# Foodservice and Food Processing

# Your Total Temperature Solution.

**COMARK**
A Fluke Company

Designed for today's busy restaurant kitchens, food processing facilities and storage areas, Comark's line of thermometers and related temperature and humidity instruments lead the industry. Whether it's a waterproof C28 thermocouple, PDT300 pocket digital thermometer, or a FoodPro Plus infrared with probe, Comark has a solution to fit your budget.

Prevent the outbreak and spread of foodborne illness. Our range of monitoring and recording instruments – N5001USB HACCP Auditor, Diligence and EVt loggers, and the new RF500A wireless system – offer accurate and tamper-proof 24/7 recording of key parameters to augment your HACCP and food safety program.

Designed especially for the food industry Comark instruments meet a number of key international standards:

- All of our key products are **NSF certified** so you can trust that they meet their published accuracy and specifications. Every component is food grade and manufactured in a sanitary facility.
- **IP ratings** tell the user immediately how effectively the electrical instrument case protects against the ingress of dust and water.
- The **CE mark** certifies that the product meets European health and safety regulations.

Many Comark products are molded with **BioCote**®, a patented silver–based antimicrobial agent. BioCote® effectively inhibits the function, growth, and reproduction of a wide range of micro–organisms. Its protection is increasingly accepted as part of HACCP, due diligence and health and safety procedures. BioCote® protection lasts for the life of the instrument because the agent is present throughout the case plastic and cannot rub off or leach out. The active ingredients are registered with the EPA.

With our wide range of products, a knowledgable staff and a commitment to your satisfaction, you can count on Comark for answers to all your temperature measurement needs.

2

3

## Quick - Reliable - Accurate

**C28 Temperature Kit**
Time and Temperature in One Unit

±1°F Accuracy, Waterproof, Long Battery Life, Wide Variety of Probes

**FPP FoodPro Plus**
Infared Thermometer with Flip down Penetration Probe

**PDT300**
Waterproof, Field Calibratable, and a Thin 1.5mm Tip

The most popular thermometer for measuring thin foods. Accuracy: ±2°F (±1°C)

**PDQ400**
Waterproof, Field Calibratable, with a Thin 1.5mm Tip

NEW

**300B**
Ruggedized and Water Resistant

New thin tip and field calibratable with an accuracy of ±2°F (1°C)

**UTL80**
Refrigerated Drawer Stick-on Thermometer

Double stick tape for securing to a refrigerated drawer

NEW

**DT400**
Waterproof, Field Calibratable, Max Hold, Dishwasher Safe

### KM28 Temperature Kit

**K-Type Thermocouple with Sub-miniature Connector**

- Accuracy: ±2°F (±1°C)
- Range: –40° to 1,000°F (–40° to 500°C)
- Large LCD and auto switch-off to save battery life
- Water resistant and easy to clean membrane keypads
- Includes CRS/5 protective rubber boot
- Accepts a wide range of K-Type probes *(see page 5)*

**KM28/P5 includes:**
- KM28
- PK19M reduced tip penetration probe
- CRS/5 protective rubber boot
- 9V battery
- AC315 carrying case

**KM28Kit includes:**
- KM28
- PK19M reduced tip penetration probe
- CRS/5 protective rubber boot
- 9V battery

**WB2/US**
Wall Bracket for KM28

**KM28P5**

**KM28Kit**

### C28 Temperature Kit

**K-Type Thermocouple with Sub-miniature Connector**

Designed for heavy use in today's busy kitchens.
- Waterproof and Rugged
- High Accuracy – better than ±1°F
- Built-in Clock and Countdown Timer
- 7,000 hour battery life
- Range: –328° to 1112°F (–200° to 600°C)
- Data Hold and Auto Switch Off
- BioCote® Antimicrobial Protection
- Settable alarms
- 2 Year Warranty
- See probes on page 5
- Battery: 2 x AA Alkaline *(see Probes on page 5)*

**C28 Kit includes:**
- C28 and PK19M penetration probe

**C20WB**
Probe Caddy and Wall Bracket

**C28Kit**

**ATT29**
4' Oven/Air Probe with Clip

**ATT50**
Penetration Probe, 8" stem

**ATT65**
Needle Probe, 3.75" stem

**PK15M**
Micro-Tip Penetration Probe (1.1mm)
Temperature range: –58° to +482°F (–50° to +250°C)

**PK19M**
Penetration Probe with Reduced Tip (1.5mm)
Temperature range: –58° to +482°F (–50° to +250°C)

**PK24M/US**
Food/Frozen Penetration Probe (3.3mm)
Temperature range: –58° to +482°F (–50° to +250°C)

**SK25**
Heavy Duty Surface Probe
Temperature range: –58° to 1200°F (–50° to 650° C)

**SK42M**
Grill Surface Probe
Temperature range: –58° to +482°F (–50° to +250°C)

**PK23M**
Oven/Meat Probe
Temperature range: –58° to +482°F (–50° to +250°C)

**SK40M**
Weighted Griddle Probe
Temperature range: +500°F (+260°C) for up to 5 minutes

**PW70T**
Antibacterial Probe Wipes
Tub of 70

**PW200T**
Antibacterial Probe Wipes
Tub of 200

## N9094

**T-Type thermocouple with extra tough water-proof case for food processing environments!**

- Waterproof and dust proof to IP68 standard
- Range: –328° to 752°F (–200° to 400°C)
- Accuracy at 73°F (+23°C): ±0.9°F (±0.5°C)
- Clock, countdown timer, data hold
- 10 year battery life
- 2 year warranty
- T-Type thermocouple standard or thermistor optional
- Optional CRS/6 protective rubber boot
- Probes must be purchased separately

