environments.

An IPX7 level reading means the instrument can be submerged in 1 meter of water for 30 minutes without water damage.

# Type K Thermocouple Probes

## Needle Probes

	31901-K	39035-K	49122-K	49135-K	50101-K	50143-K	50145-K	50207-K
<b>Description:</b>	1/8" Needle Probe - petite handle	1/8" Needle Probe	Ultra-Fine Product Probe	1/8" Rugged Needle Probe	Frozen Product Needle Probe	Heavy-Duty Needle Probe	1/8" Rugged Needle Probe	MicroNeedle Chisel Tip Probe (Direct Connect)
<b>Temperature Range:</b>	-40° to 400°F -40° to 205°C	-40° to 400°F -40° to 205°C	-100° to 500°F -73° to 260°C	-40° to 400°F -40° to 205°C	-40° to 400°F -40° to 205°C	-40° to 500°F -40° to 260°C	-40° to 500°F -40° to 260°C	-100° to 500°F -73° to 260°C
<b>Max Tip Temperature:</b>	400°F / 205°C	400°F / 205°C	500°F / 260°C	400°F / 205°C	400°F / 205°C	500°F / 260°C	500°F / 260°C	500°F / 260°C
<b>Max Cable Temperature:</b>	400°F / 205°C	400°F / 205°C	221°F / 105°C	400°F / 205°C	400°F / 205°C	176°F / 80°C	176°F / 80°C	-
<b>Response Time (liquid):</b>	4 seconds	4 seconds	3 seconds	4 seconds	4 seconds	5 seconds	4 seconds	1 second
<b>Shaft Length:</b>	4" / 102 mm	4" / 102 mm	4" / 102 mm	7" / 102 mm	3" / 76 mm	4" / 102 mm	4" / 102mm	3.75" / 95 mm
<b>Cable Length Max Extended:</b>	24" / 610 mm w/ Silicone® Jacket	36" / 914 mm w/ Teflon® Jacket	36" / 914 mm w/ PVC Jacket	36" / 914 mm w/ Teflon® Jacket	30" / 762 mm w/ Flexible Armored Cable	48" / 1.2 m w/ Polyurethane Jacket	48" / 1.2 m w/ Polyurethane Jacket	Direct Connect (no cable)
<b>Weight:</b>	1 oz / 28 g	1 oz / 28 g	1 oz / 28 g	4 oz / 113 g	1 lb / 454 g	5 oz / 142 g	4 oz / 113 g	.5 oz / 14 g
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year

**50336-K**  
DuraNeedle Probe



**50012-K**  
Angled Shaft Surface Bell Probe

## Needle Probes

	50209-K	50210-K	50263-K	50334-K	50335-K	50336-K	50337-K	50360-K	50361-K
<b>Description:</b>	MicroNeedle Probe	MicroNeedle Probe (Direct Connect)	60° Patty Probe	4" DuraNeedle Probe	4.5" Needle Probe	DuraNeedle Probe	DuraNeedle Probe (Direct Connect)	Oven Needle Probe	Meat Probe
<b>Temperature Range:</b>	-100° to 500°F -73° to 260°C	-40° to 500°F -40° to 260°C	-40° to 500°F -40° to 260°C	-100° to 500°F -73° to 260°C	-40° to 500°F -40° to 260°C	-40° to 400°F -40° to 205°C			
<b>Max Tip Temperature:</b>	500°F / 260°C	500°F / 260°C	500°F / 260°C	500°F / 260°C	500°F / 260°C	500°F / 260°C	500°F / 260°C	500°F / 260°C	400°F / 205°C
<b>Max Cable Temperature:</b>	176°F / 80°C	-	176°F / 80°C	400°F / 205°C	176°F / 80°C	176°F / 80°C	-	600°F / 316°C	400°F / 205°C
<b>Response Time (liquid):</b>	1 second	1 second	1 second	1 second	4 seconds	2 seconds	1 second	2 seconds	4 seconds
<b>Shaft Length:</b>	3.5" / 89 mm	3.75" / 95 mm	8" / 203 mm	4" / 102 mm	4.5" / 114 mm	6" / 153 mm	4" / 102 mm	5.5" / 140 mm	3.875" / 98 mm
<b>Cable Length Max Extended:</b>	48" / 1.2 m w/ Polyurethane Jacket	Direct Connect (no cable)	48" / 1.2 m w/ Polyurethane Jacket	34" / 864 mm w/ Fluoroelastomer Jacket	48" / 1.2 m w/ Polyurethane Jacket	48" / 1.2 m w/ Polyurethane Jacket	Direct Connect (no cable)	35" / 889 m w/ Stainless Steel Overbraid	10' / 3 m w/ Armor
<b>Weight:</b>	2 oz / 57 g	.5 oz / 14 g	3 oz / 85 g	2 oz / 57 g	2 oz / 57 g	2 oz / 57 g	.5 oz / 14 g	1 oz / 28 g	6 oz / 170 g
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year



**4005MK**  
Pipe Clamp Probe

## High Temperature Probes

## Pipe Probes

## Fry Vat Probes

	49126-K	49127-K	49140-K	50426-K	50427-K	4005MK	54011-K	50200-K	50208-K
<b>Description:</b>	Reduced Tip Puncture Probe	Reduced Tip Probe - Direct Connect	High Temperature Needle Probe	4" Reduced Tip Probe	12" Reduced Tip Probe	Pipe Clamp Surface Probe	Pipe Strap Surface Probe	High Temperature Probe	Fry Vat Insertion Probe
<b>Temperature Range:</b>	32° to 932°F 0° to 500°C	32° to 932°F 0° to 500°C	32° to 2012°F 0° to 1100°C	32° to 932°F 0° to 500°C	32° to 932°F 0° to 500°C	-20° to 300°F -29° to 149°C	-25° to 300°F -32° to 149°C	-40° to 400°F -40° to 205°C	-40° to 400°F -40° to 205°C
<b>Max Tip Temperature:</b>	932°F / 500°C	932°F / 500°C	2012°F / 1100°C	932°F / 500°C	932°F / 500°C	300°F / 149°C	300°F / 149°C	400°F / 205°C	400°F / 205°C
<b>Max Cable Temperature:</b>	400°F / 205°C	-	400°F / 205°C	176°F / 80°C	176°F / 80°C	220°F / 104°C	220°F / 104°C	400°F / 205°C	400°F / 205°C
<b>Response Time:</b>	1 second liquid	1 second liquid	2 seconds liquid	1 second liquid	1 second liquid	2 seconds on pipe	Varies on pipe	12 seconds liquid	8 seconds liquid
<b>Shaft Length:</b>	4" / 102 mm	4" / 102 mm	24" / 610 mm	4" / 102 mm	12" / 305 mm	3" / 76 mm	-	8" / 203 mm	7.3" / 185 mm
<b>Cable Length Max Extended:</b>	36" / 914 mm w/ Teflon® Jacket	Direct Connect (no cable)	36" / 914 mm w/ Flexible Armor	48" / 1.2 m w/ Polyurethane Jacket	48" / 1.2 m w/ Polyurethane Jacket	10' / 3 m w/ Polyurethane Jacket	10' / 3 m w/ Polyurethane Jacket	36" / 914 mm w/ Teflon® Jacket	30" / 762 mm w/ Flexible Armor
<b>Weight:</b>	4 oz / 113 g	.5 oz / 14 g	6 oz / 170 g	5 oz / 142 g	5 oz / 142 g	5 oz / 142 g	2 oz / 57 g	2 oz / 57 g	3 oz / 85 g
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year



