

1 YEAR
WARRANTY



CAUTION! – This product is not intended for medical use or use on humans



User's Guide



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MADE IN TAIWAN

OS303

Infrared HACCP Thermometer



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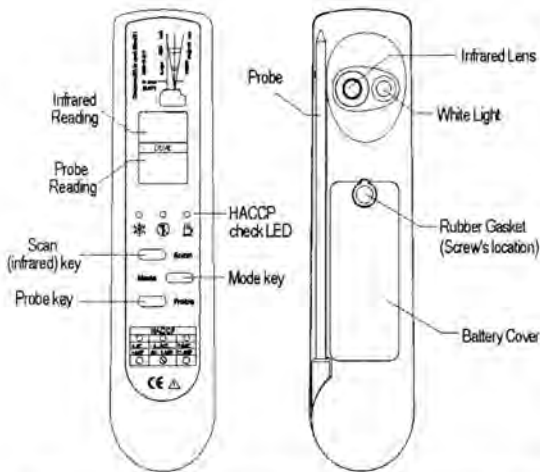
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WARNING: These products are not designed for use in, and should not be used for, human applications.

Operating Instructions



The OS303 is a non-contact infrared thermometer, with integral Probe. You can select only one Mode at the same time but can change the Mode at will.

* Special Features:

1. Food Code Zone Display;
2. Water Proof (IP65)

CAUTION! – This product is not intended for medical use or use on humans

In Non-contact Infrared Thermometer function (IRT Mode)

The white light automatically turns on while the Scan button is pressed.

Distance:Spot (FOV)= 2.5:1
Emissivity = 0.1~1 Step.01
Wave Length = 8um-14um

Simply aim the thermometer at the measure target with "Infrared Lens" and press Scan (infrared) key to display the surface temperature. The distance to target ratio is 2.5:1 therefore 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 (infrared) key is depressed. When the Scan (infrared) key is released, icon "Hold" will appear on the display and the last measurement will remain visible for 15 seconds before the display goes blank.

Mode Selection MIN → MAX → LOCK → °C/ °F → EMIS

MINIMUM OR MAXIMUM MODE

The OS303 will display the minimum or maximum reading during the measurement period only until the Mode key is pressed.

To utilize the minimum mode, please press Scan (infrared) key → Mode key → Scan (infrared) key. Keep pressing Scan (infrared) key for measurement.

To utilize the maximum mode, please press Scan (infrared) key → Mode key *twice→ Scan (infrared) key. Keep pressing Scan (infrared) key for measurement.

LOCK MODE

The lock mode is particularly useful for continuous monitoring of temperatures. The thermometer will continuously display the temperature for up to 60 minutes or until the Scan (infrared) key button is pressed.

To utilize the lock mode, please press Scan (infrared) key → Mode key *three times→ Scan (infrared) key.

°C OR °F MODE

To change the °C or °F mode, please press Scan (infrared) key → Mode key *four times→ Scan (infrared) key.

Same steps can be taken when switching from °F to °C.

EMISSIVITY

The OS303 is supplied with a default emissivity of 0.95. The emissivity can be changed from 0.10 (10E) to 1 (100E). Changes should only be carried out by experienced personnel.

Note: non-contact infrared thermometers are not recommended for use in measuring the temperature of shiny or polished metals.

To change the emissivity, please Scan (infrared) key → Mode key *five times→ Scan (infrared) key for each 0.01 (1E) adjustment→ Mode key.

In Contact Thermocouple Probe function (COT Mode)

To make measurements with the probe, make contact with the target and then press the Mode key to continuously display the temperature for up to 4 minutes. After that the OS303 will automatically shut off to extend the battery life. Pressing the Probe key will interrupt the scanning to display the last temperature with a 'Hold' display. To reenter scanning just press the Probe key again.

- ⚠ 1. Do not twist the probe and rotate the probe in wrong direction.
 - 2. Over stress on probe may cause break.
 - 3. After measuring high temp, the probe may remain HOT for a while.
 - 4. Probe is dangerous for human when the probe is in an open position. Remember to hold the probe back when not in use.
- ⚠ The probe may be damaged if exceeding the specification of measurement temperature range.

HACCP check

The "HACCP CHECK" feature is incorporated in the OS303 to graphically indicate critical temperature zones. The icons and LED indicators located above the display indicate a food product is in a safe or unsafe HACCP "Danger Zone" temperature. The green and red LED light will always be lit before power off.



A Green LED appears with icon "❄" indicates a safe cool or frozen condition below 4°C (40°F) or appears with icon "☺" indicates a safe holding temperature above 60°C (140°F).

HACCP		
❄	☹	☺
↓ 4 °C	4-60 °C	↑ 60 °C
↓ 40 °F	40-140 °F	↑ 140 °F
○	⊘	○

When temperature is between 4°C and 60°C, the red LED with icon "⊘" will appear and indicate that the temperature is fallen within the HACCP "Danger Zone" from 4°C to 60°C (40~140°F).

LCD ERROR MESSAGES

The thermometer incorporates visual diagnostic messages as follows:

「Hi」 「Lo」

'Hi' or 'Lo' is displayed when the temperature being measured is outside of the range of the instrument, 'Hi' when higher than +250°C (572°F) and 'Lo' when lower than -55°C (-67 °F).

「Er 2」 「Er 3」

'Er2' is displayed when the thermometer is exposed to rapid changes in the ambient temperature. 'Er3' is displayed when the ambient temperature exceeds 0°C (32°F) or +50 °C (122 °F). The thermometer should be allowed 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, wait for auto power off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on.

BATTERIES

The OS303 incorporates visual low battery indication as follows:



'Battery OK': measurements are possible



'Battery Low': battery needs to be replaced, measurements are possible



'Battery Exhausted': measurements are not possible

CHANGE BATTERIES



⚠ Since the thermometer is waterproof, please make sure the battery cover and also the rubber gasket is in place securely.

1. Please pick out the rubber gasket on the battery by using a small, pointed screwdriver, then release the screw on the battery cover.
2. Open the battery cover.
3. Replace the new battery.
(Power Supply: AAA 2pcs, 1.5V)
4. Close the bottom side and insert the battery cover, push downward and then press forward.
5. Use the instruction as point 1 to close the battery cover and replace the screw hole with the rubber gasket.

⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with a CR2032 lithium cell. Please note: It is important to turn the instrument off before replacing the battery otherwise the thermometer may malfunction. Dispose of used battery promptly and keep away from children.

SPECIFICATION

	Infrared Scan function (IRT Mode)	Thermocouple Probe (K type, Grounded) (COT Mode)
Measurement Range	-55~250°C (-67~ 482°F)	-55~330°C (-67 to +626 °F)
Operating Range	0~50°C (32~122°F)	
Accuracy (Tobj=15-35°C, Tamb=25°C)	+/-0.6°C (1.1 °F)	below -5 : +/-1°C -5~ 65 : +/-0.5°C above 65 : +/-1% of reading
Accuracy (Tamb=23+/-3°C)	-33~0: +/- (1°C+0.1/degree) 0~ 65: +/-1°C 65~250: +/-1.5% of reading	
Resolution (-9.9~199.9°C)	0.2°C/0.5°F	0.2°C/0.5°F
Dimension	22.18*38*190.09mm(0.87*1.50*7.48 inch)	
Weight (with battery)	98.1g(3.15oz)	
Battery Life	Typ.40, min 30 hours continuous use (auto power off after 15 seconds)	

EMC/RFI

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



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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