Temperature Measurement with Bluetooth Wireless Technology

Enter the Smart Age with Bluetooth Products from ThermoWorks





Thermometers with Bluetooth® Wireless Technology

FOOD SERVICE | FOOD PROCESSING | HEALTH INSPECTIONS | INDUSTRIAL

The Leader in Foodservice Thermometers Featuring Bluetooth Wireless Technology

Best selection and most widely-used thermometers in food service. Highest precision backed by an internationally accredited calibration lab. Each device can be seamlessly integrated into existing mobile applications with a professional SDK. All models feature Bluetooth Low-Energy Version 4.0. Use our extensive line of connected thermometers for line checks, audits, receiving, grilling, cooking, high and low temp warewashing, machine testing, checking cold and hot holding, as well as measuring surface temperatures, cook-chill, ROP, and more.















PRODUCTS

ThermoWorks is dedicated to ...

Designing intuitive and durable products that make your daily life on the job easier and more efficient. That's why our products include a NIST-traceable certificate of calibration, so you can use them with complete confidence in the accuracy of your instrument.

SOFTWARE DEVELOPMENT KITS

р4



Software Development Kits are available upon request for Android, iOS, and Windows 10.

THERMAPEN® BLUE

p5



All the features of the award-winning Thermapen, now with Bluetooth® wireless technology. Perform line checks faster and more accurately with readings saved directly to your smart device.

Best in class accuracy to $\pm 0.7^{\circ}F$ Includes NIST-traceable calibration certificate 2-3 second readings Waterproof to IP67

179-607

TEMPTEST® BLUE & TEMPTEST® 2 BLUE



All the features of the TempTest
Bluetooth wireless technology.
faster and more accurately with
directly to your smart device.

You can use it as a
standalone thermometer as well, if preferred.

2-3 second readings High accuracy to $\pm 0.7^{\circ}F$ Interchangeable probe options Waterproof to IP67

292-910 / 292-857

RAYTEMP® BLUE

р7



With an optic ratio of 5:1 and food grade accuracy, RayTemp Blue is perfect for close range, noncontact foodservice temperature measurements. Perform line checks faster and more accurately with readings saved directly to your smart device.

Adjustable emissivity Range to 662°F 5:1 distance to spot ratio

228-920

DISHTEMP® BLUE



DishTemp Blue accurately and irreversibly records the max surface temperature of dishware in commercial dishwashers and saves the recordings directly to a smart device.

Measures true plate surface temperature Records irreversible MAX temp of dishwasher Use with HACCP LE or integrate into your exisiting apps Eliminate costly and inaccurate thermal labels

TX-5200

BLUEDOT®



BlueDOT combines the simplicity of DOT, top-rated oven alarm thermometer, with the connectivity of Bluetooth wireless technology giving you one simple, connected, and powerful thermometer.

Straightforward display—current and alarm temp 95-foot line-of-sight transmission Track alarms, Max/Min, and graph in free app

TX-1400

THERMAQ® BLUE

p10



Track two thermocouple probes simultaneously on your smart device. Free software tracks high/low alarms and alerts you when your food is ready. Interchangeable probe options. Durable and made in the U.K. with Thermapen accuracy.

150-foot line-of-sight transmission No internet required Includes free ThermaQ app

292-921

SOFTWARE DEVELOPMENT KITS

- Compatible with all ThermoWorks Bluetooth® products
- Technical support available
- No hidden costs or subscription

Software development kits are available upon request for Android, iOS, and Windows 10, making it easy to create apps that communicate with Thermoworks' line of Bluetooth thermometers. Handle all communications specifics (communication protocols, error handling) and present full instrument functionality in terms of convenient programming objects.

Supported Thermometers

Thermapen® Blue RayTemp® Blue TempTest® Blue ThermaQ® Blue TempTest® 2 Blue DishTemp® Blue

All thermometer functionality, which varies from thermometer to thermometer, is made available by the SDK. Please see individual product documentation for details.