**54011-K**  
Pipe Strap Probe

## Air Probes

	31903-K	31905-K	39032-K	49138-K	50302-K	50305-K	50306-K	50332-K	50338-K
<b>Description:</b>	Hand-held Air Probe	Bare Tip Air Probe	Hand-Held Air Probe	Bare Tip Air Probe	Industrial Air Probe	Freezer / Cooler Probe	Oven / Freezer Probe	Hand-Held Air Probe	Industrial Air Probe
<b>Temperature Range:</b>	-40° to 400°F -40° to 205°C	-40° to 400°F -40° to 205°C	-328° to 400°F -200° to 205°C	32° to 896°F 0° to 480°C	32° to 896°F 0° to 480°C	-40° to 400°F -40° to 205°C	-100° to 600°F -73° to 316°C	-100° to 500°F -73° to 260°C	32° to 896°F 0° to 480°C
<b>Max Tip Temperature:</b>	400°F / 205°C	400°F / 205°C	400°F / 205°C	896°F / 480°C	896°F / 480°C	400°F / 205°C	600°F / 316°C	500°F / 260°C	896°F / 480°C
<b>Max Cable Temperature:</b>	400°F / 205°C	400°F / 205°C	400°F / 205°C	896°F / 480°C	896°F / 480°C	176°F / 80°C	600°F / 316°C	176°F / 80°C	896°F / 480°C
<b>Response Time :</b>	9 seconds in 5 m / sec. air	1 sec. liquid & 3 sec. 5 m / sec. air	11 seconds in 5 m / sec. air steam	1 second liquid 9 sec. 5 m / sec. air	1 second liquid 10 sec. 5 m / second air	25 seconds air	1 second liquid 10 sec. 5 m / second air	10 seconds in 5 m / sec. air	1 second liquid 9 seconds in 5m / sec. air
<b>Shaft Length:</b>	4" / 102 mm	-	4" / 102 mm	-	2.125" / 54 mm	-	2.125" / 54 mm	4" / 102 mm	-
<b>Cable Length Max Extended:</b>	24" / 610 mm w/ Silicone® Jacket	24" / 610 mm w/ Silicone® Jacket	36" / 914 mm w/ Teflon® Cable	48" / 1.2 m w/ Fiberglass Jacket	46.5" / 1.2 m w/ Fiberglass Jacket	24" / 610 mm w/ Teflon® Jacket	43" / 1.1 m w/ Stainless Steel Overbraid	48" / 1.2 m w/ Polyurethane Jacket	48" / 1.2 m w/ Fiberglass Jacket
<b>Weight:</b>	1 oz / 28 g	1 oz / 28 g	1 oz / 28 g	1 oz / 28 g	1 oz / 28 g	3 oz / 85 g	1 oz / 28 g	2 oz / 57 g	1 oz / 28 g
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year

**50306-K**  
Air Probe for oven or cooler / freezer with clip



## Surface Probes

	31907-K	50001-K	50008-K	50010-K	50012-K	50014-K	50069-K	50316-K	50318-K	50319-K	50405-K
<b>Description:</b>	Surface Probe - petite handle	Right Angle Bell Surface Probe	Silkscreen Probe	Tape Surface Probe	120° Angled Shaft Surface Bell Probe	Weighted Griddle Surface Probe	Moving Surface Bow Probe	1/8" Surface / Immersion Probe - flat tip	Ceramic Tip Surface Probe	90° Ceramic Tip Surface Probe	Blunt Tip Probe
<b>Temperature Range:</b>	-40° to 400°F -40° to 205°C	-40° to 400°F -40° to 205°C	-40° to 400°F -40° to 205°C	-40° to 400°F -40° to 205°C	-40° to 500°F -40° to 260°C	-40° to 500°F -40° to 260°C	-40° to 500°F -40° to 260°C	-100° to 500°F -73° to 260°C	-40° to 1202°F -40° to 650°C	-40° to 1202°F -40° to 650°C	-100° to 500°F -73° to 260°C
<b>Max Tip Temperature:</b>	400°F / 205°C	400°F / 205°C	400°F / 205°C	400°F / 205°C	500°F / 260°C	500°F / 260°C	500°F / 260°C	500°F / 260°C	1202°F / 650°C	1202°F / 650°C	500°F / 260°C
<b>Max Cable Temperature:</b>	400°F / 205°C	400°F / 205°C	400°F / 205°C	400°F / 205°C	176°F / 80°C	400°F / 205°C	221°F / 105°C	176°F / 80°C	176°F / 80°C	176°F / 80°C	-
<b>Response Time:</b>	5 seconds on oiled surface	7 seconds oiled surface	1 second liquid	9 seconds on metal surface	4 seconds oiled surface	4 seconds oiled surface	4 seconds oiled surface	6 seconds metal / 1 second liquid	1 second oiled surfaces	1 second oiled surfaces	6 seconds oiled surface 1 second liquid immersion
<b>Shaft Length:</b>	4" / 102 mm	9" / 229 mm	-	-	4.5" / 114 mm	-	8" / 203 mm	4" / 102 mm	4" / 102 mm	5" / 127 mm	7.5" / 190 mm
<b>Cable Length Max Extended:</b>	24" / 610 mm w/ Silicone® Jacket	30" / 762 mm w/ flexible armored cable	15" / 381 cm w/ Silicone® Jacket	36" / 914 mm w/ Teflon® Jacket	48" / 1.2 m w/ Polyurethane Jacket	30" / 762 mm w/ Armored Cable	36" / 914 mm w/ PVC® Jacket	48" / 1.2 m w/ Polyurethane Jacket	48" / 1.2 m w/ Polyurethane Jacket	48" / 1.2 m w/ Polyurethane Jacket	Direct Connect (no cable)
<b>Weight:</b>	1 oz / 28 g	6 oz / 170 g	3 oz / 85 g	1 oz / 28 g	5 oz / 142 g	2 lbs / 907 g	6 oz / 170 g	2 oz / 57 g	5 oz / 142 g	6 oz / 170 g	.5 oz / 14 g
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year

## Miscellaneous Probes

	39138-K	49136-K	50121-K	50415-K	50701-K	52048-K
<b>Description:</b>	Bare-Tip Probe	Bendable Tip Probe	Racing Tire Probe	Dishwasher Probe	Combo Probe	Product Simulator
<b>Temperature Range:</b>	-328° to 400°F -200° to 205°C	32° to 1652°F 0° to 900°C	-40° to 500°F -40° to 260°C	-67° to 221°F -55° to 105°C	-100° to 500°F -73° to 260°C	-40° to 180°F / -40° to 82°C
<b>Max Tip Temperature:</b>	400°F / 205°C	1652°F / 900°C	500°F / 260°C	221°F / 105°C	500°F / 260°C	180°F / 82°C
<b>Max Cable Temperature:</b>	400°F / 205°C	221°F / 105°C	176°F / 80°C	221°F / 105°C	400°F / 205°C	-
<b>Response Time :</b>	1 sec. liquid & 7 sec. 5 m / sec. air	1 second liquid	1 second liquid	9 seconds in 5 m / sec. air	2 seconds liquid	Stabilization of Simulator - up to 2 hours
<b>Shaft Length:</b>	-	7" / 178 mm	.1875" / 5 mm	-	35" / 889 mm	-
<b>Cable Length Max Extended:</b>	36" / 914 mm w/ Teflon® Jacket	36" / 914 mm w/ PVC® Jacket	48" / 1.2 m w/ Polyurethane Jacket	15" / 4.5 m w/ PVC Jacket	36" / 914 mm w/ Fluoroelastomer Jacket	6" / 152 mm Flexible Cable w/ Teflon® Jacket
<b>Weight:</b>	1 oz / 28 g	1 oz / 28 g	4 oz / 113 g	3 oz / 85 g	15 oz / 425 g	2.5 oz / 71 g
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year

**52048-K**  
Product Simulator Probe



For a complete inventory of probes see our online catalog #67-800 at:  
[www.cooper-atkins.com/documentation.asp](http://www.cooper-atkins.com/documentation.asp)



**NOTE:** Most probes are available in Type J and Type T configurations.

# Digital Panel Thermometers

Cooper-Atkins' panel meters allow you to obtain accurate interior temperature readings remotely from outside the cabinet. They reduce the frequency of opening your cooler / freezer door and keep the cold air in and the hot air out. All are designed for retro-fit applications.

