What Does Temperature effect in the lab?

Temperature is one of the most universally impactful parameters in the laboratory. Among other things, it can significantly influence:

Test results

Shelf life & Efficacy

Effectiveness & stability

Accuracy & Precision

Traceable® Products FAQ

1. What are MIN/MAX?

Min/Max are measurement readings recorded into memory signifying the lowest (minimum) value achieved and highest (maximum) value achieved since instrument's memory was cleared. Min/Max readings are NOT a settable feature; instruments automatically detect Min/Max.

2. What are Hi/LO Alarms?

Hi/Lo describes a settable alarm. If the measured temperature value of an instrument registers above a high alarm set value, the instrument will alarm. Similarly, if the measured temperature value of an instrument registers below your low alarm set value, the instrument will alarm. Example: If monitoring temperature a low alarm is set to 2°C and high alarm is set to 8°C, alarm will sound if the instrument detects a value below 2°C or above 8°C.

3. What is the function of a bottle/vaccine probe?

Bottle probes are useful for monitoring temperature inside refrigerators where door is likely to be opened on a regular basis. A probe sealed within the bottle mimics temperature responses of products within the refrigerator rather than the air temperature, which will be affected more dramatically by the door opening. Vaccine probe follows the same concept, but is similar dimensions to most vaccine bottles.

What is Traceable®?

Traceable® means that a unit is individually serialized, calibrated, and certified with an unbroken chain of traceability to the NIST.

In the context of measurement science, traceability is the result of a measurement can be traced back to a national authority such as the National Institute of Standards and Technology (NIST), a United States Government Agency within the Commerce Department.

Why Traceable®?

For a critically controlled and certified process, make sure that you are using calibrated instruments. Traceable® units come with a unique and individually serialized certificate that shows all of the information needed for validation. You can be confident in the readings that you are getting and our units are always cost effective.

Monitoring – The Drive to Meaningful Data

Measurement
- Accredited Calibration
- Digital Display
- Wide Range
- Manual/Periodic check

Basic Monitoring
- Min/Max Memories
- Hourly/Daily recording
- High & Low Parameter Alarms
- Summary Monitoring

Data-Logging
- Log data continuously
- Download logged data to PC
- Alarm history reporting
- Ongoing Monitoring

Cloud Monitoring
- Remote Alarm Notification
- Unlimited Cloud Data Storage
- Third-Party Reporting
- Real Time Monitoring

agapi LAB SOLUTIONS
We Believe You Are Important
— How Can We Help?

agapi LAB SOLUTIONS
We Believe You Are Important
— How Can We Help?

Delivering Quality Scientific Supplies Worldwide Since 1900

LAB BASICS *Traceable®*

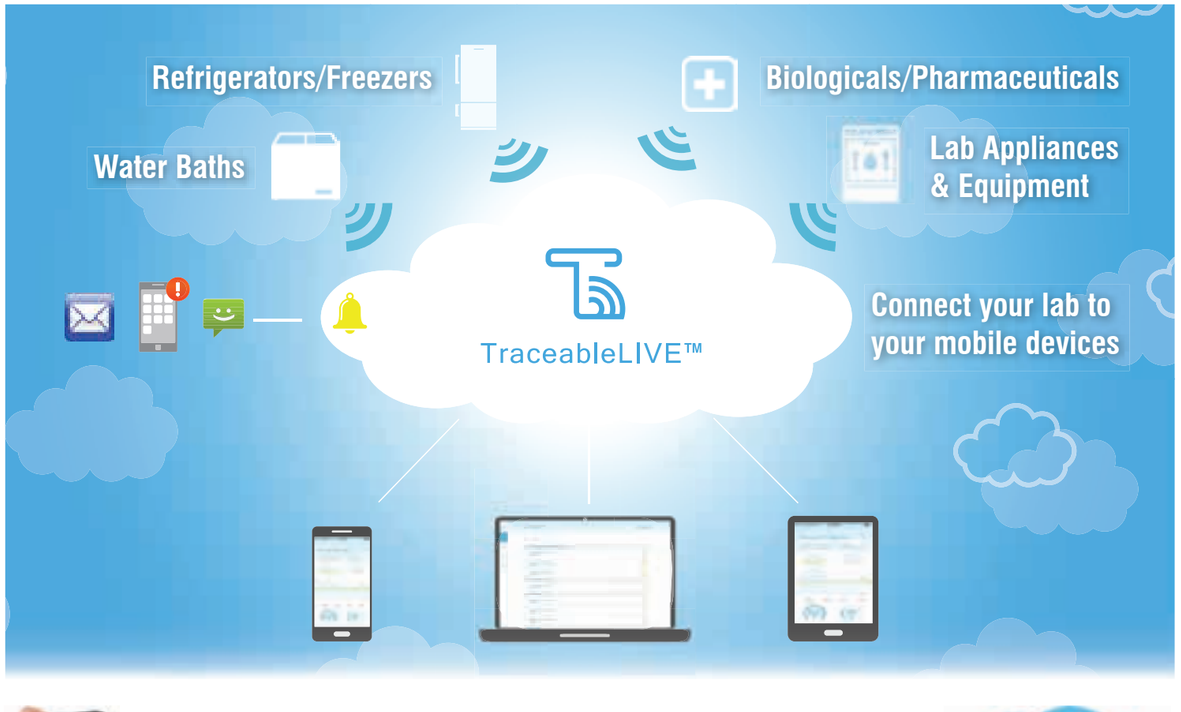
Traceable® Thermometers - measure, monitor, record and transmit