PACKAGE CONTENTS

	iOS	Android	Windows
Library	.aar library	Universal static (.a) library	.dll library
Sample apps	Kotlin, Java	Objective-C, Swift	C#
API Documentation	HTML	HTML	HTML

The packages are accompanied by a release note for the corresponding platform, detailing:

- How to incorporate the SDK into an app project
- Significant changes from previous releases

REQUIREMENTS

	iOS	Android	Windows
OS version	Minimum SDK 21 (Lollipop)	Minimum iOS 11.0	Windows 10, NET 4.7.2+
Sample apps	Kotlin, Java	Objective-C, Swift	C#
API reference	HTML	HTML	HTML
IDE for sample apps	Android Studio 3.6 or later	XCODE 11 or later	Visual Studio

Any questions regarding this new SDK release, or any other software development enquiries for ThermoWorks thermometers can be directed at sales@thermoworks.com or call 801-756-7705.



THERMAPEN® BLUE

- Reads temperature in just 2-3 seconds
- · Securely transmits data to your smart device
- · Helps your business be HACCP compliant

Thermapen Blue combines Bluetooth® wireless technology with the same high accuracy, precision, and speed delivered by the industry-leading Thermapen Mk4. Simply connect to any smart device (iOS or Android) via the app, insert the probe, and press the button to securely transmit your temperature data up to 150 feet.

The housing is washable and includes Biomaster antimicrobial technology that reduces bacterial growth. The ergonomic rubber seal minimizes the risk of ingress of water, dust, or food. Plus, it's waterproof to IP67.



SPECIFICATIONS

Range	–58 to 572°F (–49.9 to 299.9°C)
Accuracy	$\pm 0.7^{\circ} F$ (±0.4°C) from –58 to 392°F (–49.9 to 199.9°C) otherwise $\pm 1.8^{\circ} F$ (±1.0°C)
Resolution	0.1° via remote device
Response Time	2-3 seconds
Probe	4.3 L inches, high performance Type K thermocouple
Wireless Communication	Bluetooth 4.0
Approvals	US (FCC), Canada (IC), EU (CE - Complies with all relevant directives for Europe), AU/NZ (RCM)
Auto-off	1 to 1440 minutes (1 day) - default 10 minutes
Water Resistance	IP67
Environmental Range	–4 to 122°F (–20 to 50°C)
Battery	1.5 volt AAA, 1,000 hours typical
Dimensions	1.97 H x 6.2 W x 0.75 D inches (50 H x 157 W x 19 D mm)
Weight	0.25 lbs (112g)
Certificate	Includes NIST-traceable calibration













certificate

TEMPTEST® BLUE & TEMPTEST® 2 BLUE

- · Waterproof IP67, compact design
- Automatic 360° rotating display
- SDK & technical support available
- Interchangeable thermocouple probes available

The TempTest Blue and TempTest 2 Blue combine Bluetooth® wireless technology with high accuracy, precision, and fast response. Simply





connect to your host device (iOS or Android) via the app, probe the item to be measured, and press the button to securely transmit your temperature data up to 150 feet.

The thermometer is housed in a waterproof IP67 case with an ergonomic rubber seal. Both include Biomaster antimicrobial technology to reduce bacterial growth. The TempTest Blue incorporates a stainless steel food penetration probe with a fast-response tip. The true temperature of a product can be measured in 2-3 seconds. The TempTest 2 Blue features a removable probe. Choose from dozens of interchangeable Type K probe options including surface, needle, air, and wire probes.

SPECIFICATIONS

Range	-58.0 to 572.0°F (-49.9 to 299.9°C)
Accuracy	$\pm 0.7^{\circ}\text{F}$ (±0.4°C) from –58 to 392°F (–49.9 to 199.9°C) otherwise $\pm 1.8^{\circ}\text{F}$ (±1.0°C)
Resolution	0.1°
Response Time	2-3 seconds (reads to within 1°F of final temperature of an ice bath in 3 seconds)
Probe	Type K thermocouple
Auto-off	1 to 1440 minutes (1 day) - default 10 minutes
Water Resistance	IP67
Wireless Communication	Bluetooth 4.0
Approvals	US (FCC), Canada (IC), EU (CE - Complies with all relevant directives for Europe), AU/NZ (RCM)
Operating Range	-4 to 122°F (-20 to 50°C)
Battery	1.5 volt AAA x 2, 1,000 hours typical
Dimensions	7.9 H x 1.9 W x 0.7 D inches (200 H x 47 W x 17 D mm) including probe
Weight	3.7 oz. (105 g)
Certificate	Includes NIST-traceable calibration certificate