	SP160-0 SP160-01	SP120	PM120	PMRH120	DM120 Series	DM450 Series	DTT361
<b>Temperature Range:</b>	-58° to 158°F -50° to 70°C	-58° to 158°F -50° to 70°C	-40° to 122°F -40° to 50°C	-12° to 140°F -24° to 60°C	-40° to 120°F -40° to 48°C	-40° to 450°F -40° to 232°C	32° to 392°F 0° to 200°C
<b>Accuracy:</b>	±1F° / 0.5C° from 32° to 122°F / 0 to 50°C ±2F° from -4° to 32°F ±3.6F° < -4° and > 122°F	±2F° / ±1C°	±1.8F° / ±1C° from -4° to 122°F / -20° to 50°C ±3.6F° / ±2C° below -4°F / 20°C	±2F° / ±1C° ±5% RH from 30° to 75%RH / at 32° to 122°F / 0° to 50°C	±2F° / ±1C°	±2% of reading	±9F° / ±4C° from 159° to 266°F / 71° to 130°C ±11F° / ±5C° from 267° to 320°F / 131° to 160°C ±14F° / ±7C° from 321° to 392°F / 161° to 200°C
<b>Resolution:</b>	0.1°F / °C	0.1°F / °C	0.1°F / °C	0.1° / 1% RH	0.1°F / °C	0.1°F / °C	0.1°F / °C
<b>Ambient Operating Range:</b>	0° to 120°F up to 90% non-condensing	0° to 120°F up to 90% non-condensing	0° to 120°F up to 90% non-condensing	0° to 120°F up to 90% non-condensing	15° to 150°F up to 90% non-condensing	0° to 150°F up to 90% non-condensing	4° to 122°F
<b>Response Time:</b>	10 seconds	10 seconds	1 second	5 seconds	15 seconds	15 seconds	-
<b>LCD:</b>	1.4" x .5" 36 x 13 mm	1.875" x .625" 48 x 16 mm	1.875" x .625" 48 x 16 mm	1.875" x .625" 48 x 16 mm	1.3" x .5" 33 x 13 mm	1.3" x .5" 33 x 13 mm	1.875" x 1.375" 48 x 35 mm
<b>Lead Length:</b>	48" / 1.2 m	10' / 3 m	39" / 1 m	39" / 1 m	39" / 1 m	39" / 1 m	44" / 1.1 m
<b>Case Material:</b>	ABS	ABS	Polycarbonate	Polycarbonate	Stainless Steel	Stainless Steel	ABS Plastic
<b>Case Dimensions:</b>	4.5" x 1.125" x .625" 114 x 29 x 16 mm	2.75" x 2.75" x .75" 70 x 70 x 19 mm	2.7" x 1.4" x 1.1" 69 x 36 x 28 mm	2.75" x 1.5" x 1" 70 x 38 x 25 mm	<b>DM120</b> 2.97" x 1.08" / 76 x 27 cm <b>DM120S</b> 3.47" x 1.1" / 88 x 28 mm	<b>DM450</b> 2.97" x 1.08" / 76 x 27 mm	4" x 2 1/2" x 1.375" 102 mm x 64 mm x 35 mm
<b>Power:</b>	Solar w/ battery back-up (1) 1.5V AAA	Solar w/ battery back-up (1) 1.5V A76	(1) 1.5V AA	(1) 1.5V AA	(1) 1.5V #LR754	(1) 1.5V #LR754	(1) 1.5V AAA
<b>Mounting:</b>	Hangs	Hangs	Optional Mounting Flange (Model 9302)	Optional Front Flange	<b>DM120</b> Front Flange <b>DM120S</b> Back Flange	<b>DM450</b> Front Flange	Wall-mount bracket with magnet
<b>Weight:</b>	3 oz / 85 g	2.5 oz / 71 g	2 oz / 57 g	2.5 oz / 71 g	<b>DM120</b> 2.5 oz / 71 g <b>DM120S</b> 3.5 oz / 999 g	<b>DM450</b> 4.4 oz / 125 g	4 oz / 113 g
<b>Regulatory Listings:</b>	CE RoHS	CE RoHS	CE RoHS	CE RoHS	CE RoHS	CE RoHS	CE RoHS
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year

## SP Series Solar Powered Instruments

Meter operates using ambient light (natural, fluorescent and incandescent) and have a Lux rating above 100. When the ambient light is not strong enough to power the meter, the 1.5V battery automatically turns the unit on.

SP120



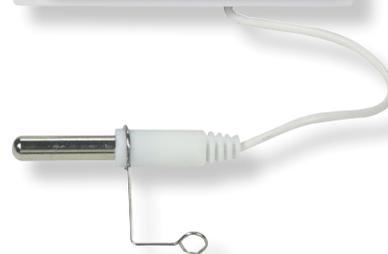
SP160-0



## PM120 Mini Remote-Reading Thermometer

For use when mounting space is limited.

- Min / Max feature
- 9302 Mounting flange available.



SP160-01



**PMRH120**  
**Mini Remote-Reading**  
**Thermometer / Hygrometer**

- Min / Max feature
- 9302 Mounting flange available.



**DM120 / DM450 Series**  
 Front flange for flush mounting or back flange for surface mounting to cabinet and / or enclosure. The removable 2" / 51 mm diameter polycarbonate lens makes battery replacement easy.



DM120



DM450

**DTT361**  
**Cooking**  
**Thermo / Timer**

- Wall-mount bracket with magnet
- Temperature / Time / Alarm



# Data Loggers

**GL100**  
**Water-resistant, Mini Data Loggers**

2" x 2-5/8" / 51 x 67 mm Data Logger Tag monitors both time and temperature. Stores up to 2,048 records at specific intervals from 1 minute to 4 hours. Surface-mount bracket with adhesive backing and stainless steel bead chain for hanging from racks or hooks.

- Temperature Range: -40° to 185°F / -40° to 85°C
- Temperature Accuracy: ±2F° from -4° to 158°F / ±1C° from -20° to 70°C
- Clock Accuracy: ±2 minutes per month
- PC Requirements: Windows 95 or higher (minimum of 10MB of hard-drive space) and CD-Rom
- Not compatible with Macintosh computers**
- 1 year warranty



- GL100-05**
- Two (2) mini data loggers
  - Two (2) mounts
  - USB Adapter



- GL100**
- Two (2) mini data loggers
  - Two (2) mounts
  - Reader and software

# Vapor Tension Panel Thermometers

Used in many HVAC / R applications, these units are the perfect choice for use in walk-in refrigerators, tanks, refrigerated display cases, holding and specialty cabinets, dairy cases, freezers, floral displays and much more. They are able to obtain interior temperature readings remotely from outside of the cabinet and can be retro-fitted.

- Nickel / Tin-plated bulb and capillary
- Polycarbonate lens / bezel
- Stainless steel cases

6142-20



6642-12



6742-19



6812-02



7112-05



	6142-06	6142-13	6142-20	6142-58
<b>Temperature Range:</b>	40° to 240°F 10° to 115°C	-40° to 120°F -40 to 50°C	-40° to 60°F -40° to 15°C	-40° to 60°F -40° to 15°C
<b>Accuracy:</b>	±2F°/±1C° from 140° to 210°F / 60 to 99°C	±2F° / ±1C° at 10° and 40°F / -12° and 4.5°C ±5F° / ±2.5C° at 110°F / 43°C	±2F° / ±1C° at 10° to 40°F / -12° to 4.5°C	±2F°/±1C° at 10° to 40°F / -12° to 4.5°C
<b>Dial Dimension:</b>	2" / 51 mm	2" / 51 mm	2" / 51 mm	2" / 51 mm
<b>Capillary Length:</b>	48" / 1.2 m	48" / 1.2 m	48" / 1.2 m	20" / 6.1 m
<b>Flange:</b>	Front	Front	Front	Front
<b>Connection:</b>	Back	Back	Back	Back
<b>Mounting:</b>	Flush	Flush	Flush	Flush
<b>Weight:</b>	5 oz / 142 g	5 oz / 142 g	5 oz / 142 g	7 oz / 198 g
<b>Regulatory Listings:</b>	RoHS	RoHS	RoHS	RoHS
<b>Warranty:</b>	1 year	1 year	1 year	1 year