Contact Us: **www.agapilabsolutions.com**
Phone 1 (267) 397-3345
E-mail customerservice@agapilabsolutions.com

Traceable® Refrigerator/Freezer Thermometers

Stay Connected—LIVE & Secure remote monitoring wherever you go! NEW

The TraceableLIVE™ Service—Simple and SECURE setup



IoT Connectivity
Protect your work

Once the setup is complete you can:

- Set alarm parameters on device remotely
- View current conditions in your lab anywhere
- Generate data reports in real time
- Assign user access for the whole team

Cloud-Based
Secure Data Link

Set up your account at
www.traceablelive.com

Phone 1 (267) 397-3345
E-mail customerservice@agapilabsolutions.com

Traceable® High-Accuracy Refrigerator Thermometers

High accuracy thermometer monitors 2 different areas of any refrigerator or freezer

- Reads to 0.01° while monitoring MIN/MAX temperatures in refrigerator and freezer simultaneously or two refrigerator locations with the exact time and date readings occurred, °F/°C switchable
- Two channel alarms provide unique visual (LED's) and audio alerts when temperature rises above or falls below user-defined high and low set points
- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Unit displays the exact time and date when dual thermometer alarms are triggered, alarms are programmable in 0.1° increments
- Supplied: battery, 10 ft cable, magnetic strips, Velcro®, bench stand, Traceable® Certificate

1227U03

Thomas No.	Range	Resolution	Accuracy	Probe
1227U03	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.30°C	1 Glycol-filled bottle (patented)
1227U04	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.30°C	2 Glycol-filled bottles (patented)
1227U05	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.30°C	2 Bullets™

1227U04

1227U05

Traceable® Refrigerator/Freezer Thermometers

The world's most popular refrigerator/freezer thermometer

- Accurately monitor temperatures in freezers, water baths, heating blocks, incubators, and refrigerators with this enclosed temperature-buffered sensor, °F/°C switchable
- Minimum/maximum monitors readings overnight, on weekends, or for any time period
- Alarm is programmable in 1° increments, sounds continuously when temperature rises above/falls below set points and can be turned off manually
- Visual and audible signals continue even if temperature returns to non-alarm range
- Supplied: flip-open stand, 10 ft cable, wall mount, Velcro®, magnetic strips, Traceable® Certificate

9327L12

9338E60

Thomas No.	Range	Resolution	Accuracy	Probe
9338E60	–58 to 158°F (–50 to 70°C)	1°	±1°C	0.187-inch diameter and ¾-inch long
9327L12	–58 to 158°F (–50 to 70°C)	1°	±1°C	Bottle (patented)

Traceable® Digital-Bottle™ Refrigerator/Freezer Thermometer

Sealed unit can be placed inside a refrigerator

- MIN/MAX memory monitors readings overnight, on weekends, or for any time period—a significant advantage over glass thermometers displaying only current temperature
- The entire unit, including the bottle and display, may be placed in any environment within the operating range of the thermometer, °F/°C switchable
- Supplied: battery, holder, double-backed tape, Velcro®, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe
1221Z93	–22.0 to 122.0°F (–30.0 to 50.0°C)	0.1°	±1.0°C between –20.0 to 50°C	Bottle (patented)
1221Z94	–22.0 to 122.0°F (–30.0 to 50.0°C)	0.1°	±0.4°C at tested points, otherwise ±1°C	Bottle (patented)
1221Z95	–22.0 to 122.0°F (–30.0 to 50.0°C)	0.1°	±1.0°C between –20.0 to 50°C	Glass-bead filled bottle
1221Z96	–22.0 to 122.0°F (–30.0 to 50.0°C)	0.1°	±0.4°C at tested points, otherwise ±1°C	Glass-bead filled bottle

