



ThermoTrace® 15039-01

BLE Infrared Thermocouple Probe Combo Thermometer



The ThermoTrace BLE Infrared Thermocouple Probe

Combo Thermometer is a non-contact infrared thermometer, combined with a thermocouple probe that provides different methods to measuring temperature for different food products and on different surfaces.



Only one thermometer mode can be used at a time, but easily switches between Infrared and Thermocouple Probe measurement modes.

Infrared Lens



Multi-beam
Laser

Scan Button

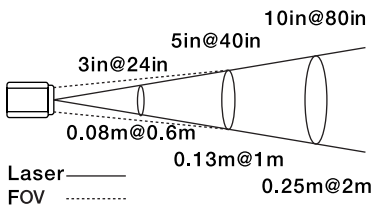
Distance:Spot (FOV) = 8:1
(FOV = Field of View)

Emissivity = 0.1 to 1, Step 0.01

Wave Length = 8-14um

Infrared Thermometer Function Modes

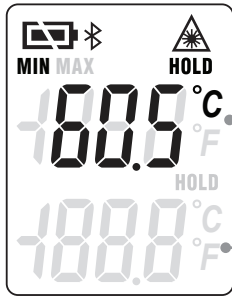
The laser will automatically turn on while the **SCAN** button is pressed and will also broadcast data through bluetooth-low-energy (BLE) upon each **SCAN** button press.



Multi-Beam Laser
encircles the approximate
measurement area for
better targeting.

Aim the Infrared Lens at the target and press the SCAN button to display the surface temperature. The distance to target ratio is 8:1 so the thermometer should be positioned as close to the target as possible.

While scanning, the newest temperature will be updated on the LCD and the measurement will continue as long as the SCAN button is depressed. When the SCAN button is released, HOLD will appear on the display and the last measurement will remain visible for 30 seconds before the display goes blank.



Infrared Thermometer
Temperature Reading

Thermocouple Probe
Temperature Reading

Mode Selection: ① MIN → ② MAX → ③ °F/°C → ④ Emissivity

MINIMUM OR MAXIMUM MODE

To utilize the Minimum Mode, press the **SCAN** button once, press the **MODE** button once and **MIN** appears on the LCD, then press and hold the **SCAN** button as you move the multi-beam laser across the surface of the area to be measured. As long as the **SCAN** button is pressed, the display will show the minimum temperature detected.

To utilize the Maximum Mode, press the **SCAN** button once, press the **MODE** button twice and **MAX** appears on the LCD, then press and hold the **SCAN** button as you move the multi-beam laser across the surface area to be measured. As long as the **SCAN** button is pressed, the display will show the maximum temperature detected.

The thermometer will display the minimum or maximum reading until the **SCAN** button is released, or until the **MODE** button is pressed once to exit.

°F OR °C MODE

To change the temperature scale press the **SCAN** button once and then press the **MODE** button three times for temperature scale selection. The temperature scale will blink. Press **SCAN** button once to change the scale between °F and °C.

EMISSIVITY

The infrared thermometer is supplied with a default emissivity of 0.95E. The emissivity can be changed from 0.10 (10E) to 1 (100E). Changes should only be carried out by experienced personnel. For information relating to the emissivity of specific materials, please contact Technical Support. Note: Non-contact infrared thermometers are not recommended for use in measuring the temperature of shiny or polished metals.

To change the emissivity, press the **SCAN** button once, press the **MODE** button four times, then press the **SCAN** button for each 0.01 (1E) step adjustment. Press the **MODE** button to exit Emissivity Setting.

Thermocouple Probe Function Modes

Swing out the Thermocouple probe until it is fully extended and locked into position. Insert the probe in the area to be measured, press the **PROBE** button to continuously display the probe temperature readings for up to 8 minutes. The device will automatically shut off after 8 minutes to extend the battery life.

Press and hold the PROBE button to interrupt the scanning and hold the last temperature reading. HOLD will be displayed on the screen (if you release the PROBE button, the unit will hold the reading then shut off after ~30 seconds).

To continue measuring temperature, press the PROBE button again to display the current probe reading.