	6642-06	6642-12	6742-19	6812-01	6812-02
<b>Temperature Range:</b>	-40° to 60°F -40° to 15°C	40° to 240°F 10 to 115°C	-40° to 60°F -40° to 15°C	-40° to 60°F -40° to 15°C	-40° to 120°F -40° to 50°C
<b>Accuracy:</b>	±2F° / ±1C° at 10° to 40°F / -12° and 4.5°C	±2F°/±1C° from 140° to 210°F / 60° to 99°C	±2F° / ±1C° at 10° to 40°F / -12° and 4.5°C	±2F°/±1C° at 10° to 40°F / -12° 4.5°C	±2F°/±1C° at 10° to 40°F / -12° and 4.5°C ±5F° / ±2.5C° at 110°F / 43°C
<b>Dial Dimension:</b>	2" / 51 mm	2" / 51 mm	2" / 51 mm	2" / 51 mm	2" / 51 mm
<b>Capillary Length:</b>	48" / 1.2 m	48" / 1.2 m	48" / 1.2 m	48" / 1.2 m	48" / 1.2 m
<b>Flange:</b>	Strap Hanger no flange	Strap Hanger no flange	U-Bracket no flange	Back	Back
<b>Connection:</b>	Bottom	Bottom	Back	Back	Back
<b>Mounting:</b>	-	-	-	Surface	Surface
<b>Weight:</b>	5 oz / 142 g	5 oz / 142 g	5.6 oz / 158.9 g	5 oz / 142 g	5 oz / 142 g
<b>Regulatory Listings:</b>	RoHS	RoHS	RoHS	RoHS	RoHS
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year

	7112-01	7112-02	7112-05	7612-06
<b>Temperature Range:</b>	-40° to 60°F -40° to 15°C	-40° to 120°F -40 to 50°C	40° to 240°F 10° to 115°C	-40° to 60°F -40° to 15°C
<b>Accuracy:</b>	±2F°/±1C° at 10° to 40°F / -12° to 4.5°C	±2F° / ±1C° at 10° and 40°F / -12° and 4.5°C ±5F° / 2.5C° at 110°F / -43°C	±2F°/±1C° from 140° to 210°F / 60° to 99°C	±2F° / ±1C° at 10° to 40°F / -12° and 4.5°C
<b>Dial Dimension:</b>	2.5" / 64 mm	2.5" / 64 mm	2.5" / 64 mm	2.5" / 64 mm
<b>Capillary Length</b>	48" / 1.2 m	48" / 1.2 m	48" / 1.2 m	48" / 1.2 m
<b>Flange:</b>	Front	Front	Front	Strap Hanger
<b>Connection:</b>	Back	Back	Back	Bottom
<b>Mounting:</b>	Flush	Flush	Flush	-
<b>Weight:</b>	7 oz / 198 g	7 oz / 198 g	7 oz / 198 g	5.6 oz / 159 g
<b>Regulatory Listings:</b>	RoHS	RoHS	RoHS	RoHS
<b>Warranty:</b>	1 year	1 year	1 year	1 year

# Bi-Metal Thermometers



**CT Series Counter Packs**  
• 12 Units per display box

1246-02



CT180-51



**2238-06**  
**Stem-Test Thermometer**  
• Field adjustable  
• Vessel clip included



**2240-05**  
**Soil Thermometer**



**2234**  
**Compost Thermometer**



All 1" Pocket-tests are field adjustable and include a red, protective sheath with calibration wrench made with anti-microbial plastic\*.

	1246 Series	CT Series	2234	2236-02	2238-06	2238-14	2240-05
<b>Temperature Range:</b>	1246-01: -40° to 180°F 1246-01C: -40° to 80°C 1246-02: 0° to 220°F 1246-02C: -20° to 100°C 1246-03: 50° to 550°F 1246-03C: 10° to 285°C	CT180-51: -40° to 180°F CT220-51: 0° to 220°F	50° to 190°F 10° to 90°C	-402° to 180°F -40° to 80°C	0° to 220°F -10° to 100°C	50° to 550°F 10° to 285°C	30° to 90°F
<b>Accuracy:</b>	±2°F	±2°F	±2°F / ±1°C	±2°F / ±1°C	±2°F / ±1°C	±5°F	±5°F
<b>Dial Diameter:</b>	1" / 25 mm	1" / 25 mm	2.125" / 21 mm	2" / 50 mm	2" / 50 mm	2" / 50 mm	2" / 50 mm
<b>Lens Material:</b>	Magnifying Polycarbonate	Magnifying Polycarbonate	Tempered Glass	Tempered Glass	Tempered Glass	Tempered Glass	Tempered Glass
<b>Stem Length:</b>	5" / 127 mm	5" / 127 mm	24" / 610 mm	5" / 127 mm	8" / 203 mm	8" / 203 mm	6" / 152 mm
<b>Weight:</b>	0.5 oz / 14 g	0.5 oz / 14 g	1.5 oz / 43 g	1.5 oz / 43 g	1.2 oz / 35.4 g	1.5oz / 42.5g	1.5 oz / 43 g
<b>Regulatory Listings:</b>		-	-	-			-
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year

**\*Anti-microbial**  
The anti-microbial additive in the ABS plastic housing inhibits the growth of bacteria on the unit. It does not protect users or others against bacteria. Always clean and wash products thoroughly before and after each use.

Developed for through-wall mounting, all units have a bi-metal coil movement and glass lens with a 0.25" / 6.35 mm diameter stainless steel stem. The stainless steel, back flange bezel has three, equally spaced mounting holes 0.150" / 3.81 mm diameter on a 2.9" / 74 mm diameter bolt circle.

	2225 Series	2245 Series	2255 Series
<b>Temperature Range:</b>	2225-02: 0° to 220°F 2225-03: -40° to 160°F 2225-05: 200° to 1000°F 2225-20: 200° to 1000°F / 100° to 500°C	2245-02: 0° to 220°F 2245-03: -40 to 160°C	2255-02: 0° to 220°F 2255-03: -40° to 160°F
<b>Accuracy:</b>	2225-02: ±2°F / ±1°C 2225-03: ±2°F / ±1°C 2225-05: ±20°F / ±10C° 2225-20: ±20°F / ±10C°	2245-02: ±2°F 2245-03: ±3F°	2255-02: ±2°F 2255-03: ±3F°
<b>Dial Dimension:</b>	2" / 51 mm	2" / 51 mm	2" / 51 mm
<b>Outer Flange Diameter:</b>	2225-02: 3.5" / 89 mm 2225-03: 3.5" / 89 mm 2225-05: 3.3 / 84 mm 2225-20: 3.3 / 84 mm	3.5" / 84 mm	3.5" / 89 mm
<b>Stem Length:</b>	4" / 102 mm	6" / 152 mm	9" / 229 mm
<b>Weight:</b>	2.5 oz / 71 g	3 oz / 85 g	3.8 oz / 108 g

2225-20



# Digital Pocket Test Thermometers



A digital pocket-test thermometer that is “**Accurate for Life**” and does **NOT** require any field adjustment. Eliminating field adjustment removes the risk of introducing inaccuracy into the instrument. Cooper-Atkins brings this industry leading advancement with the guarantee that our **Digital Pocket Tests** are always accurate. Look for the logo **A** on Cooper-Atkins products and you'll know they are **Accurate for Life...GUARANTEED!!**

Cooper-Atkins offers a wide range of fast-response Digital Pocket Tests with 0.1° resolution. Thermistor sensors are located in the probe tip for quick response time and accurate readings.

## DFP450W Digital Pocket Test with Temperature Alarm

- Min / Max & Hold Temperature
- Dishwasher-safe



## TTM59 Pocket Test Plus™

- Replaces a wristwatch in the kitchen with an all-in-one pocket-test thermometer.
- 3-Station timer alarms
  - Clock / Date
  - Min / Max
  - Dishwasher-safe



### Anti-microbial

*The anti-microbial additive in the ABS plastic housing inhibits the growth of bacteria on the unit. It does not protect users or others against bacteria. Always clean and wash products thoroughly before and after each use.*

**REDUCED TIP FOR <6 SECOND  
RESPONSE TIME**



## DPP400W Pen Style

- Min, Max & Hold temperature

**TTM41 & TTM41-10  
Coolit-Rite™ Cooling Validator**  
Validator with 15” stem (TTM41) or 10” (TTM41-10) tracks elapsed time while it monitors the temperature of the food being cooled.