Traceable® Refrigerator/Freezer Ultra™ Thermometers

Temperature-buffered bottle insulates sensor from rapid temperature changes

- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Triple display simultaneously shows MIN/MAX and current temperatures, °F/°C switchable
- Monitors minimum/maximum readings overnight, on weekends, or for any time period - a significant advantage over current read-only temperatures
- Alarm is programmable in 0.1° increments–alerts user when temperature rises above/falls below a set point
- Supplied: battery, Velcro®, magnetic strips, 10 ft cable, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe
1189Q90	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	1 bottle (patented)
1189Q91	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	2 bottles (patented)
1189Q92	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	1 Bullet™
1189Q93	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	2 Bullets™
1189Q94	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	1 bottle & 1 Bullet™


Bottle Probe


Bullet™ Probe

Traceable® Wireless Radio-Signal Refrigerator Thermometer

Captures temperature data with high-efficiency wireless technology

- Unit wirelessly reads refrigerator temperatures from 100' away, place remote module inside refrigerator
- Minimum/maximum memory allows monitoring conditions over any time period, °F/°C switchable
- Distinctive alarm sounds when temperature rises above or falls below set points
- Readings from up to 3 remote sensors are sent to main unit via radio signal-433 MHz penetrates refrigerators and walls
- Supplied: batteries, 1 main unit, 1 remote, flip-open stand, wall mount, Velcro®, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe
1208T92	22.0 to 158.0°F (–30.0 to 70.0°C)	0.1°	±1.0°C	bottle (patented)
1208T93		0.1°	±1.0°C	Accessory Bottle Remote module (set to channel 1, 2, or 3)

Traceable® Platinum High-Accuracy Refrigerator/Freezer Thermometer

Displays MIN/MAX temperatures for previous 24 hours (for each hour) and previous 7-days (for each day); or previous 31 days (for each day)

- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Time/date stamp key shows exact time and date for all minimum and maximum readings
- Triple display shows current temperature in °F or °C, as well as MIN/MAX temperatures
- 1208T87 and 1208T88 are ideal for ultra-low freezer applications
- 1208T85 and 1208T86 are ideal for refrigerator/freezer applications
- Supplied: platinum probe, stand, wall mount, batteries, Traceable® Certificate

Platinum RTD stainless-steel probe

Thomas No.	Range	Resolution	Accuracy	Probe	Calibration points
1208T87	–148.00 to 199.99°F (–100.00 to 199.99°C)	0.01°	±0.1°C	Handle: 0.13" dia. x 6.3" stem, 9" overall	–80°C, 0°C, 50°C and 190°C
Refrigerator/Freezer					
1208T85	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.1°C	Bottle (patented)	–40°C, 0°C and 50°C
1208T86	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.1°C	0.187" dia. x ¾" long	–40°C, 0°C and 50°C
1208T88	–148.00 to 158.00°F (–100.00 to 70.00°C)	0.01°	±0.1°C	0.187" dia. x ¾" long	–80°C, –40°C, and 0°C

Phone 1 (267) 397-3345
E-mail customerservice@agapilabsolutions.com

The simple, efficient, and reliable way to stay connected to your critical environments

Four easy step setup

Purchase
Purchase a TraceableLIVE™ Product.

Connect
Connect your new device to your existing Wi-Fi.

Create
Create an account on TraceableLIVE.com.

Point
Point device to your account to begin controlling device.

