

## SPECIFICATIONS

<b>Range</b>	<b>IR:</b> -58 to 662°F (-49.9 to 349.9°C) <b>Probe:</b> -58 to 572°F (-49.9 to 289.9°C)
<b>Resolution</b>	0.1°
<b>Accuracy</b>	<b>IR:</b> ±1.8°F (±1°C) from 32 to 212°F (0 to 100°C), otherwise ±3.6°F (±2°C) or ±2% whichever is greater <b>Probe:</b> ±0.7°F (±0.4°C) from -58 to 392°F (-49.9 to 199.9°C)
<b>Response Time</b>	2-3 seconds
<b>Distance :Spot</b>	5:1
<b>Emissivity</b>	From 0.10 to 1.00, default 0.95
<b>Battery</b>	2 x CR2032, approx. 1,000 hours
<b>Auto-Off</b>	When not connected to Bluetooth, it's settable in Probe mode & 60 sec. in IR mode
<b>Oper. Range</b>	-4 to 122°F (-20 to 50°C)
<b>Probe</b>	0.12 dia. x 4.3 L inches (reduces to 0.06 dia. inches) Type K thermocouple
<b>Display</b>	1.02 H x 1.26 W inches (26 H x 32 W mm) rotates 90°, 6.18 W x 1.97 H x 0.75 D inches (157 W x 50 H x 19 D mm)
<b>Dimensions</b>	
<b>Weight</b>	4.41 oz. (125 g)
<b>Calibration</b>	NIST-Traceable Certificate included
<b>Wireless Comm.</b>	BLE 5.0
<b>Approvals</b>	US, Canada, EU



# ThermoWorks

## Thermapen® IR Blue



The Thermapen IR Blue is both a non-contact infrared (IR) and a penetration probe *Bluetooth®* thermometer.

### CONNECTION

Use a Bluetooth Low Energy iOS or Android™ host device with a compatible app installed to make connections to the instrument. When connected, the Bluetooth symbol will show in the display.

When the probe is connected via Bluetooth, the connection will remain for 10 seconds after the probe is closed, giving time to switch to IR Mode, keeping a continuous Bluetooth connection. After the 10 seconds the Bluetooth connection will be dropped.

### Please Note:

No readings are stored in the instrument. When not connected, the instrument can still be used in both 'IR' and 'Probe' Mode. Readings are taken and displayed every 1 second.

### IR Mode Operation

(Probe in closed position)

#### Not Connected

Press the SCAN button to turn on the instrument. Aim the instrument at an object while pressing the SCAN button. The SCAN symbol will appear in the display all the time the SCAN button is held, along with the target's surface temperature.

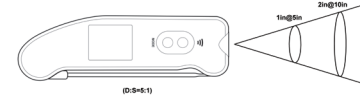
When the SCAN button is released 'HOLD' is displayed along with the latest target temperature, which will remain for 60 seconds before the instrument will shut down.

#### Connected

If a measurement interval is set, the instrument will measure and update its display at that rate, otherwise press the SCAN button to take a measurement.

### MEASUREMENT ZONE/TARGET DISTANCE

The measurement zone is proportional to the distance Thermapen IR Blue is away from the target. Thermapen IR Blue is equipped with a 5:1 lens. If the target is 5 inches away, the measurement zone will be 1 inch across.



### EMISSIVITY

Thermapen IR Blue is supplied with a default emissivity of 0.95 (see settings). For information relating to the emissivity of specific materials, please visit our website [thermoworks.com/emissivity-table](http://thermoworks.com/emissivity-table).

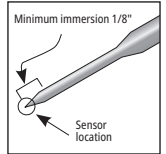
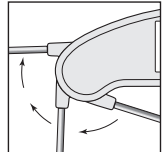
### Please Note:

IR thermometers are not recommended for use when measuring the temperature of shiny or polished metals.

### PROBE MODE OPERATION

#### Not connected

Unfold the probe and insert the tip into the medium or substance to be measured. The sensor is located at the tip of the probe, therefore the minimum depth insertion should be 3 mm. The instrument reading in the display will take a few seconds to stabilize.