**N9094 Kit includes:**
- N9094
- CRS/6 protective rubber boot
- PT24LC/US  penetration probe
- MC28 case

*BioCote*

**WATERPROOF DUSTPROOF IP68**

**N9094**

**C22Kit**

*BioCote*  *NSF*

## C22

**T-Type Thermocouple with locking probe connector**

For complete assurance that the unit and probe "system" accuracy is better than 1°F, the C22 with a Comark locking probe connector is your best answer. The C22 comes in the same waterproof and rugged case as the C28 and also includes the Clock, Countdown Timer, DataHold and Auto Switch Off features.
- System Accuracy (Type-T Thermocouple): ±0.9°F (0.5°C)
- System Accuracy (PST Thermistor): ±0.6°F (0.3°C)
-  Range: –328° to 752°F (–200° to 400°C)

## TX27L

**Thermometer Test Cap**

The TX27L simulates a temperature of 32°F (0°C) when attached to a thermometer. Compare this point to the reading on the thermometer to ensure calibration.
- Calibrated at +32°F in a UKAS (NIST) laboratory with a 1 Year Certificate
- Check the accuracy of any Comark thermistor thermometer with a Lumberg type probe connector. C22, N9094, N2012

## ST22L/W

**Surface Probe with Heat Resistant Lead**

Temperature range:
-148° to 482° F (-100° to 250° C)

## PT19L

**Penetration Probe with Reduced Tip (1.5mm)**

Temperature range:
-148° to +482°F (-100° to +250°C)

## PT24LC/US

**Food/Frozen Penetration Probe (3.3mm)**

Temperature range:
-148° to +482°F (-100° to +250°C)

## PT23L/INT

**Needle Probe, 4" Stem**

Temperature range:
-148° to +482°F (-100° to +250°C)

## P125F / P250F Pocketherm

**Thermistor and Thermocouple**

Pocketherm is fast and accurate. Set different probe angles for taking different temperatures. Audible alarm plus flashing LEDs instantly indicate critical HACCP zones. Choose the P125F for greater accuracy or the P250F for higher range. Also available in °C.

*BioCote*

**Switches on when probe swings out!**

*NEAT:*
*Probe angles to fit the measurement*
*FAST:*
*Tapered probe for quicker response*
*COMPACT:*
*Fits easily in pockets or cases.*

**LED indicators for quick recognition of HACCP temperature zones**

| | | |
|---|---|---|
| Yellow: | Cold Hold | Below 40°F |
| Green: | Hot Hold | 140°F to 180°F |
| Red: | Ground Beef | Above +158°F |

| Specifications: | P250F (thermocouple) | P125F (thermistor) |
|---|---|---|
| Range: | –58°F to +482°F | –40°F to +257°F |
| Resolution: | 0.1° | 0.1° |
| Accuracy: | ±2°F, up to +257°F | ±0.9° from –4°F to +158°F |
| Battery: | 9V | 9V |
| Auto Off: | After 1 hour | After 1 hour |

## DT15 / DT20

**Economical Thermistor Thermometer**

These water-resistant, handheld units offer speed and accuracy with interchangeable probes and a large easy-to-read display. Use to test yeast temperatures in baking and brewing, cooked meat temperatures, or the farthest reaches of a walk-in cooler. Includes ATT55 probe, AC22 case, and AA battery.

| Specifications | DT15 | DT20 |
|---|---|---|
| Accuracy: | ±1°F from 32° to 160°F ±2°F outside that range | ±2°F (±1°C) |
| Range | -40° to 300°F | -40° to 300°F |
| Data hold | No | Yes |
| °C/°F | No | Yes |
| Min/Max | No | Yes |
| 1 Year Warranty | | |

**Accessories:**

| | |
|---|---|
| ATT55 | Liquid probe |
| ATT56 | Air probe |
| ATT57 | Surface probe |
| ATT58 | Extension probe |

## DT33/P1

**Combination Probe Kit**

Check everything in the kitchen with one kit. Includes:
- DT33
- ATT19 oven probe
- ATT39 handle
- ATT40 surface probe
- ATT41 liquid immersion probe
- ATT42 air probe
- Carrying case

## DT33/P3

**Food Test / Convenience Kit**

This kit includes:
- DT33 temperature tester
- Soft pouch with belt loop
- ATT54A food probe
- Hard case
- Battery
- Instructions.

**Specifications DT33**

Thermocouple J-Type
| | |
|---|---|
| Accuracy | ±0.1%, ±1.3°F |
| Resolution | 1.0° |
| Range (°F) | -125° to 500° |
| Battery | 9V |
| 1 Year Warranty | Yes |

# INFRARED THERMOMETERS

| Safer | Risk Zone | Safer |
|---|---|---|
| Chilled and Frozen Storage | Ripening Fermenting Warming-Cooling | Pasteurization Sterilization Conservation Warm Holding |
| Microorganism growth inhibited | Heavy growth of Microorganisms | Microorganism growth inhibited or destroyed |
| 41°F (5°C) | 41°F to 135° F (5°C to 57°C) | 135°F (57°C) |

HOLD 21.2

## FPP FoodPro Plus

Infrared thermometer with an added flip-down RTD sensor probe and integral countdown timer.
- Probe Range: -40° to 400°F (-40° to 200°C)
- Probe Accuracy: ±1°F from +23 to 150°F
- Probe is replaceable in the field: FP-Probe
- Infrared Range: -30° to 525°F (-35° to 275°C)
- Distance to Spot Size Resolution (D:S) 2.5:1
- Battery: 9V Alkaline