TraceableLIVE™ Wi-Fi Datalogging Refrigerator/Freezer Thermometers with Remote Notification

- Monitor locally or remotely temperature and more—connects to existing Wi-Fi
- Alerts: temperature alarm, connectivity interruption, low battery
- Cloud-based applications—no local software required; web, Android, iOS data visibility
- Receive MOBILE PUSH / E-MAIL / TEXT notifications
- To access data and remote notifications a TraceableLIVE subscription is required
- Continuous data transmission & monitoring using SSL-encrypted SECURE connection
- Unlimited scalability—use TraceableLIVE™ in individual labs or an entire network of facilities
- Multiple point accredited temperature calibration—traceable to NIST, °F/°C switchable
- Supplied: 2 probes, Quick Start Guide, batteries, magnets, Velcro®, wall mount, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe	Comments
1184P42	–50.00 to 60.00°C (–58.00 to 140.00°F)	0.01°	±0.25°C	2 Bottles (patented)	Ideal application refrigerators and freezers
1184P43	–50.00 to 60.00°C (–58.00 to 140.00°F)	0.01°	±0.25°C	1 Bottle & 1 Bullet™	Ideal for monitoring ambient and refrigerator/freezer temperature
1184P44	–50.00 to 60.00°C (–58.00 to 140.00°F)	0.01°	±0.25°C	2 Bullets™	Fast response—Ideal for air and liquid samples
1184P45	–50.00 to 60.00°C (–58.00 to 140.00°F)	0.01°	±0.25°C	2 Stainless-steel	Ideal for use in water baths and instruments with ports

Traceable® Certificate

Multi-point calibration on an individually-numbered Traceable® Certificate which assures accuracy from an ISO/IEC 17025:2005 (1750.01) calibration laboratory accredited by A2LA. It indicates traceability of measurements to the SI units through NIST or other recognized national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Agreement.

1198D76

Bottle Probe

Bullet™ Probe

Platinum RTD sensors, Stainless-steel 316 Probe

Traceable® Excursion-Trac™ Datalogging Refrigerator/Freezer Thermometers

Datalogging thermometer with user-defined time intervals

- Features: MIN/MAX and current temperatures, Smart-Alarm™, and °F/°C switchable
- Stores up to 10 unique alarm events, memory can be cleared after downloading data to USB stick
- Meets current CDC requirements for vaccine storage and monitoring
- Rolling memory structure, maintains most recent 525,600 temperature observations
- Recorded data (CSV file) may be transferred from thermometer to PC or Mac using a USB flash drive—no additional software needed
- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Hassle-free retrieval of data—unit can remain in use while downloading/analyzing data
- Status indicators—low battery, memory full, USB data transfer, active alarm state
- Supplied: stand, Velcro®, magnetic strips, wall mount, batteries, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe
1198D76	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 bottle (patented)
1198D77	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 bottles (patented)
1198D78	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 Bullet™
1198D79	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 Bullets™
1198D80	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 bottle & 1 Bullet™
1198D81	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 stainless-steel
1198D82	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 stainless-steel

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E-mail customerservice@agapilabsolutions.com

www.agapilabsolutions.com

Traceable® Memory-Loc™ Datalogging Refrigerator/Freezer Thermometers

Datalogging thermometer that can be used in 21 CFR 11 environments

- Features: MIN/MAX and current temperatures, Smart-Alarm™, °F/°C switchable
- Meets current CDC requirements and additional recommendations for vaccine storage and monitoring
- Use in 21 CFR 11 environments, raw data is locked and may not be cleared/changed on base unit
- Datalogging thermometer with fixed one minute logging interval
- Capable of storing over 1 million temperature observations
- Stores up to 10 unique alarm events
- Recorded data (CSV file) may be transferred from thermometer to PC or Mac using a USB flash drive—no additional software needed
- Hassle-free retrieval of data—unit can remain in use while downloading/analyzing data
- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Status indicators—low battery, low memory, USB data transfer, active alarm state
- Supplied: stand, Velcro®, magnetic strips, wall mount, batteries, Traceable® Certificate

1198D83

Bottle Probe

Bullet™ Probe

Platinum RTD sensors, Stainless-steel 316 Probe

Thomas No.	Range	Resolution	Accuracy	Probe
1198D83	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 bottle (patented)
1198D84	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 bottles (patented)
1198D85	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 Bullet™
1198D86	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 Bullets™
1198D87	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 bottle & 1 Bullet™
1198D88	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 stainless-steel
1198D89	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 stainless-steel

Temperature-buffered glycol bottle probe mimics solution

Bottle and solution insulate sensor from rapid changes, as an example, when a refrigerator door is opened. Solution mimics temperature of stored samples.

Sealed probe with non-toxic glycol

Mercury-free, solid-state probe eliminates possibility of refrigerator contamination. Probe is sealed in a miniature bottle (1 x 2½ inches) filled with nontoxic glycol. Solution is GRAS (generally recognized as safe) by the FDA (Food and Drug Administration).