- Adjustable vessel clip
- Water-resistant



## IPX7 Waterproof

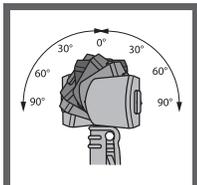
DFP450W, TTM59 and DPP400W instruments are IPX7 waterproof rated and durable for harsh environments.

An IPX7 level reading means the instrument can be submerged in 1 meter of water for 30 minutes without water damage.

	DFP450W	DPP400W	DPS300-01	DT300	TTM41	TTM41-10	TTM59
<b>Temperature Range:</b>	-40° to 450°F -40° to 232°C	-40° to 392°F -40° to 200°C	-40° to 302°F -40° to 150°C	-40° to 302°F -40° to 150°C	-4° to 302°F -20° to 150°C	-4° to 302°F -20° to 150°C	-4° to 350°F -20° to 177°C
<b>Accuracy:</b>	±4F° / ±1C° from -40 to 0° F / -40° to 32°C ±2F° / ±1C° from 0° to 350° F / 32° to 177°C	±2F° / ±1C° from 14° to 212°F / -10° to 100°C / ±3F° / 1.5°C all other ranges	±2F° / ±1C° from 32° to 212°F / -0° to 100°C ±4F° / 2C° all other ranges	±2F° / ±1C° from -10° to 212°F / -23° to 100°C ±4F° / 2C° all other ranges	±2F° / ±1C° from -4° to 212°F / -20° to 100°C ±3F° / 1.5°C all other ranges	±2F° / ±1C° from -4° to 212°F / -20° to 100°C ±3F° / 1.5°C all other ranges	±1F° / ±0.5C° over entire range
<b>Resolution:</b>	0.1°F / °C	0.1°F from -40° - 199°F, 1°F from 200° - 392°F, 0.1°C over the entire range	0.1°F / °C				
<b>Display - LCD</b>	.875" / 22.2 mm	.875" / 22.2 mm	.50" / 12.7 mm	.875" / 22.2 mm	1.25" / 32 mm	1.25" / 32 mm	.43" / 11 mm
<b>Stem Length:</b>	4.75" / 121 mm	2.75" / 70 mm	4.75" / 121 mm	4.625" / 117 mm	15" / 381 mm	10" / 254 mm	4.75" / 121 mm
<b>Power:</b>	(1) 1.5V #LR44	(1) 1.5V #LR44	(1) 1.5V #LR44	(1) 1.5V #LR44	(1) 1.5V #LR44	(1) 1.5V #LR44	(1) 3V #CR2032
<b>Auto Shut-off:</b>	Yes (After 10 min)	Yes (After 10 min)	Yes (After 10 min)	No	-	-	-
<b>Weight:</b>	.7 oz / 20 g	.7 oz / 20 g	1 oz / 25 g	.5 oz / 14 g	2 oz / 56 g (with clip)	2 oz / 56 g (with clip)	1.8 oz / 51 g
<b>Water Resistance Rating:</b>	IPX7	IPX7	-	-	Water Resistant	Water Resistant	IPX7
<b>Regulatory Listings:</b>	CE  RoHS	CE  RoHS	CE  RoHS	CE  RoHS	CE  RoHS	CE  RoHS	CE  RoHS
<b>Warranty:</b>	Lifetime	Lifetime	1 year	1 year	Lifetime	Lifetime	Lifetime

### DPS300-01 Digital Pocket Test with 180° Swivel Head

- On / Off Buttons
- °F / °C Switchable
- Memory Feature
- Reduced Tip Design



Adjustable 180° Swivel Head for Easy Viewing From Any Angle



### DT300 Oval Style Digital Pocket Test

- On / Off Buttons
- °F / °C Switchable



#### Anti-microbial

The anti-microbial additive in the ABS plastic housing inhibits the growth of bacteria on the unit. It does not protect users or others against bacteria. Always clean and wash products thoroughly before and after each use.

## Probe Wipes

### 9150 Probe Wipe Box

The wipes clean and sanitize probes quickly without skin contact. Each wipe contains 70% Isopropyl Alcohol.

- 200 Count



### 9152 Probe Wipe Tub

- 200 Count



# Infrared Thermometers

	412	462	470	480	481
<b>Temperature Range:</b>	Infrared -76° to 932°F / -60° to 500°C Thermocouple Instrument -83° to 1999°F / -64° to 1400°C	-40° to 536°F / -40° to 280°C	-27° to 428°F / -33° to 220°C	Infrared -27° to 428°F / -33° to 220°C Thermocouple Probe -67° to 624°F / -55° to 330°C	Infrared -40° to 536°F / -40° to 280°C Thermocouple Probe -40° to 392°F / -40° to 200°C
<b>Infrared Accuracy:</b>	±4F° / ±2C° or 2% whichever is greater	±2F° / 1C°: ±0.1°F < 32°F / 0°C ±2F° / 1C°: 32° to 150°F (65°C); ±1.5% of reading > 150°F (65°C)	±3.6F° / ±2C° or 2% whichever is greater	±4F° / ±2C° or 2% whichever is greater	< 150°F / 65°C: ±2F° / ±1C° > 150°F / 65°C: ±1.5% of reading
<b>Probe Accuracy:</b>	Thermocouple Jack ±2°F / ±1°C, or 1% whichever is greater	-	-	Thermocouple Probe ±2°F / ±1°C or 1% whichever is greater	RTD Probe 23° to 150°F / -5° to 65°C: ±1F° / 0.5C° < 23°F / -5°C: ±2F° / 1C° > 150°F / 65°C: ±2F° / 1C° or 1.5% of reading
<b>Resolution:</b>	0.1°F / °C	< 230°F / 110°C: 1° F / C° > 230°F / 110°C: 1° F / C°	< 200°F / 93°C: 1° F / C° > 200°F / 93°C: 1° F / C°	0.1°, 1° above 200°F / 93°C	0.1° F / °C
<b>Ambient Operating Range:</b>	32° to 122°F / 0° to 50°C	32° to 122°F / 0° to 50°C	32° to 122°F / 0° to 50°C	32° to 122°F / 0° to 50°C	32° to 122°F / 0° to 50°C
<b>Laser:</b>	Single Dot	Single Dot	None	None	Single Dot
<b>Distance to Spot (D:S):</b>	12:1	6:1	1:1	1:1	3:1
<b>Emissivity:</b>	0.95 - adjustable from 0.01 to 1.0	0.97 fixed	Preset at 0.95	0.95 - adjustable from 0.01 to 1.0	97 Fixed
<b>Storage Temperature:</b>	-4° to 149°F / -15° to 65°C	-4° to 149°F / -20° to 65°C	-4° to 149°F / -20° to 65°C	-4° to 149°F / -20° to 65°C	-4° to 122°F / -20° to 50°C
<b>Power:</b>	(2) 1.5V AAA	(1) 9V battery Alkaline	(1) Lithium Button cell 3V battery - #CR2032	(1) Lithium Button cell 3V battery - #CR2032	(1) 9V battery
<b>Dimensions:</b>	6.9" x 2.8" x 1.5" / 175 x 72 x 38 mm	7.375" x 2.25" x 1.5" / 184 x 56 x 38 mm	2.67" x 1.44" x 0.75" / 68 x 36 x 19 mm	6.125" x 1.68" x 1.625" / 155 x 41 x 22 mm	6.625" x 1.375" x 2.5" / 168 x 35 x 64 mm
<b>Battery Life:</b>	180 Hours Typical 140 Hours Minimum	12 Hours	40 Hours Typical 30 Hours Minimum	40 Hours Typical 30 Hours Minimum	100 Hours Typical
<b>Weight:</b>	6 oz / 170 g	5 oz / 142 g	1 oz / 28.4 g	2.5 oz / 73 g	6 oz / 170 g
<b>Regulatory Listings:</b>	CE RoHS	CE RoHS	CE RoHS	CE RoHS	CE NSF RoHS
<b>Warranty:</b>	1 year	1 year	1 year	1 year	1 year