## FP FoodPro

Quickly scan food surface temperatures using unique target illumination beam.
- "HACCP Check" feature graphically displays critical temperature zones.
- Range: -20° to 400°F (-30° to 200°C)
- ±2°F Accuracy from +32° to 150°F or 1.5% of reading
- Emissivity: pre-set at 0.97
- Distance to Spot Size Resolution (D:S) 2.5:1
- Battery: AA Alkaline

## KM842
### Rugged IR Thermometer

When surface temperature measurements need to be fast and accurate, the KM842 is hard to beat.
- Perform HACCP temperature measurements at receiving
- Monitor surface temperatures during cooking
- Check hot holding and serving temperatures
- Ensure uniform storage temperatures

## RAYMTFSU
### Economy Infrared Thermometer for Food Service Applications

Precisely locate target measurement point through laser sighting. For HACCP temperature measurements at receiving, during cooking, holding and serving.
- Switchable °F/°C with backlight
- Auto switch off
- Single degree resolution
- Emissivity pre-set to 0.95
- 7 second display hold
- 4:1 distance to spot size (D:S)
- Optional soft pouch (AC814T)
- ±2°F accuracy in critical food zone, 32° to 150°

| Specifications | FPP | FP | KM842 | RAYMTFSU |
|---|---|---|---|---|
| Sighting | LED | LED | Single point | Single point |
| Case | Belt Pouch included | n/a | Hard case | Optional soft pouch (MTAPK) |
| Measurement Range | -30° to 525°F (-35° to 275°C) | -20° to 400°F (-30° to 200°C) | -25° to 750°F (-32° to 400°C) | -25° to 400°F (-30° to 200°C) |
| Accuracy | 73°F and up, ±1% or ±2°F, whichever is greater | 73°F and up, ±1% or ±2°F, whichever is greater | 73°F and up, ±1% or ±2°F, whichever is greater | 73°F and up, ±1% or ±2°F, whichever is greater |
| Ratio of Distance Spot to Size | 2.5:1 | 2.5:1 | 12:1 | 4:1 |
| Response Time | 500m second | 500m second | 500m second | 500m second |
| Ambient Operating Range | 32° to 122°F 10 to 95% RH | 32° to 122°F 10 to 95% RH | 32° to 122°F 10 to 95% RH | 32° to 122°F 10 to 95% RH |
| Emissivity (pre-set) | 0.95 | 0.95 | 0.95 | 0.95 |
| Backlight | Yes | Yes | Yes | Yes |
| Battery | 9V Alkaline | AA Alkaline | 9V Alkaline | 9V Alkaline |
| Warranty | 2 years | 2 years | 1 year | 1 year |

# POCKET DIGITAL THERMOMETERS

**NEW**

## 300
**Simple, Compact Styling and a Great Price for Excellent Value!**

Now field calibratable with a thin 1.5mm tip!
Range: −40° to 300°F (−40° to 150°C)
Accuracy: ±2°F (1°C)
Data Hold
Auto Power Off

BioCote   NSF

**NEW**

## 300B
**Ruggedized and Water Resistant**

For added protection, the model 300 is packaged with the ARB300A protective rubber boot on a single slide card.

BioCote   NSF

## PDQ400
**Waterproof, Field Calibratable, and a Thin 1.5mm Tip**

High Accuracy Pocket Digital Thermometer
Waterproof and field calibratable
Max temperature hold for use in commercial dishwashers
Range: −4° to 400°F (−20° to 200°C)
Accuracy: ±1°F (0.5°C)

**NEW**

BioCote   NSF   ACCURACY 1°F FIELD CALIBRATABLE   WARRANTY 5 YEARS

## DT400
**Waterproof, Field Calibratable, Max Hold, Dishwasher Safe**

A new extended range to cover all kitchen needs including fryer temperatures and dishwasher cycles. The 1.5mm tip means fast response and easy measurement of thin foods.
Range: −4° to 400°F (−20° to 200°C)
Accuracy: ±1°F (0.5°C)

BioCote   NSF   ACCURACY 1°F FIELD CALIBRATABLE

**NEW**

## 314
**Waterproof Thermometer**

Features a 5-inch stem and easy to clean membrane keypad.
Range: −58° to 300°F (−50° to 150°C)
Accuracy: ±2°F (±1°C)
Field calibratable

NSF

## KM14
**Check Dishwasher Cycles**

Check dishwasher rinse temperatures with this new waterproof pocket digital thermometer.
Range: −4° to 400°F (−20° to 200°C)
Accuracy: ±2°F (1°C)
Maximum temperature hold
Field calibratable
Stem diameter of 3.3mm

BioCote   NSF

## PDT300
**Waterproof, Field Calibratable, and a Thin 1.5mm Tip**

The most popular thermometer for measuring thin foods.
Range: −58° to 300°F (−50° to 150°C)
Accuracy: ±2°F (±1°C)

BioCote   NSF

## 550B
**High Temperature Range with Water Resistant ARB300 Boot.**

Range: −40° to 550°F
Accuracy: ±2°F to 392°F, 1.5% otherwise
Field calibratable

NSF

## DT300
**Rugged and Dependable**

Range: −58° to 300°F
Accuracy: ±2°F
Field calibratable
Data Hold
Auto Off

NSF

**The sensor** in all Comark pocket digital thermometers is positioned directly at the tip of the stem. So you are always ensured of a quick, accurate and reliable measurement. For the fastest readings, select a model with a thin 1.5mm stem.