1198D76

Bottle Probe

Bullet™ Probe

Platinum RTD sensors, Stainless-steel 316 Probe

Traceable® Excursion-Trac™ Datalogging Refrigerator/Freezer Thermometers

Datalogging thermometer with user-defined time intervals

- Features: MIN/MAX and current temperatures, Smart-Alarm™, and °F/°C switchable
- Stores up to 10 unique alarm events, memory can be cleared after downloading data to USB stick
- Meets current CDC requirements for vaccine storage and monitoring
- Rolling memory structure, maintains most recent 525,600 temperature observations
- Recorded data (CSV file) may be transferred from thermometer to PC or Mac using a USB flash drive—no additional software needed
- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Hassle-free retrieval of data—unit can remain in use while downloading/analyzing data
- Status indicators—low battery, memory full, USB data transfer, active alarm state
- Supplied: stand, Velcro®, magnetic strips, wall mount, batteries, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe
1198D76	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 bottle (patented)
1198D77	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 bottles (patented)
1198D78	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 Bullet™
1198D79	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 Bullets™
1198D80	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 bottle & 1 Bullet™
1198D81	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 stainless-steel
1198D82	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 stainless-steel

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Datalogging thermometer that can be used in 21 CFR 11 environments

- Features: MIN/MAX and current temperatures, Smart-Alarm™, °F/°C switchable
- Meets current CDC requirements and additional recommendations for vaccine storage and monitoring
- Use in 21 CFR 11 environments, raw data is locked and may not be cleared/changed on base unit
- Datalogging thermometer with fixed one minute logging interval
- Capable of storing over 1 million temperature observations
- Stores up to 10 unique alarm events
- Recorded data (CSV file) may be transferred from thermometer to PC or Mac using a USB flash drive—no additional software needed
- Hassle-free retrieval of data—unit can remain in use while downloading/analyzing data
- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Status indicators—low battery, low memory, USB data transfer, active alarm state
- Supplied: stand, Velcro®, magnetic strips, wall mount, batteries, Traceable® Certificate

1198D83

Bottle Probe

Bullet™ Probe

Platinum RTD sensors, Stainless-steel 316 Probe

Thomas No.	Range	Resolution	Accuracy	Probe
1198D83	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 bottle (patented)
1198D84	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 bottles (patented)
1198D85	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 Bullet™
1198D86	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 Bullets™
1198D87	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 bottle & 1 Bullet™
1198D88	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	1 stainless-steel
1198D89	–50.00 to 70.00°C (–58.00 to 158.00°F)	0.01°	±0.25°C	2 stainless-steel

Temperature-buffered glycol bottle probe mimics solution

Bottle and solution insulate sensor from rapid changes, as an example, when a refrigerator door is opened. Solution mimics temperature of stored samples.

Sealed probe with non-toxic glycol

Mercury-free, solid-state probe eliminates possibility of refrigerator contamination. Probe is sealed in a miniature bottle (1 x 2½ inches) filled with nontoxic glycol. Solution is GRAS (generally recognized as safe) by the FDA (Food and Drug Administration).

1189Q90

Bottle Probe

Bullet™ Probe

Traceable® Refrigerator/Freezer Ultra™ Thermometers

Temperature-buffered bottle insulates sensor from rapid temperature changes

- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Triple display simultaneously shows MIN/MAX and current temperatures, °F/°C switchable
- Monitors minimum/maximum readings overnight, on weekends, or for any time period - a significant advantage over current read-only temperatures
- Alarm is programmable in 0.1° increments–alerts user when temperature rises above/falls below a set point
- Supplied: battery, Velcro®, magnetic strips, 10 ft cable, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe
1189Q90	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	1 bottle (patented)
1189Q91	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	2 bottles (patented)
1189Q92	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	1 Bullet™
1189Q93	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	2 Bullets™
1189Q94	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.5°C	1 bottle & 1 Bullet™

1208T92

1208T93

Traceable® Wireless Radio-Signal Refrigerator Thermometer

Captures temperature data with high-efficiency wireless technology

- Unit wirelessly reads refrigerator temperatures from 100' away, place remote module inside refrigerator
- Minimum/maximum memory allows monitoring conditions over any time period, °F/°C switchable
- Distinctive alarm sounds when temperature rises above or falls below set points
- Readings from up to 3 remote sensors are sent to main unit via radio signal-433 MHz penetrates refrigerators and walls
- Supplied: batteries, 1 main unit, 1 remote, flip-open stand, wall mount, Velcro®, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe
1208T92	22.0 to 158.0°F (–30.0 to 70.0°C)	0.1°	±1.0°C	bottle (patented)
1208T93		0.1°	±1.0°C	Accessory Bottle Remote module (set to channel 1, 2, or 3)