WARNINGS

- 1 Do not twist the probe, over-extend, or rotate the probe in the wrong direction.
 - 2 Stress on probe may cause it to break.
 - 3 After measuring high temperature, the probe will be HOT.
 - 4 Probe is dangerous when in an open position. Remember to fold the probe back when not in use.
- ! The thermocouple probe may be damaged if the temperature exceeds the probe measurement range.
 - ! To avoid electric shock and thermometer damage, do not measure any live circuit where voltage exceeds 24V AC RMS or 60V DC with the thermocouple probe.



HACCP Food Safety Check Points

Use **MIN/MAX** mode functions to verify HACCP check points.

Safe Zone Check Points

Below 40°F (4°C) indicates a safe cool or frozen condition.

Above 140°F (60°C) indicates a safe hot holding temperature.

Danger Zone Check Point

Between 40°F to 140°F (4°C to 60°C).

LCD Error Messages

Hi Lo

Hi or Lo is displayed when the temperature being

Er2

Er2 is displayed when the thermometer is exposed to

Er3

Er3 is displayed when the ambient temperature exceeds 32°F (0°C) or +122°F (50°C). The thermometer should be allowed plenty of time (minimum 30 minutes) to stabilize to the

Er

For all other error messages it is necessary to reset the thermometer.

To reset, wait for auto power off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on. If the error message remains, please contact the Technical Support for further assistance.

Battery Icons



Battery OK - Measurements are possible.



Battery Low - Battery needs to be replaced, measurements are possible but the thermometer can sometimes malfunction.



Battery Exhausted - Replace battery.

Specifications

Field of View:	8:1
Infrared Measurement Range:	-76°F to 662°F (-60°C to 350°C)
Probe Measurement Range:	-76°F to 662°F (-60°C to 350°C)
Operating Range:	32°F to 122°F (0°C to 50°C)
Display Range:	-67°F to 662°F (-55°C to 350°C)
Infrared Accuracy:	Object Temperature: $\pm 1.1^\circ\text{F}$ from 59°F to 95°F ($\pm 0.6^\circ\text{C}$ from 15°C to 35°C) Ambient Temperature: 68°F to 78.8°F (20°C to 26°C) -76 to 0°F: $\pm(2\text{ F}+0.1/\text{degree})$ -60 to 0°C: $\pm(1^\circ\text{C}+0.1/\text{degree})$ 0 to 149°F: $\pm 2^\circ\text{F}$ (0 to 65°C: $\pm 1^\circ\text{C}$) 149 to 662°F: $\pm 1.5\%$ of reading (65 to 350°C: $\pm 1.5\%$ of reading)
Probe Accuracy:	< 23°F: $\pm 2^\circ\text{F}$ (< -5°C: $\pm 1^\circ\text{C}$) 23°F to 149°F: $\pm 1^\circ\text{F}$ (-5°C to 65°C: $\pm 0.5^\circ\text{C}$) > 149°F (> 65°C): $\pm 1\%$ of reading
Response Time:	Less than 1 second

Display Hold Time:	30 seconds
Display Resolution:	0.5°F (0.2°C)
Emissivity Range:	Factory set at 0.95 - adjustable 0.1 to 1.00 step 0.01
Battery & Battery Life:	AAA x 2 IRT Mode: Typical 22 hrs; min. 20 hrs continuous use (with laser) COT Mode: Typical 207 hrs; min. 200 hrs continuous use Auto power off after 30 seconds
Sighting Method:	Multi-beam laser
Weight:	145 grams (5.11 oz) including batteries
Dimensions:	1.56 in. x 2.12 in. x 6.22 in. (39.5mm x 53.9mm x 158mm)
Probe Length:	3.74in (95mm)
Stainless Steel Needle Tip:	Dia 0.067 in (1.7mm)
IP Rating:	IP54

Bluetooth App Operating Instructions

After powering on, press the BLE key to start the Bluetooth broadcast. Each broadcast time is 30 seconds. During the broadcast, if the APP is not successfully paired with the thermometer, the device will enter sleep mode after the broadcast time is over. If the APP is paired successfully, it is up to the device to determine when to return the value until it is turned off.

Troubleshooting

Contact Tech Support at:

Phone: 925-249-2250 Ext 5120 **Toll Free:** 800-390-0804 US & Canada

Email: techsupport@deltatrac.com



Scan the QR code
for more product
information

FCC ID: SH6MDBT40

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION:

To assure continued FCC compliance: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.



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