**Temperature and measurement instrument performance is vital in almost every application, especially throughout the food industry.**
Performance can be affected by many factors including use and abuse and the age of the instrument.

Regular, professional calibration checks are recommended, with certification as required, especially for companies with HACCP procedures and other quality systems. In the meantime, calibration can be monitored with Comark simulators, reference thermometers and validation equipment.

## C9040K/US
**Temperature Simulator**

Checks calibration of most K–Type thermocouples (C28, KM28)
• Supplied with UKAS (NIST) Certificate of Calibration
• Ideal for companies with HACCP programs
• T–Type version available as C9040TL

**Simulated Temperature Points**

+14°F, +32°F, +122°F, +212°F,+ 932°F
(–20°C, 0°C, +50°C, +100°C, +500°C)

## KM820/VAL
**Validator**

Use this heavy duty aluminum cup (shown above) to check the calibration of infrared or contact thermometers.
• Also available in a calibration check kit with the KM20REF reference thermometer and carrying case.

## KM20REF Kit

Use this high-accuracy reference thermometer for checking the calibration of all types of thermometer and probe combinations.
• PT100 sensor and permanently attached probe for highest system accuracy
• Complete with 5-Point UKAS Certificate of Calibration
• Auto switch off
• Supplied with hard carrying case
• Can be used with the KM820/VAL Validator

## C22REF Kit
**Reference Thermometer Kit**

Kit includes:
• C22 Thermometer
• PX22L Thermistor Probe
• TX27L +32°F Temperature Test Cap with UKAS (NIST) certificate
• MC28 Hard Carrying Case

## UTL264
**Count Up, Count Down Timer**

Extra large digits make the UTL264 easy to read. The audible buzzer clearly announces when countdown has been reached. Timing capacity of 99 minutes 59 seconds and repeatable memory make this timer a value-added tool. Features easel stand and magnetic clip back. Battery included (AAA).

## UTL882
**Digital Timer with Clock**

The UTL882 with magnet, pocket clip and stand has a count-down capacity of 24 hours. The "Memory" timer allows you to store a preset time. Count-up in one second resolution up to 24 hours. All three functions, clock, timer and count down, can operate simultaneously. Battery included (AB13).

## UTL884
**Mechanical Timer**

This easy-to-use 60 minute timer has a long-ring bell alarm.

## 206 Timer
**4-Channel Pocket Timer**

Pocket timer with clock and count-up offers excellent versatility. Four independently programmable channels operate simultaneously, each with unique alarms. Pocket clip, stand, and AB13 battery included.
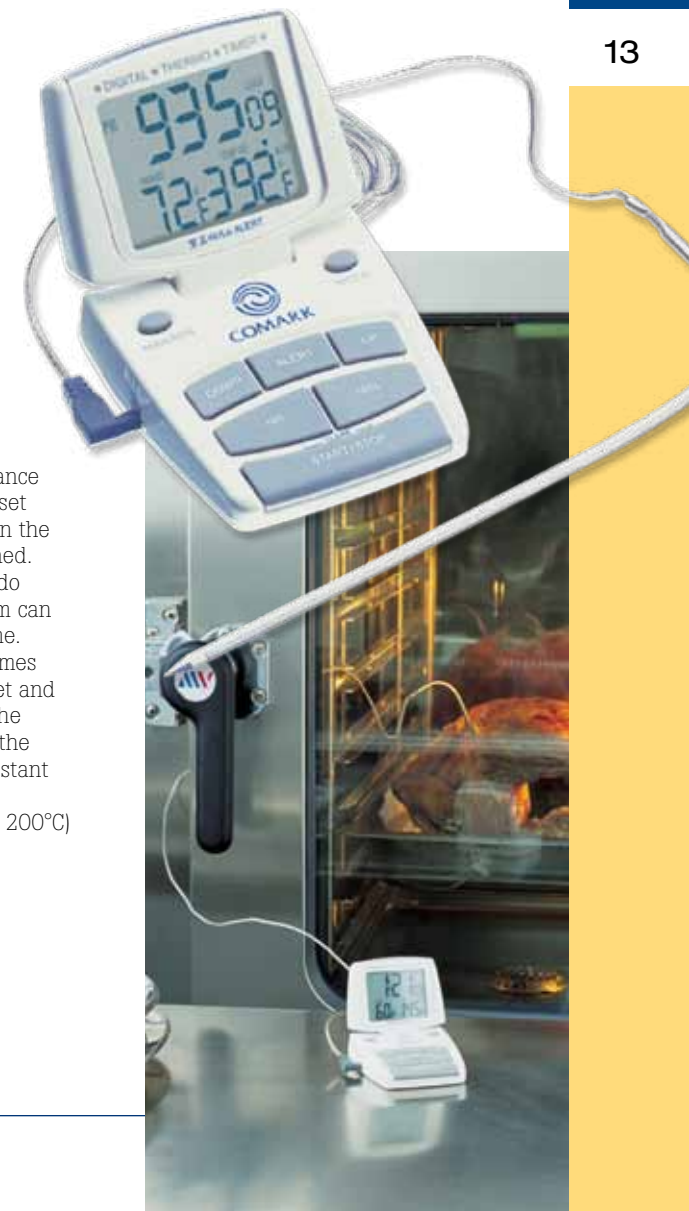
## HLA1
**High-Low Cooking or Cooling Alarm**

For economic HACCP compliance in cooking and cooling, just set the alarm. It will sound when the desired temperature is reached. It's the first thermometer to do this in one simple unit. Alarm can be set for temperature or time. Switchable from °F to °C. Comes with adjustable back, magnet and AAA battery. You can close the oven or refrigerator door on the 36″ stainless steel, heat-resistant probe.
Range: 14° to 400°F (–10° to 200°C)
Accuracy: ±3.5°F
Replacement probe: ATT865

## SWT2
**Stopwatch Timer**

Stopwatch and countdown timer in one unit with memory, 18″ cord and AB13 battery.