NEW EXTENDED BATTERY LIFE

1208T85

1208T86
1208T88

1208T87

Traceable® Platinum High-Accuracy Refrigerator/Freezer Thermometer

Displays MIN/MAX temperatures for previous 24 hours (for each hour) and previous 7-days (for each day); or previous 31 days (for each day)

- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Time/date stamp key shows exact time and date for all minimum and maximum readings
- Triple display shows current temperature in °F or °C, as well as MIN/MAX temperatures
- 1208T87 and 1208T88 are ideal for ultra-low freezer applications
- 1208T85 and 1208T86 are ideal for refrigerator/freezer applications
- Supplied: platinum probe, stand, wall mount, batteries, Traceable® Certificate

Platinum RTD stainless-steel probe

Thomas No.	Range	Resolution	Accuracy	Probe	Calibration points
1208T87	–148.00 to 199.99°F (–100.00 to 199.99°C)	0.01°	±0.1°C	Handle: 0.13" dia. x 6.3" stem, 9" overall	–80°C, 0°C, 50°C and 190°C

Refrigerator/Freezer

1208T85	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.1°C	Bottle (patented)	–40°C, 0°C and 50°C
1208T86	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.1°C	0.187" dia. x ¾" long	–40°C, 0°C and 50°C
1208T88	–148.00 to 158.00°F (–100.00 to 70.00°C)	0.01°	±0.1°C	0.187" dia. x ¾" long	–80°C, –40°C, and 0°C

The simple, efficient, and reliable way to stay connected to your critical environments

Four easy step setup

Purchase
Purchase a TraceableLIVE™ Product.

Connect
Connect your new device to your existing Wi-Fi.

Create
Create an account on TraceableLIVE.com.

Point
Point device to your account to begin controlling device.

TraceableLIVE™ Wi-Fi Datalogging Refrigerator/Freezer Thermometers with Remote Notification

- Monitor locally or remotely temperature and more—connects to existing Wi-Fi
- Alerts: temperature alarm, connectivity interruption, low battery
- Cloud-based applications—no local software required; web, Android, iOS data visibility
- Receive MOBILE PUSH / E-MAIL / TEXT notifications
- To access data and remote notifications a TraceableLIVE subscription is required
- Continuous data transmission & monitoring using SSL-encrypted SECURE connection
- Unlimited scalability—use TraceableLIVE™ in individual labs or an entire network of facilities
- Multiple point accredited temperature calibration—traceable to NIST, °F/°C switchable
- Supplied: 2 probes, Quick Start Guide, batteries, magnets, Velcro®, wall mount, Traceable® Certificate

