

Series MIT Miniature Infrared Non-Contact Thermometer

6:1 D:S Ratio with Laser Sighting



The Series MIT Miniature Infrared Temperature Thermometer is the ultimate portable infrared solution. This unit has features such as MIN and MAX Temperature, Adjustable Emissivity, Battery Life Indicator, and Laser Sighting. This affordable thermometer also has a 6 to 1 distance to spot ratio in a key chain size housing.



SPECIFICATIONS

Measurement Range: -67 to 482°F (-55 to 250°C). Accuracy: 2% of reading or 4°F (2°C) whichever is greater.

Emissivity Range: 0.95 default - adjustable 0.05 to 1.00 Emissivity.

Distance Spot: 6:1 optics ratio. Resolution: 0.1°F/0.1°C (switchable).

Response Time: 1 second.

Operating Range: 32 to 122°F (0 to 50°C).

CAUTION

70.0

Battery Life: Typical 40 hours of continuous use (auto power off

after 15 sec.). (2) CR2032 batteries included. Weight: 2.29 oz (65 g) including batteries.

Dimensions: .89 x 1.97 x 4.06 in (175.2 x 39.0 x 71.9 mm).

OPERATING INSTRUCTIONS

Laser Information

By partially pressing the "SCAN" key the device will begin to measure the temperature of the target. When the "SCAN" key is completely depressed the laser will operate while taking measurement.

Changing Units

To change the thermometer's units, first turn the instrument on by pressing the "SCAN" key then press the "MODE" key four times until the °C or °F symbol flashes. Press the "SCAN" key to change the units.

EMISSIVITY RANGE

The infrared thermometer is supplied with a default emissivity of 0.95. The emissivity of the thermometer can be changed from 0.05 (5E) to 1.00 (100E). Changes should only be carried out by experienced personnel. To change the emissivity first turn the instrument on by pressing the "SCAN" key, and then press the "MODE" key five times for emissivity value until the emissivity value flashes on the display. Press the "SCAN" key to adjust the emissivity value, and press the mode key to accept the change. For information relating to the emissivity of specific materials, please contact the nearest retailer.

NOTE: Non-contact infrared thermometers are not recommended for use in measuring the temperature of shiny or polished materials.

Minimum or Maximum Mode

To utilize the thermometer's minimum or maximum mode, first turn the instrument on by pressing the "SCAN" key, then press the "MODE" key once for minimum or twice for maximum function. The "MIN" or "MAX" icon will flash, then press the "SCAN" key to confirm the minimum or maximum mode. The thermometer will display the minimum or maximum reading only.

Lock Mode

The lock mode is particularly useful for continuous monitoring for temperatures.

To utilize the thermometer's lock mode first turn the instrument on by pressing the "SCAN" key then press the "MODE" key three times for the lock mode function. The lock icon will flash then press the "SCAN" key to confirm the lock mode. The thermometer will continuously display the temperature for up to 60 minutes or until the "SCAN" key is pressed again.

www.dwyer-inst.com e-mail: info@dwyer-inst.com

LCD Error Messages

The thermometer incorporates visual diagnostic messages as follows.

"HI/LOW": "Hi" or "Lo" is displayed when the temperature is outside the measurement range of the instrument. "Hi" would appear above 250°C (482°F) and "Lo" would appear under-65°C (-67°F).

"Er2": Displays when the thermometer is exposed to rapid changes in the ambient temperature.

"Er3": Displays 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 working/room temperature.

"Er": For all other error messages it is necessary to reset the thermometer. To reset it, turn the instrument off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn it on. If the error message remains please contact the Dwyer Customer Service department for further assistance.

Batteries:

The thermometer incorporates visual low battery indication as follows.

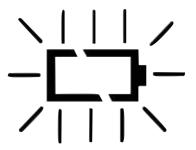
Battery OK: Measurements are possible.



Battery Low: Battery needs to be replaced, measurements are still possible.



Battery Exhausted: measurements are not possible. When the low battery icon indicates the battery is low, the batteries should be replaced immediately with CR2032 batteries.



Please Note: It is important to turn the thermometer off before replacing the battery otherwise the thermometer may malfunction. Dispose of used batteries promptly and keep away from children.

FMC/RFI

Readings may be affected if the unit is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected

CAUTION

- When device is in use, do not look directly into the laser beam - Permanent eye damage may result.
- 2. Use extreme caution when operating the laser.
- 3. Never point the device towards anyone's eyes.
- 4. Keep out of reach of all children.

MAINTENANCE

A periodic check of the system calibration is recommended. The Series MIT is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.

Storage and Cleaning

The sensor lens is the most delicate part of the thermometer. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol. Allowing the lens to fully dry before using the thermometer. Do not submerge any part of the thermometer. The thermometer should be stored at room temperature between -4°F and 149°F (-20°C to 65°C).

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