## Tough, durable, accurate

Comark's dial thermometers can't be beat. All models feature stainless steel construction and a plastic watertight lens.

- ±1 division accuracy
- Magnifying dial cover
- Recalibration nut
- 1 Year Limited Warranty

*With Comark's patented calibration nut, you can easily calibrate your bi-metal thermometer in seconds with only a twist of your fingers. Once it is set, the nut stays tight and firmly in place.*

**T220A Display Box**

### T220A
**Calibratable Dial Thermometer**

1" dial, 5" stem
T220A: Display box of 12

| Stock No. | Dial | Stem | Div. | NSF | Ranges |
|---|---|---|---|---|---|
| T125 | 1" | 5" | 2° | Yes | 25° to 125°F |
| T160A, T160AK | 1" | 5" | 2° | Yes | –40° to 160°F |
| T220A, T220AK | 1" | 5" | 2° | Yes | 0° to 220°F |
| T550AK | 1" | 5" | 5° | Yes | 50° to 550°F |
| T200L | 1" | 5" | 2° | No | 100° to 200°F |
| T160/3 | 1-3/4" | 5" | 2° | Yes | –40° to 160°F |
| T220/3 | 1-3/4" | 5" | 2° | Yes | 0° to 220°F |
| T220/38A | 1-3/4" | 8" | 2° | Yes | 0° to 220°F |
| T550/38A | 1-3/4" | 8" | 5° | Yes | 50° to 550°F |
| TC100A | 1" | 5" | 1° | Yes | –10° to 100°C |
| TCF220/3 | 1-3/4" | 5" | 2°/1° | Yes | 0° to 220°F (–10° to 100°C) |

*"K" indicates slide card.*

### T220/38A
**Large Face, 8" Stem, and Clip**
0° to 220°F

Make steam table measurements with these large-face, easy-to-read thermometers. You can also use the T220A/38A for lattes.

### T550/38A
**Large Face, 8" Stem, and Clip**
50° to 550°F

### T200L
**Latte Thermometer**

Check milk temperatures in lattes, espresso drinks and hot cocoa. The sturdy clip attaches securely to cups or pitchers.

### FG80AK

This thermometer hangs or stands, has easy-to-read bold numbers, and a dual scale. Non-toxic, spirit filled.
Ranges: –40° to 80°F (–40° to 27°C)
Accuracy: ±1 division, 2° div. °F (1° div. °C)

### EFG120C
**Economy**

This non-toxic spirit filled economy thermometer has protective end caps, bold numbers for easy reading, and can hang or be mounted.
Ranges: –40° to 120°F, (–40° to 50°C)
Accuracy: ±1 division, 2° div. °F (1° div. °C)

### RFT2AK

This thermometer hangs or stands with easy-to-read bold numbers. Blue and green zones indicate safe temperatures while red indicates possible spoilage.
Specify boxed or carded (K).
Range: –20° to 80°F
Accuracy: ±1 div., 2° div. °F (1° div. °C)

### ERF1K
**Economy**

This dual-scale economy thermometer hangs or stands and has easy-to-read bold numbers. Made of stainless steel.
Ranges: –20° to 86°F (–30° to 30°C)
Accuracy: ±1 division, 2° div. °F/°C

### UTL140
**Indoor/Outdoor Stick-on Thermometer.**

Includes both adhesive and magnetic mount.
Range:– 40° to 120°F, (–40° to 50°C)

### UTL80
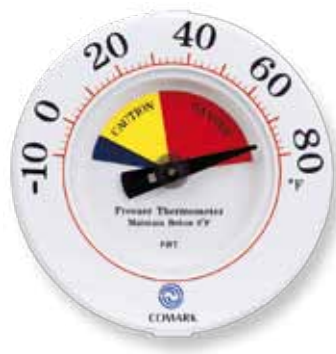**Refrigerated Drawer Stick-on Thermometer**

A modified RFT2A features double stick tape for securing inside a refrigerated drawer.
Range: –20° to 80°F (–30° to 25°C)
Accuracy: ±2°F

### CWT
**Cooler Wall Thermometer**

6" diameter face features brightly colored HACCP danger zones. Comes on display card with mounting bracket and screws, included.
Range: +10° to 80°F

### FWT
**Freezer Wall Thermometer**

6" diameter face features brightly colored HACCP danger zones. Comes on display card with mounting bracket and screws, included.
Range: –10° to 80°F

### WT4
**Wall Thermometer**

Spirit filled, 9-inch length, plastic construction.
Range: –20°F to +120°F (–10°C to +50°C)

## MT200K
**Meat Thermometer**

This dishwasher safe thermometer has an adjustable temperature indicator and dual range readings.
Range: 120° to 200°F (60° to 85°C)
Accuracy: ±1 division, 2° div

## DHH
**Dial Hot Holding Thermometer**

Quickly see if hot food is staying hot! HACCP zone at 140°F+
Range: 100° to 180°F (38° to 80°C)

## DOT2AK
**Oven Thermometer**

Easy-to-read bold numbers are displayed in colored zones for quick reference. Hangs or stands. Specify boxed or carded (K).
Range: 200° to 550°F (100° to 280°C)
Accuracy: ±1 division, 25° div.