RAYTEMP® BLUE

- · Securely transmit temperature data to any smart device
- Distance to spot ratio of 5:1
- · Time-saving, paperless HACCP recording
- Includes NIST-traceable certificate of calibration

RayTemp Blue infrared non-contact thermometer incorporates many of the features of the RayTemp 2, but with Bluetooth® wireless technology. With an optic ratio of 5:1 and food grade accuracy, RayTemp Blue is perfect for close range, non-contact foodservice temperature measurements. Simply connect to your host device (iOS or Android) via the app, press and hold the measure button, and aim at the target to display the surface temperature and securely transmit measurements up to 150 feet.



Can be integrated with existing apps with available SDK—call for details.

SPECIFICATIONS

Range -58 to 662°F (-49.9 to 350°C)

 $\begin{array}{c} \pm 1.8^{\circ}F~(\pm 1.0^{\circ}C)~from~32~to~212^{\circ}F~(0~to~100^{\circ}C)\\ \text{Accuracy} & \text{otherwise}~\pm 3.6^{\circ}F~(\pm 2.0^{\circ}C)~or~2\%~of~reading, \end{array}$

whichever is greater

Response Time 1 second

Distance to Target5:1 target ratio (5 inch distance measures a 1 inch

diameter target area)

Emissivity 0.95 default - adjustable 0.1 to 1

Spectral Range 5 to 16 μ m

Resolution 0.1° / 1°

Units °C/°F switchable (user reconfigurable in app)

Water Resistance IP54

Wireless Bluetooth 4.0

Approvals

US (FCC), Canada (IC), EU (CE - Complies with all

relevant directives for Europe), AU/NZ (RCM)

Battery 3 x 1.5 volt AAA included, 3,000 hours typical

Auto-Off 10 minutes (adjustable in app)

Operating Range -4 to 122°F (-20 to 50°C)

Display 1 H x 1.5 W inches (24 H x 38 W mm) LCD

Dimensions 5 H x 2.2 W x 1 D inches (128 H x 56 W x 25 D mm)

Weight 4.6 oz. (130 grams)

Certificate Includes NIST-traceable calibration certificate













DISHTEMP® BLUE

- Simulates maximum plate surface temperatures
- Waterproof to IP66
- · Transmits temperature data directly to any smart device
- · Replaces costly throwaway test strips

DishTemp Blue Dishwasher Thermometer transmits temperature data to your iOS or Android smart device via a secure wireless connection of up to 20 feet.

DishTemp Blue is specifically designed to save time and paper and eliminate human error when recording dishwasher cycle temperatures. DishTemp Blue also simulates a plate as it's cleaned and sanitized in a commercial dishwasher, accurately and irreversibly recording the maximum surface temperature, eliminating the need for costly and inaccurate test strips or stem thermometers that do not stay in place. Store your daily dishwasher temps digitally so you're always ready for an inspection.



SPECIFICATIONS

Range	32 to 194°F (0 to 90°C)
Accuracy	±0.9°F (±0.5°C)
Resolution	0.1°
IP Rating	IP66
Operating Range	32 to 194°F (0 to 90°C)
Wireless Communication	Bluetooth version 4.1 About 20 feet (6 meters) (device dependent)
Approvals	US (FCC Part 15), Canada (IC), EU (CE - Complies with all relevant directives for Europe), AU/NZ (RCM)
Battery	1x CR2032 (3V) lithium coin cell, 50 hours
Display	1.04 H x 1.77 W inches (26.5 H x 45 W mm)
Dimensions	5 dia. x 0.55 D inches (127 dia. x 14 D mm)
Calibration	Includes NIST-traceable calibration certificate
Special Feature	Irreversible Max temperature indicator









BLUEDOT®

- Straightforward display—current and alarm temp
- · 95-foot line-of-sight transmission
- Track alarms, Max/Min, and graph in free app
- Uses Pro-Series® temperature probes