## 412 Infrared with Laser Sighting & Thermocouple Jack

- LCD display with backlight
- FDA Class II, Single-point laser may be turned on or off
- High and Low alarms
- Measures min, max, average & differential temperatures
- Accepts Type-K Thermocouple probes
- Lock-mode for continuous monitoring up to 60 minutes
- Adjustable emissivity
- Soft, carrying case



(D:S)  
12:1

## 462 Slim-Line Infrared Thermometer

- Easy to use. Just aim at the object, press the button, and read the surface temperature.
- LCD display with backlight
  - Single-point laser
  - Auto Shut-off after 7 seconds



(D:S)  
6:1

## 470 Mini Infrared Thermometer

- The pocket-sized design is very compact, and includes lanyard to wear around your neck.
- Min / Max / Hold / Lock



(D:S)  
1:1

## 480 DualTemp™ Infrared & Probe

- For surface and internal temperature readings.
- Auto Shut-off after 7 seconds / Probe after 4 mins



(D:S)  
1:1

## 481 DualTemp2™ Infrared with Platinum RTD Probe

- For surface and internal temperature readings.
- Auto Shut-off after 20 seconds
  - Data hold and maximum temperature memory
  - HACCP LED indicators
  - Storage pouch included



(D:S)  
3:1

**422**  
**Gun Style Infrared with**  
**Laser Sighting**



(D:S)  
12:1

**423**  
**Gun Style Infrared with**  
**Laser Sighting**  
 Accepts Type K Thermocouple  
 probes



(D:S)  
16:1

	422	423	424	425
<b>Temperature Range:</b>	-76° to 932°F / -60° to 500°C	-76° to 1157°F / -60° to 625°C	-76° to 1600°F / -60° to 900°C	-76° to 1832°F / -60° to 1000°C
<b>Accuracy:</b>	±4F° / ±2C° or 2% of reading (whichever is greater)	±4F° / ±2C° ±1.8F° / ±1C°, or 1% of reading (whichever is greater)	±4F° / ±2C° or 2% of reading (whichever is greater)	±4F° / ±2C° or ±2% of reading (whichever is greater)
<b>Resolution:</b>	0.1°F / °C	0.1°F / °C	0.1°F / °C	0.1°F / °C
<b>Ambient Operating Range:</b>	32° to 122°F / 0° to 50°C	32° to 122°F / 0° to 50°C	32° to 122°F / 0° to 50°C	32° to 122°F / 0° to 50°C
<b>Laser:</b>	Single Dot	Single Dot	Dual Dot	Dual Dot
<b>Distance to Spot (D:S):</b>	12:1	16:1	35:1	50:1
<b>Emissivity:</b>	0.95 Fixed	0.10 to 0.95 - adjustable from 0.10 to 1.00	Preset at 0.95 - adjustable from 0.10 to 1.00	Preset at 0.95 - adjustable from 0.10 to 1.00
<b>Storage Temperature:</b>	-4° to 149°F / -20° to 65°C (without battery)	-4° to 149°F / -20° to 65°C (without battery)	-4° to 149°F / -20° to 65°C (without battery)	-4° to 149°F / -20° to 65°C (without battery)
<b>Power:</b>	(2) 1.5V AAA (included)	(2) 1.5V AAA (included)	(2) 1.5V AAA (included)	(2) 1.5V AAA (included)
<b>Dimensions:</b>	1.625" x 5.5" x 7.25" 41 x 140 x 184 mm	1.625" x 5.5" x 7.25" 41 x 140 x 184 mm	7.75" x 1.875" x 8" 197 x 48 x 203 mm	7.75" x 1.875" x 8" 197 x 48 x 203 mm
<b>Battery Life:</b>	18 hrs typical / 14 hrs continuous use with laser / backlight on	18 hrs typical / 14 hrs continuous use with laser / backlight on	18 hrs typical / 14 hrs continuous use with laser / backlight on	18 hrs typical / 14 hrs continuous use with laser / backlight on
<b>Weight:</b>	8 oz / 227 g	9 oz / 229 g	1 lb / 454 g w/ stand	1 lb / 454 g w/ stand
<b>Regulatory Listings:</b>	CE RoHS	CE RoHS	CE RoHS	CE RoHS
<b>Warranty:</b>	1 year	1 year	1 year	1 year

**424**  
**Gun Style Infrared**  
**with Laser Sighting**

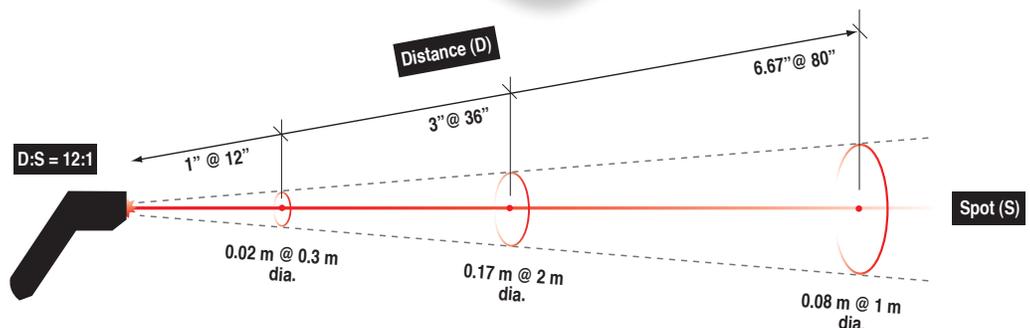
- Measures min, max, average & differential temps
- Programmable HI / LO alarms
- Built-in, high-intensity LED flashlight
- Magnetic stand
- ABS carrying case



(D:S)  
35:1

**D:S (Distance to Spot Ratio)**

The further away from the object, the larger the surface area measured. Optical resolution is expressed as a ratio of the distance to the resolution spot divided by the diameter of the spot.



# Hot / Holding Thermometers

	24HP	26HP	3210
<b>Temperature Range:</b>	100° to 600°F 50° to 300°C	100° to 175°F 40° to 80°C	100° to 600°F 50° to 300°C
<b>Accuracy:</b>	±25°F°	±3F° / ±1.5C°	±25F° / ±12C°
<b>Housing Material:</b>	Stainless Steel	Stainless Steel	Aluminum
<b>Dial Diameter:</b>	2" / 51 mm	2" / 51 mm	2.5" / 64 mm
<b>Lens Material:</b>	Glass	Glass	Glass
<b>Weight:</b>	1.5 oz / 43 g	1.5 oz / 43 g	3 oz / 85 g
<b>Regulatory Listings:</b>			
<b>Warranty:</b>	1 Year	1 Year	1 Year



**24HP  
Oven Thermometer**

- HACCP dial
- Hangs or stands

**3210  
Grill Surface Thermometer**

- Zoned dial
- Unique side-grips



**26HP  
Hot Holding Cabinet Thermometer**

- HACCP Zoned dial
- Hangs or stands

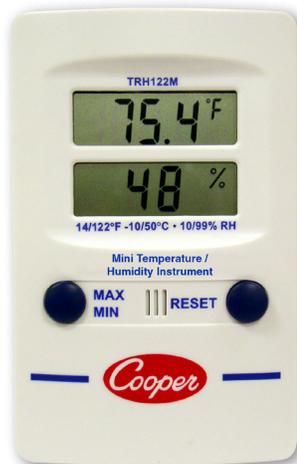
# Digital Wall Thermometers

	TRH122M	TRH158	T158	IO70
<b>Temperature Range:</b>	14° to 122°F / -10° to 50°C 10% to 99% RH	32° to 122°F / 0° to 50°C 25% to 90% RH	(Internal): 32° to 122°F / 0° to 50°C  (External): -58° to 158°F / -50° to 70°C	(Internal): 32° to 122°F / 0° to 50°C  (External): -58° to 158°F / -50° to 70°C
<b>Accuracy:</b>	±2F° / ±1C° ±5% from 25% to 95% RH ±7% when < 25% RH & > 95% RH	±2F° / ±1C° ±5% RH	±2F° / ±1C°	±2°F or 2% of reading
<b>Resolution:</b>	0.1°F / °C	0.1°F / °C	0.1°F / °C	0.1°F / °C
<b>Display - LCD</b>	1.5" x .5" / 38 mm x 13 mm (dual display)	2.875" x 2.125" / 73 mm x 54 mm	2.875" x 2.125" / 73 mm x 54 mm	1.625" x 1.375" / 41 mm x 35 mm
<b>Power:</b>	(1) 1.5V Battery AAA	(1) 1.5V Battery AAA	(1) 1.5V Battery AAA	(1) 1.5V Battery AAA
<b>Weight:</b>	3 oz / 85 g	4.5 oz / 127 g	5.5 oz / 156 g	3 oz / 85 g
<b>Regulatory Listings:</b>		RoHS	RoHS	-
<b>Warranty:</b>	1 Year	1 Year	1 Year	1 Year



**T158  
Digital Wall Thermometer with Remote Sensor**

- Wall or desk mountable
- Remote sensor
- F / C selectable .