## EMT2K
**Economy Meat Thermometer**

Stainless steel body, bold numbers for easy reading and dual scale measurement.
Range: 140° to 190°F (60° to 87°C)
Accuracy: ±1 division, 10° div.

## EOT1K
**Economy Oven Thermometer**

This economy stainless steel thermometer measures in dual scale. It hangs or stands and bold numbers for easy reading.
Range: 100° to 600°F (50° to 300°C)
Accuracy: ±1 division, 25° div.

## OT600K
**Oven Thermometer**

This glass and mercury thermometer hangs or stands and its stainless steel frame folds shut for protection.
Range: 100° to 600°F
Accuracy: ±1 division, 10° div.

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## CD550
**Candy Thermometer**

Dishwasher safe, clip included, adjustable temperature indicator, 2 ¼" dial face, 12" stem.
Range: 50° to 550°F
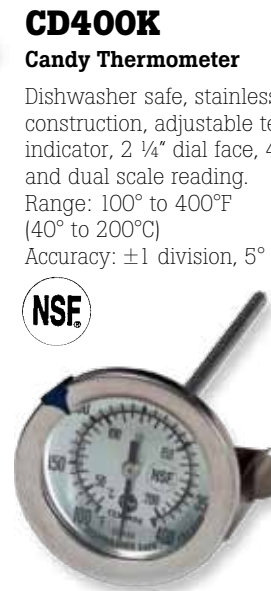Accuracy: ±1 division, 5° div.

## CD400K
**Candy Thermometer**

Dishwasher safe, stainless steel construction, adjustable temperature indicator, 2 ¼" dial face, 4 ½" stem, and dual scale reading.
Range: 100° to 400°F (40° to 200°C)
Accuracy: ±1 division, 5° div.

## CF400K
**Candy Thermometer**

This spirit glass thermometer, constructed of stainless steel, has dual range and a clip on the back.
Range: 100° to 400°F (40° to 200°C)
Accuracy: ±1 division, 2° div.

## RH60 • RF60A
**Vapor Tension Thermometers**

These thermometers have a 2" dial, a 48" nickel-plated capillary for easy measurement, and easy-to-read, color-coded scales. A recalibration pointer makes calibration easy. RH60 features a hanger strap and bottom connection. RF60A has front flange mount and back connection.
Range: -40° to 60°F (-40° to 15°C)
Accuracy: ±1 division, 2° div.

## GT500K
**Grill Thermometer**

Measure grill surface temperature with easy-to-read dial.
Range: 0° to 500°F
Accuracy: ±1 division, 5° div.

## DTH880
**Compact Temperature and Humidity Tester**

This unit can be wall mounted or used with a handy built-in tilt stand. It measures humidity from 25 to 95% RH and temperature from 32° to 122°F (0° to 50°C). Features include comfort zone indication and min/max readings. Uses a "AAA" battery and comes with a 1 Year Limited Warranty.
Accuracy: ±2°F (1°C), 32° to 104°F (0° to 40°C)
Humidity: ±5% RH, 40% to 80%, ±7% below 40% or over 80%

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## TEMPERATURE AND HUMIDITY MONITORING

**Comark Diligence EV Data Loggers** measure both humidity and temperature when monitoring food in storage, transit or processing as well as pharmaceutical and general industrial applications. Models with thermistor sensors offer highest accuracy. K or T-Type thermocouples provide a wide measurement range. With the addition of the N2000Box, the N2012 can measure up to five separate channels with a single logger using four external probes and one internal sensor. With the N2000ADP/K, the N2014 can measure up to four channels using three external thermocouple probes and one internal sensor.

WATERPROOF
**IP67**
DUSTPROOF

**N2011**   **N2012**   **N2013**   **N2014**   **N2000Box**

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### Features:

- Tough, molded cases, dust and waterproof to IP67 standards
- Large memory capacity of up to 16,000 readings
- Instrument accuracy of 0.9°F, +0.3% of reading at +68°F
- Ability to log over multiple periods
- Windows™ based Evolution software for fast data download and analysis
- LED indication of active logging and temperature or humidity alarm conditions
- LCD displays on selected models for instant checks on current readings and alarms
- Additional beeper warning of temperature and humidity alarm conditions
- Single-button control of main functions
- Ability to scroll LCD display between readings from all sensors in use on
- Wide range of Comark temperature probes available

### 32K Memory Specifications:

| | |
|---|---|
| 1 channel | 16,000 samples |
| 2 channels | 8,000 samples |
| 3 channels | 5,300 samples |
| 4 channels | 4,000 samples |
| 5 channels | 3,200 samples |
| | |
| Communications | Via infra-red interface |
| Download Time | 3 minutes for 10,000 readings (typical) |
| Logging Frequency | Programmable between 1 second and 99 hours |
| Battery LIfe | Up to 5 years |
| LED Indication | Red = Alarm, Green = Logger active |

### Measurement Range

**N2011**
| | |
|---|---|
| Temperature | –40° to +158°F (–40° to +70°C) |

**N2012**
| | |
|---|---|
| Internal Sensor | –40° to 158°F (–40° to 70°C) |
| External Sensor | –40° to +302°F (–40° to 150°C) |