BlueDOT combines the simplicity of DOT, our top-rated oven alarm thermometer, with the connectivity of Bluetooth® wireless technology giving you one simple, connected, and powerful thermometer. Simply set your temperature target with the up or down buttons, or right from your smartphone, and BlueDOT will beep when it gets there. Hear your alarms on BlueDOT and your smart device with the free mobile app. The wireless connection also allows you to track Max/ Min temperatures and graph your cook. BlueDOT has big, easy-to-read digits, a backlit display, molded-in splash-proof seals, and a commercial-grade housing making it durable and user-friendly. It comes with a ThermoWorks Pro-Series probe with a cable that withstands up to 700°F (370°C), a fold-out



stand, and a magnetic back for surface mounting. BlueDOT works with any of the optional Pro-Series probes outlasting all competitors. Intended for commercial food service, BlueDOT beats houseware brands for simplicity and durability.

SPECIFICATIONS

Probe Range	-58 to 572°F (–50 to 300°C)
Cable Max Temp	Max 700°F (370°C)
Accuracy	$\pm 1.8^{\circ} F$ (±1.0°C) from –4 to 248°F (–20 to 120°C) $\pm 3.6^{\circ} F$ (±2.0°C) from –58 to -4°F / 248 to 392°F (–50 to -20°C / 120 to 200°C)
Max Sound Volume	70dB
Wireless Communication	Bluetooth version 4.1 About 95 feet line-of-sight (device dependent)
Approvals	US (FCC), Canada (IC), EU (CE - Complies with all relevant directives for Europe), AU/NZ (RCM)
Water Resistance	IP65 (excluding probe connector)
Operating Range	32 to 122°F (0 to 50°C)
Backlight	10 seconds
Resolution	1°
Units	°C/°F switchable
Sensor	Thermistor
Battery	2 x AAA, 500 hours typical (using Bluetooth)

3.125 H x 3.125 W x 0.75 D inches

(79.4 H x 79.4 W x 19.1 D mm)







Dimensions

THERMAQ® BLUE

- Two-channel Type K input—dual monitoring
- Log and graph temperature changes in the app
- · Programmable high and low alarms

Track temperatures with two thermocouple probes simultaneously on any smart device. The free downloadable app tracks high and low alarms, Max/Min temperatures, and alerts you when your smoker temperatures fall out of range, or when your food is ready. Log and graph temperature changes on your smart device and easily export data for archiving or analysis. Choose from hundreds of interchangeable Type K thermocouple probes, including ones with armored or overbraid cables and high temperature probes.



SPECIFICATIONS

Range	–58 to 662°F (–49.9 to 350°C)
Accuracy	$\pm 1.8^{\circ} F$ ($\pm 1.0^{\circ} C$) from 32 to 212°F (0 to 100°C) otherwise $\pm 3.6^{\circ} F$ ($\pm 2.0^{\circ} C$) or 2% of reading, whichever is greater
Response Time	1 second
Distance to Target	5:1 target ratio (5 inch distance measures a 1 inch diameter target area)
Emissivity	0.95 default - adjustable 0.1 to 1
Spectral Range	5 to 16 μm
Resolution	0.1° / 1°
Units	$^{\circ}\text{C/}^{\circ}\text{F}$ switchable (user reconfigurable in app)
Water Resistance	IP54
Wireless	
Communication	Bluetooth 4.0
Communication Approvals	US (FCC), Canada (IC), EU (CE - Complies with all relevant directives for Europe), AU/NZ (RCM)
	US (FCC), Canada (IC), EU (CE - Complies with all
Approvals	US (FCC), Canada (IC), EU (CE - Complies with all relevant directives for Europe), AU/NZ (RCM)
Approvals Battery	US (FCC), Canada (IC), EU (CE - Complies with all relevant directives for Europe), AU/NZ (RCM) 3 x 1.5 volt AAA included, 3,000 hours typical

5 H x 2.2 W x 1 D inches (128 H x 56 W x 25 D mm)

Includes NIST-traceable calibration certificate

4.6 oz. (130 grams)













Dimensions Weight

Certificate