1184P42

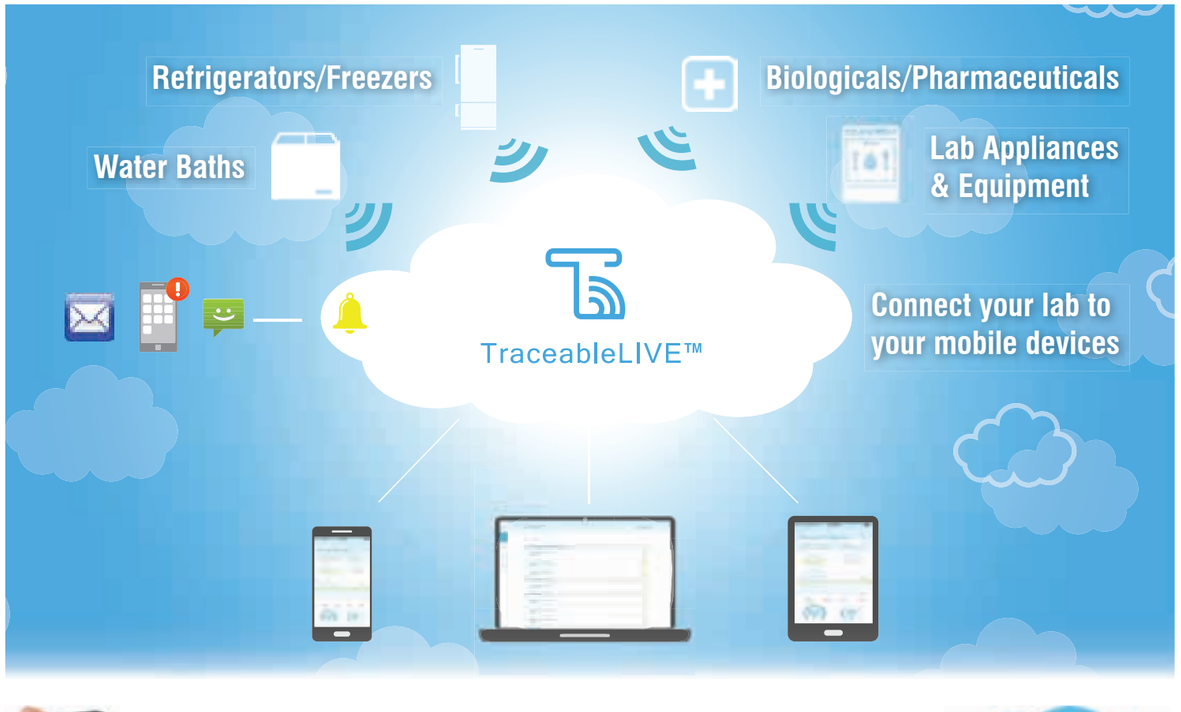
Thomas No.	Range	Resolution	Accuracy	Probe	Comments
1184P42	–50.00 to 60.00°C (–58.00 to 140.00°F)	0.01°	±0.25°C	2 Bottles (patented)	Ideal application refrigerators and freezers
1184P43	–50.00 to 60.00°C (–58.00 to 140.00°F)	0.01°	±0.25°C	1 Bottle & 1 Bullet™	Ideal for monitoring ambient and refrigerator/freezer temperature
1184P44	–50.00 to 60.00°C (–58.00 to 140.00°F)	0.01°	±0.25°C	2 Bullets™	Fast response—Ideal for air and liquid samples
1184P45	–50.00 to 60.00°C (–58.00 to 140.00°F)	0.01°	±0.25°C	2 Stainless-steel	Ideal for use in water baths and instruments with ports

Traceable® Certificate

Multi-point calibration on an individually-numbered Traceable® Certificate which assures accuracy from an ISO/IEC 17025:2005 (1750.01) calibration laboratory accredited by A2LA. It indicates traceability of measurements to the SI units through NIST or other recognized national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Agreement.

Stay Connected—LIVE & Secure remote monitoring wherever you go! NEW

The TraceableLIVE™ Service—Simple and SECURE setup



IoT Connectivity
Protect your work

Once the setup is complete you can:

- Set alarm parameters on device remotely
- View current conditions in your lab anywhere
- Generate data reports in real time
- Assign user access for the whole team

Cloud-Based
Secure Data Link

Set up your account at
www.traceablelive.com

Phone 1 (267) 397-3345
E-mail customerservice@agapilabsolutions.com

Traceable® High-Accuracy Refrigerator Thermometers

High accuracy thermometer monitors 2 different areas of any refrigerator or freezer

- Reads to 0.01° while monitoring MIN/MAX temperatures in refrigerator and freezer simultaneously or two refrigerator locations with the exact time and date readings occurred, °F/°C switchable
- Two channel alarms provide unique visual (LED's) and audio alerts when temperature rises above or falls below user-defined high and low set points
- Smart-Alarm™: visual/audible alarm that continues to alarm even if unit returns to non-alarm conditions
- Unit displays the exact time and date when dual thermometer alarms are triggered, alarms are programmable in 0.1° increments
- Supplied: battery, 10 ft cable, magnetic strips, Velcro®, bench stand, Traceable® Certificate

1227U03

Thomas No.	Range	Resolution	Accuracy	Probe
1227U03	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.30°C	1 Glycol-filled bottle (patented)
1227U04	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.30°C	2 Glycol-filled bottles (patented)
1227U05	–58.00 to 158.00°F (–50.00 to 70.00°C)	0.01°	±0.30°C	2 Bullets™

1227U04

1227U05

Traceable® Refrigerator/Freezer Thermometers

The world's most popular refrigerator/freezer thermometer

- Accurately monitor temperatures in freezers, water baths, heating blocks, incubators, and refrigerators with this enclosed temperature-buffered sensor, °F/°C switchable
- Minimum/maximum monitors readings overnight, on weekends, or for any time period
- Alarm is programmable in 1° increments, sounds continuously when temperature rises above/falls below set points and can be turned off manually
- Visual and audible signals continue even if temperature returns to non-alarm range
- Supplied: flip-open stand, 10 ft cable, wall mount, Velcro®, magnetic strips, Traceable® Certificate