**N2013**
| | |
|---|---|
| Temperature | –4° to +140°F (–20° to +60°C) |
| Humidity | 0 to 97% RH, non-condensing |

**N2014**
| | |
|---|---|
| K-Type | –328° to +2,500°F (–200° to +1,372°C) |
| T-Type | –328° to +750°F (–200° to +400°C) |

### Diligence EV Product Line

| | |
|---|---|
| N2011 | Internal Temperature Sensor with LCD |
| N2012 | Internal Temperature Sensor and up to 4 external sensors with N2000 Box with LCD |
| N2013 | Single Temperature and Humidity Alarm, with LCD |
| N2014 | Thermocouple Logger with range of –328°F to +2500°F with N2000ADP/K and appropriate probes with LCD |
| N2000CRUSB | Communications Interface with USB connection. |
| N2000BOX | Multi-link Box to connect up to 4 probes to N2002 or N2012. |
| N2000ADP/K | Adaptor to connect up to 3 thermocouple probes to N2004 or N2014 |
| EVSW | Standard Software |
| EVSWPRO | Software for use with 21CFR Part II |
| PX31L | Penetration Probe, 3 ft long with 3″ stem for N2002 and N2012. |
| PK31L | Penetration Probe, 3 ft long with stem for N2014. |
| ADP55 | USB to Serial Port Adapter |

## EVt2 Temperature Logger

Multi-Use Logger makes it easy to comply with USDA and HACCP requirements by monitoring the temperatures of meat, seafood and produce shipments 24/7.

- Review maximum, minimum and average trip temperatures plus total time in alarm, right on the screen. Accept or reject a shipment in seconds.
- Download data to a PC for permanent HACCP records
- Single button starts/stops logging
- Up to 3,000 readings with 1 sec to 99 hour intervals
- Special software for 21 CFR Part 11 compliance
- BioCote® Antimicrobial Protection
- Waterproof and rugged IP67 case

### EVt Line

| | |
|---|---|
| EVt2 | Transport Logger, multi-use |
| EVSW | Software, standard |
| EVSWPRO | Software for use with 21CFR Part 11 |
| EVTCRUSB | PC Interface for programming and downloading data with USB connector |

## N3014/US

**Logging Monitor with Graphic Display**

Monitor 8 temperature channels continuously from your office.

- Large memory capacity of 64k
- Audible and visual alarm indication
- RS232 port for data communications, programming and serial printing
- Accepts industry-standard sub-min thermocouple connections
- Range: –325° to 3200°F
- Accuracy for K-Type thermocouple: ± 0.1 % of reading, ± 0.4 °F
- Rechargeable battery or main power connected

### N3014/US Product Line

| | |
|---|---|
| N3014/US | Graphic Display Monitor |
| EVSW | Software |
| ADP46 | Printer Connector Cable |
| ADP53 | RS232 Cable |
| ADP54/US | Power Supply for US only |
| LC30 | Hard Carrying Case |
| AK31M | Flexible Thermocouple with 10 meter lead, Type K |
| AK36M | Flexible Thermocouple with 50 meter lead, Type K |

*See our web site for additional probes.*

## N5001USB HACCP Auditor

**Maintain all your Food Safety and HACCP records in one convenient database. Eliminate clipboards and manual record-keeping.**

The N5001USB is a unique data management tool for all aspects of a food service or food processing operation. You can record temperatures at receiving, storage, prep, hot holding or cold holding plus incorporate the many other checklists you've been filling out by hand. All this with a simple series of screens that are unique to your operation. Design them yourself with our free-form software.

- Corrective Action selections ensure that failures are corrected immediately
- Filter data to quickly find or analyze non-conformances
- Auditor data is in real time and is tamper-proof
- Export to Excel or Access for reporting to upper management
- Simulation sequence allows you to fine-tune any changes before you finalize a program
- Instruction screens can be included to aid in employee training
- Programming offered via special quotation
- T Type thermocouple probes with 6 pin socket for secure attachment
- Range: –328° to 752°F (–200° to 400°C)
- Accuracy with probe: ±2°F (1°C)
- Large, backlit graphic display
- BioCote® antimicrobial protection
- Waterproof and rugged IP67 case
- Battery: 2 x AA  Alkaline

**Typical screens**

### N5001USB Auditor Product Line

| | |
|---|---|
| N5001USB | Auditor |
| CRS/6 | Protective Rubber Boot |
| SWAUDITOR | Software |
| MC28 | Hard Carrying Case |
| PT19L | Penetration Probe with 1.5mm tip |
| PT24LC/US | Penetration Probe with 3.3mm tip |

## RF500
## Wireless Monitoring System

This system provides effortless 24/7 monitoring of temperature, humidityand door events. Low power RF technology with built-in mesh networking, and transmitters with bi-directional communications offer:

- Accurate, tamper-proof records
- Secure multi-user access to data via the internet at any time
- Alarm notification via email, phone or pager
- Transmitters that are waterproof and accurate with long battery life
- Compliance with legislative and regulatory requirements
- Plus, it's easy to install, use and maintain

**Manual checks on temperature and humidity are a thing of the past.**

The RF500A employs a system of remote sensors and probes to automatically collect and transmit data to a Gateway unit which manages the system and stores the data.

The RF500A Gateway requires no specialized PC software. It connects directly to the local area network permitting 24/7 single or multi-user access via the internet at any time. The system provides a full audit trail, electronic signatures and data protection to meet the requirements of 21 CFR Part 11.

In the event of readings falling outside pre-set limits, alarm notification via screens, SMS, email or voice contact you immediately, so immediate corrective action can be taken.