**TRH122M  
Mini Temperature / Humidity  
Dual-Display Wall Thermometer**

- Min / Max memory and switchable F/C.



**IO70  
Digital Indoor / Outdoor Wall Thermometer**

- Large LCD
- Built-in sensor
- 10-foot cable for remote sensor.



**TRH158  
Digital Temperature / Humidity Wall Thermometer**

- Built-in sensor
- F / C selectable .

# Refrigerator / Freezer Thermometers

	25HP	330	335	336	535
<b>Temperature Range:</b>	-20° to 80°F -29° to 27°C	-40° to 120°F -40° to 50°C	-40° to 80°F -40° to 25°C	-40° to 100°F -40° to 40°C	-20° to 120°F -30° to 50°C
<b>Accuracy:</b>	±2F° / ±1C°	±2F° / ±1C°	±2F° / ±1C°	±2F° / ±1C°	±5F° / ±2C°
<b>Housing Material:</b>	Stainless Steel	Food Grade Plastic	Stainless Steel	Food Grade Plastic	Plastic
<b>Dimensions:</b>	2.375" x 1.5" x 3" 60 x 38 x 76 mm	6.25" x .25" x 4" 16 x 6.4 x 102 mm	4.75" x .875" x 1.125" 120.6 x 22 x 29 mm	6" x 1" 152.4 x 25.4 mm	2" 50.8 mm
<b>Lens Material:</b>	Glass	-	Crystal Clear Polycarbonate	-	Plastic
<b>Weight:</b>	1.5 oz / 43 g	.25 oz / 7 g	1 oz / 28 g	2 oz / 57 g	.5 oz / 14 g
<b>Regulatory Listings:</b>					-
<b>Warranty:</b>	1 Year	1 Year	1 Year	1 Year	1 Year



**535 Cooler Thermometer**

- Self-adhesive tabs for permanent mounting
- Magnetic back



**330 Vertical Glass Tube Thermometer**

- Lightweight design
- Durable, plastic casing
- Non-toxic, spirit-filled glass tube



*Takes on product temperature in changing ambient conditions of any refrigerator, walk-in or delivery truck. It helps save energy by determining an optimal ambient temperature.*

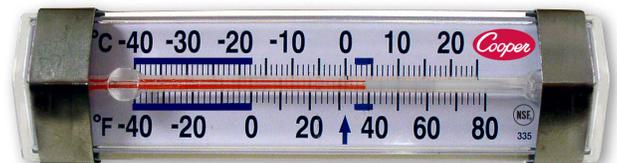
**336-01 ColdStik™ Product Simulator Thermometer**

- Product simulator with Silicone-based gel
- Waterproof
- Stands or Hangs
- Two (2) Zip-ties included for mounting



**25HP Refrigerator / Freezer Thermometer**

- Includes dry storage range
- Hangs or stands



**335 Horizontal Glass Tube Thermometer**

- Magnifying lens
- Hangs, stands, or permanently mounts

# Wall Thermometers

212 Series 12" (304 mm) Wall Thermometers / Hygrometers allow easy monitoring of temperatures. Specialty HACCP color-zoned dial units were developed for use in critical food-related applications.

## 212 Series

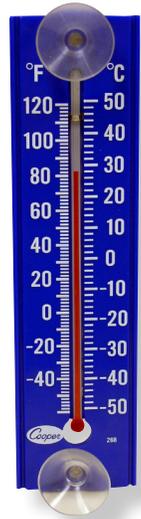
## 250 / 255 Series

	212-150	212-158	212-159	250	255-06	255-14
Temperature Range:	-40° to 120°F -40° to 50°C 0 to 100% RH	10° to 80°F 0 to 100% RH	-10° to 80°F 0 to 100% RH	-40° to 120°F -40° to 50°C	-60° to 120°F -50° to 50°C	-10° to 80°F
Accuracy:	±3F° 30° to 90F° ±5F° <30° and >90F°	±3F°	±2C°	±2F° / 1C°	±2F° / 1C°	±2F°
Resolution:	2°F increments	1°F increments	1°F increments	±2°F / 1°C	2°F increments	2°F increments
Dial Diameter:	11.5" / 291 mm	11.5" / 291 mm	11.5" / 291 mm	4.5" / 114 mm	6" / 60 mm	6" / 152 mm
Weight:	1 lb / 28 g	1 lb / 28 g	1 lb / 28 g	4 oz / 113 g	3 oz / 85 g	3 oz / 85 g
Warranty:	1 year	1 year	1 year	1 year	1 year	1 year

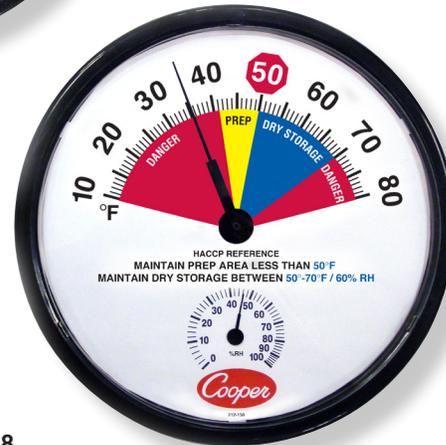
212-159  
12" Freezer & Cooler  
Thermometer / Hygrometer °F



268  
Wall Thermometer  
• -40° to 120°F /  
-50° to 50°C  
• ±2F° / 1C°  
• 7.63" x 2" / 194 x 51 mm  
• Non-toxic, spirit-filled  
glass tube  
• Suction cups included  
for window mounting  
• 1 year warranty



212-150  
12" Wall Thermometer / Hygrometer



212-158  
12" Prep & Dry Storage  
Thermometer / Hygrometer °F



250  
5" Wall / Storage  
Thermometer



255-14  
6" Refrigerator / Freezer  
Thermometer



255-06  
6" Wall / Storage  
Thermometer

# Timers

	FT24	TC6	TFS4	TM60	TS100	TW3
<b>Unit Range:</b>	24 Hours	24 Hour	99 Hours 59 Minutes	0 to 60 Minutes	99 Minutes 59 seconds	99 Minutes 59 seconds
<b>Resolution:</b>	1 second	1 second	Hours / Minutes Minutes / Seconds	1 minute	1 second	1 second
<b>Power Source:</b>	(4) C cell	1.5 v AAA	(4) 1.5v "C" AC Adaptor (optional)	Wind up	15v LR44	1.5 v AAA
<b>Memory / Recall:</b>	Yes	Yes	Yes	No	Yes	Yes
<b>Modes:</b>	-	Counts up / down	Counts up / down	-	-	-
<b>Alarm Level (Decibel):</b>	90 decibels	85 decibels	90 decibels	70 decibels	70 decibels	70 decibels
<b>Housing:</b>	ABS Plastic	White plastic	ABS plastic	Stainless steel	ABS plastic	ABS plastic
<b>LCD Dimensions:</b>	.875" x 2.25" 22 x 54 mm	.625" x 1.625" 16 x 41 mm	3" x 3" 76 x 76 mm	-	.375" x .875" 10 x 22 mm	1.5" x 2.5" 76 x 76 mm
<b>Weight:</b>	1 lb 3 oz / 539 g	2 oz / 57 g	1lb 6oz / 523g	4.3 oz / 122 g	1 oz / 28 g	3 oz / 85 g
<b>Regulatory Listings:</b>	CE	CE  RoHS	CE  RoHS	-	CE  RoHS	CE  RoHS
<b>Warranty:</b>	2 Years	1 Year	1 Year	1 Year	1 Year	1 Year