#### Connected

If a measurement interval is set, it will take the temperature at that rate, but otherwise it will take the temperature every 1 second. Pressing the SCAN button forces an extra temperature reading. When the reading is updated, it is sent back to the host.



Made in the UK



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## Operating Instructions

The probe should not be rotated more than 180 degrees as damage will occur. When not in use, it is recommended to store the probe in the closed position.



The probe tip is very sharp and therefore caution should be taken when closing the probe.

### ROTATIONAL DISPLAY

The display will rotate through 90° steps depending on the direction the instrument is pointing so that it can be used at any angle or in either hand, in both modes.

### MAX/MIN

In IR mode, press the Mode button to show the maximum or minimum values of the 'SCAN' previously taken. These values are lost when the instrument turns off after 60 seconds, or the probe is opened. If the SCAN button is pressed while viewing Max/Min values the instrument immediately measures and reverts into measurement mode.

### Please Note:

Max/Min is only available in IR mode.

### SETTINGS

Adjustable via the app including: °C or °F, Measurement Interval, Auto-off, Emissivity, Sensor Name and High/Low Alarm levels. All settings are stored in the instrument and are downloaded to the app on connection.

### AUTO-OFF

If the instrument is connected to Bluetooth, the auto-off is disabled.

When in IR Mode and not connected, it will auto-off after 60 seconds. The auto-off timer will reset if any button is pressed. To activate the instrument after auto-off, press the SCAN button. In probe mode, the auto-off time is set via the App. The auto-off timer is reset by movement/button press. To activate the instrument after auto-off, simply press any button.

### AMBIENT

The ambient operating range is -4 to 122°F (-20 to 50°C).

### BATTERY REPLACEMENT

The battery level is shown in the App and on the display. When at 'Low Bat' it needs replacing. The instrument continues to measure accurately but we recommend that the batteries be changed. To replace the batteries, undo the retaining screw and lift the battery cover. Remove the batteries by pulling the battery retaining clip back while holding the instrument upside down. Replace both batteries, placing them positive side up, and ensuring the edge of the batteries are clipped under the plastic lugs near the cover hinge. Replace cover and tighten retaining screw.

### STORAGE & CLEANING

Clean the instrument regularly with an anti-bacterial probe wipe to avoid potential food borne bacteria growth. The infrared sensor lens is the most delicate part of the thermometer and should be kept clean at all times. Care should be taken when cleaning the lens, using only a damp, soft cloth or damp cotton swab. Allow the lens to fully dry before using it. The thermometer should be stored between -4 to 140°F (-20 to 60°C).

### WARNING:

IPA and other solvents may cause damage to the case and screen of this instrument.

### LCD ERROR MESSAGES (PROBE & IR MODES)

If the ambient temperature falls outside the operational range, then 'Ambient Lo' or 'Ambient Hi' will be displayed. This will continue until the ambient temperature has returned within the limits. The instrument should be allowed plenty of time (minimum 30 minutes) to stabilize to the working/room temperature. 'Hi' or 'Lo' will be displayed when the temperature being measured is outside of the instrument's temperature range. 'Err' will be displayed if the instrument has developed a fault.

### PRODUCT WARRANTY

This instrument carries a two-year guarantee against defects in either components or workmanship. During this period, products that prove to be defective will, at the discretion of ThermoWorks, be either repaired or replaced without charge. This guarantee does not apply to sensors/probes, where a six-month period is offered. Full details of liability are available within ThermoWorks Terms & Conditions of Sale at [www.thermoworks.com/product-warranty](http://www.thermoworks.com/product-warranty).

For warranty, service, and technical assistance, please contact ThermoWorks' Technical Support at (385) 330-0591 or email at [techsupport@thermoworks.com](mailto:techsupport@thermoworks.com).

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### RADIO CERTIFICATIONS

*This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:*

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

*This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.*

*Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

*Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.*

*Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.*