**Advanced features include: ADR – Automatic Data Retrieval.**

In the event of a power failure, data is stored in the RF500A transmitter then automatically transmitted to the Gateway as soon as the network is restored, so no data is lost.

**Mesh Network – established through powered transmitters.**

This enables the system to automatically adjust to any changes in the environment, rerouting signals as required to ensure that the data is always returned to the Gateway.
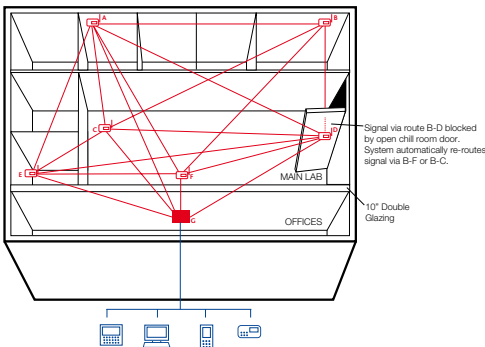
**Waterproof Transmitters with LCD**

Transmitters are fully waterproof and include an LCD for instant data display and an LED for local alarm indication. Low battery indicator on each unit is viewable via the web. Choose either a model with a 3 year battery life or AC power transformer.

- **RF512** has an integral temperature sensor plus connectors for two external thermistor probes and an external door sensor.
- **RF513** has integral temperature and humidity sensors and a connector for an external door sensor.
- **RF516** is a precision temperature transmitter with an internal temperature sensor plus connectors for one external PT100 probe and an external door sensor.

### Mesh Networking

Signal via route B-D is blocked by open chill room door. System automatically re-routes signal via B-F or B-C.

Instant alarm notification is sent via screens, SMS, voice or email to your PC, PDA, mobile or pager.

### Specifications:

| RF500A Gateway | |
|---|---|
| Channels | Up to 512 |
| Transmitters | Up to 128 |
| Storage Capacity | Up to 10 years of storage |
| RF Frequency | 2.4 GHz using IEEE 802.15.4 |
| Battery Life | 4 hours (rechargeable) |
| Power Sources | 110V adaptor, rechargeable Ni-Mh battery |
| Clock Accuracy | 4ppm (2 minutes per year) |
| Dimensions | L 259mm x W 189mm x H 92mm |
| Weight | 3.7kg (8 lb) |

| Transmitters – RF512, RF513, RF516 | |
|---|---|
| Temperature Measurement Range: | |
| Internal Thermistor Sensor | |
| RF512, RF516 | –22° to 158°F (–30° to 70°C) |
| Integral Thermistor Sensor | |
| RF513 | –22° to 158°F (–30° to 70°C) |
| External Thermistor Sensor | –40° to 257°F (–40° to 125°C) |
| External Pt100 Sensor | –328 to 750°F (–2 00° to 400°C) |
| Humidity Measurement Range | 10 to 90% RH |
| System Accuracy with Standard Sensors: | |
| Temperature | |
| External Thermistor: | –4° to 158°F ±0.9°F (0.5°C) |
| External Thermistor: | full range ±2°F (1°C) |
| Internal Thermistor : | –4° to 158°F ±1°F (0.5°C) |
| Humidity | 10 to 90% RH ±3% |
| Logging Memory | 32,000 records |
| Logging Frequency | Programmable between 1 and 60 minutes |
| Monitoring Frequency | 1 minute |
| Battery Type | Replaceable Lithium 'C' Cell (Part No RFBATT) |
| Battery Life | Up to 3 years |
| | (when used at 73°F room temperature) |
| Dimensions | L 170mm x W 83mm x H 34mm |
| Weight | 200g (0.5 lb) |

*See our separate brochure on the RF500A system for more details or visit our website.*

- Large LCD allows local view of temperature, RH (RF513), and door opening information plus alarms and RF status
- LEDs for active/alarm indication
- High gain antenna
- Selectable scales °F or °C, %RH or DP (RF513)
- Compact, waterproof case with BioCote antimicrobial surface protection
- Door event sensor
- AC/Main power connector
- Secure Lumberg connector for probes

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## What is BioCote®?

BioCote® is a silver based anti-microbial agent that is impregnated into the instrument case during molding. BioCote® effectively inhibits the function, growth and reproduction of a wide range of micro-organisms and its protection is increasingly accepted as part of HACCP, due diligence and health and safety procedures. BioCote® protection lasts for the life of the instrument because the agent is present throughout the case plastic and cannot rub off or be leached out. BioCote® active ingredients are registered with the EPA. Although BioCote® inhibits the growth of micro-organisms on the instrument case, it does not protect an individual against such harmful organisms or remove the need to practice the highest standards of personal and product hygiene and cleanliness. BioCote® is currently found in the following Comark products: C22, C28, EVt2, 300, 300B, DT400, KM14, PDQ400, PDT300, N5001USB, N9094, P125, P250

**NEW**

## DT400 Digital Thermometer

Waterproof, Field Calibratable, Dishwasher Safe with Max Hold Feature.

## PDQ400 Pocket Digital Thermometer

Waterproof, Field Calibratable, with a Thin 1.5mm Tip

Comark Instruments is committed to providing quality and affordable products to the food service industry. Our thermometers and humidity testers bring speed, accuracy and reliability to the transport, testing and storing of food under FDA Food Code and HACCP guidelines. A large variety of products, a well-trained staff, and a commitment to customer satisfaction mean you can come to us for answers to all your temperature measurement needs!

**COMARK**
**A Fluke Company**