## TC6 Digital Timer / Clock / Stopwatch

- Built-in memory
- Splash-proof case
- Wire hang, easel stand, clip-on or magnet-mount
- Power: 1.5V, AAA battery included

## FT24 Large Single-Station Digital Timer

- Red light flashes when alarm sounds
- Built-in memory for repeat cycle timing
- Power: (4) 1.5V, C size batteries included



## TFS4 Large Multi-Station Digital Timer

- Switchable: Hours / Minutes or Minutes / Seconds
- Built-in Memory
- Power: (4) 1.5V, C size batteries included
- Built-in AC adapter jack



## TS100 Digital Timer / Stopwatch

- 99 minute, 59 second counter / timer
- Recall feature
- 18" nylon neck cord
- Power: 1.5V, G13A micro-cell battery included



## TM60 Long-Ring 60 Minute Timer

- Non-skid feet for easy, one-handed operation
- Spring-wound mechanism
- Sturdy, metal case
- Stainless steel



## TW3 Large Digit Multi-Function Timer

- Recall feature
- Water-resistant
- Large LCD: 1.5" x 2.5" / 38 mm x 63 mm
- Power: 1.5V, AAA battery included
- Wire hang, easel stand, belt-clip or magnet-mount

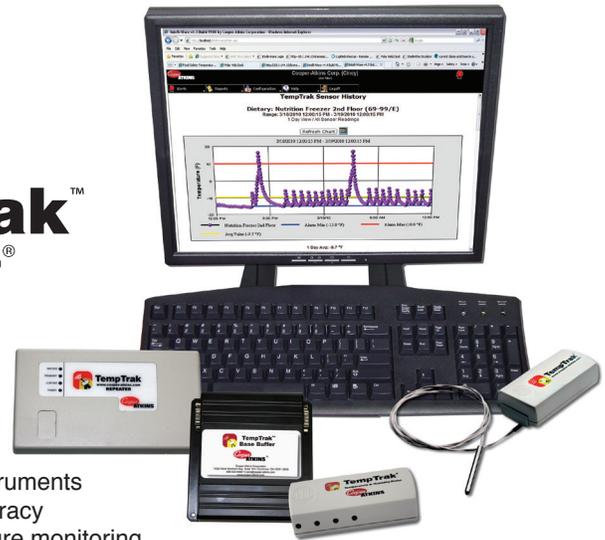


# Wireless Temperature Monitoring

**TempTrak™ Wireless Temperature Monitoring** is one of the most exciting innovations Cooper-Atkins has made in the industry today. As one of the first developers of wireless temperature monitoring systems, TempTrak™ is installed in more businesses than all other manufacturers combined. TempTrak™ offers 24 / 7 remote temperature monitoring and runs on a wide range of systems supported by a broad range of hardware.

## TempTrak™

- 24 / 7 Monitoring of fixed equipment including:
  - HVAC
  - Refrigeration
  - OEM
  - Facilities Management
- Steam Trap operation
- Pressure differential
- Paperless
- Web-based software
- -20° to 300°F (28° to 148°C) ambient air or product simulation
- Real-time alerts with escalation
- Corrective action documentation



Heating, Ventilation, Air Conditioning and Refrigeration (HVAC / R) technicians and contractors rely on Cooper-Atkins' superior quality test instruments to monitor critical temperatures in their systems. Our products' speed, accuracy and durability have made us a trusted source in remote wireless, temperature monitoring.

# Steam Trap Monitoring Solutions

**Wireless Steam Trap Monitoring Solutions** engineered by Cooper-Atkins provides 24 / 7 remote wireless monitoring. Manual Steam Trap inspection and maintenance is time-consuming and outsourcing auditing services can be costly. Our system will provide savings in energy, labor and time. The Real-time alerts and automatic notifications with corrective action allow the facilities mechanics / technicians to respond only to failing steam traps, eliminating manual audits and inspections.

- Are you aware of the amount of energy you are losing when a steam trap fails?
- How much does this cost your facility each year?
- Monitor your steam traps and know they are performing at optimum efficiency levels.

## Wireless Steam Trap Monitoring

- 24 / 7 remote wireless monitoring
- Real-time alerts and automatic notifications of defective steam traps by location
- Corrective actions of alerts can be tracked by time, user and action
- Operates within the 900 MHz bandwidth range
- FTC (FCC) part 15 compliant
- Transmitter enclosed in ABS plastic housing with two 3' Teflon™ wires each containing aluminum-housed thermistor sensors to perform accurately in diverse ambient environments
- Will monitor pipe temperatures up to 350°F
- Alerts provide immediate notification of problems
- Simple installation and setup
- Multiple types of steam traps can be monitored with one system to quickly detect steam trap failures
- Probes can be mounted on various pipe sizes in hard-to-reach areas
- Save energy, labor and time
- Reduce or eliminate manual steam trap audits

**Ball Float Steam Trap**

### Wireless Steam Trap Monitoring Solution

- Are you aware of the amount of energy you are losing when a steam trap fails?
- How much does this cost your facility each year?
- Monitor your steam traps and know they are performing at optimum efficiency levels.

Manual inspection and maintenance of your steam traps is time consuming and outsourcing auditing services can be costly.

The Cooper-Atkins Steam Trap Monitoring System will provide 24/7 remote wireless monitoring, saving energy cost, labor and time.

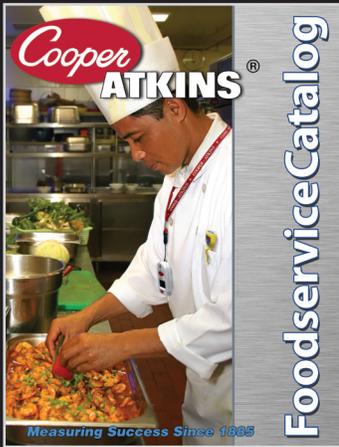
Real time alerts and automatic notifications with corrective action allow the facilities mechanics/technicians to respond only to failing steam traps, eliminating manual audits and inspections.

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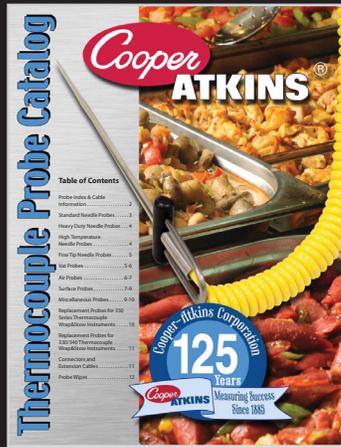
For information on any of our products please reference the page numbers below or visit our website at: [www.cooper-atkins.com](http://www.cooper-atkins.com)

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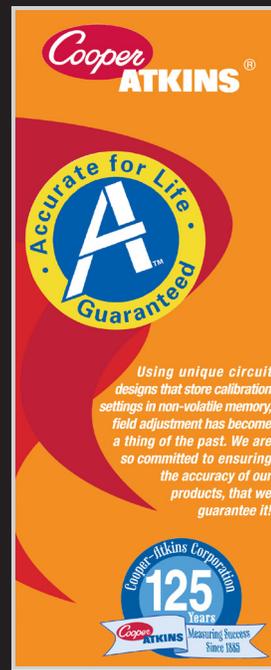
# Additional Promotional Materials



67-968  
FoodService Catalog



67-800  
Thermocouple Probe Catalog



67-909  
Accurate for Life  
Brochure



67-927  
ColdStik™ Sell Card



67-1040  
TempTrak™ Healthcare Catalog



67-1095  
TempTrak™ Catalog

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