9327L12

9338E60

Thomas No.	Range	Resolution	Accuracy	Probe
9338E60	–58 to 158°F (–50 to 70°C)	1°	±1°C	0.187-inch diameter and ¾-inch long
9327L12	–58 to 158°F (–50 to 70°C)	1°	±1°C	Bottle (patented)

Traceable® Digital-Bottle™ Refrigerator/Freezer Thermometer

Sealed unit can be placed inside a refrigerator

- MIN/MAX memory monitors readings overnight, on weekends, or for any time period—a significant advantage over glass thermometers displaying only current temperature
- The entire unit, including the bottle and display, may be placed in any environment within the operating range of the thermometer, °F/°C switchable
- Supplied: battery, holder, double-backed tape, Velcro®, Traceable® Certificate

Thomas No.	Range	Resolution	Accuracy	Probe
1221Z93	–22.0 to 122.0°F (–30.0 to 50.0°C)	0.1°	±1.0°C between –20.0 to 50°C	Bottle (patented)
1221Z94	–22.0 to 122.0°F (–30.0 to 50.0°C)	0.1°	±0.4°C at tested points, otherwise ±1°C	Bottle (patented)
1221Z95	–22.0 to 122.0°F (–30.0 to 50.0°C)	0.1°	±1.0°C between –20.0 to 50°C	Glass-bead filled bottle
1221Z96	–22.0 to 122.0°F (–30.0 to 50.0°C)	0.1°	±0.4°C at tested points, otherwise ±1°C	Glass-bead filled bottle

What Does Temperature effect in the lab?

Temperature is one of the most universally impactful parameters in the laboratory. Among other things, it can significantly influence:

Test results

Shelf life & Efficacy

Effectiveness & stability

Accuracy & Precision

Traceable® Products FAQ

1. What are MIN/MAX?

Min/Max are measurement readings recorded into memory signifying the lowest (minimum) value achieved and highest (maximum) value achieved since instrument's memory was cleared. Min/Max readings are NOT a settable feature; instruments automatically detect Min/Max.

2. What are Hi/LO Alarms?

Hi/Lo describes a settable alarm. If the measured temperature value of an instrument registers above a high alarm set value, the instrument will alarm. Similarly, if the measured temperature value of an instrument registers below your low alarm set value, the instrument will alarm. Example: If monitoring temperature a low alarm is set to 2°C and high alarm is set to 8°C, alarm will sound if the instrument detects a value below 2°C or above 8°C.

3. What is the function of a bottle/vaccine probe?

Bottle probes are useful for monitoring temperature inside refrigerators where door is likely to be opened on a regular basis. A probe sealed within the bottle mimics temperature responses of products within the refrigerator rather than the air temperature, which will be affected more dramatically by the door opening. Vaccine probe follows the same concept, but is similar dimensions to most vaccine bottles.

What is Traceable®?

Traceable® means that a unit is individually serialized, calibrated, and certified with an unbroken chain of traceability to the NIST.

In the context of measurement science, traceability is the result of a measurement can be traced back to a national authority such as the National Institute of Standards and Technology (NIST), a United States Government Agency within the Commerce Department.

Why Traceable®?

For a critically controlled and certified process, make sure that you are using calibrated instruments. Traceable® units come with a unique and individually serialized certificate that shows all of the information needed for validation. You can be confident in the readings that you are getting and our units are always cost effective.

Monitoring – The Drive to Meaningful Data

Measurement
- Accredited Calibration
- Digital Display
- Wide Range
- Manual/Periodic check

Basic Monitoring
- Min/Max Memories
- Hourly/Daily recording
- High & Low Parameter Alarms
- Summary Monitoring

Data-Logging
- Log data continuously
- Download logged data to PC
- Alarm history reporting
- Ongoing Monitoring

Cloud Monitoring
- Remote Alarm Notification
- Unlimited Cloud Data Storage
- Third-Party Reporting
- Real Time Monitoring

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— How Can We Help?

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Delivering Quality Scientific Supplies Worldwide Since 1900

LAB BASICS *Traceable®*

Traceable® Thermometers - measure, monitor, record and transmit

Contact Us: **www.agapilabsolutions.com**
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Traceable® Refrigerator/Freezer Thermometers