



**Q 1283A**

# **Infra-Red Non Contact Thermometer**

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## **Instruction Manual**



## Overview

This handheld IR thermometer offers laser pointer guide and excellent accuracy between -50°C and 580°C. The LCD indicates the measured reading & emissivity value. A new temperature reference mode allows quick verification of 'within range' temperatures, indicated by changes in LCD backlight colour (green OK, red HIGH, blue LOW). Simple point and click operation with laser for added accuracy. The sensor provides a 13:1 distance to spot ratio, ideal for most every day applications (see information below about spot ratio). Ideal for use in hard to get to or dangerous places, even while equipment is operating eg: measuring turbo, exhaust, bearing, motor, air conditioning temperatures. Also great for food safety!

## Package Includes

- 1 x Users Manual
- 1 x 9V Battery

## Features

- Fast and easy measurement
- Built-in laser pointer increases target accuracy
- Backlight LCD Display
- °C/°F selections
- Easily set reference temperature to show deviations
- Automatic measurement range selection with resolution 0.1 °C/°F
- Low Battery Indicator
- Auto Power Off
- Precise non-contact measurement
- Min/Max Record
- Emissivity adjustable from 0.1 to 1.0

## Safety

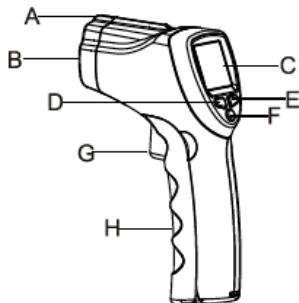
- Use extreme caution when the laser beam is turned on
- Do not point the beam toward people or animals
- Do not allow the beam to strike the eye from a reflective surface
- Do not use the laser near explosive gases



**Comply with EMC**

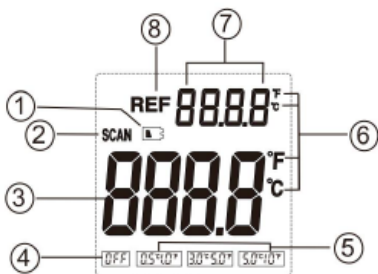
## Meter Description

- A. Laser Pointer Beam
- B. IR Sensor
- C. LCD Display
- D. Shift Left Button
- E. Shift Right Button
- F. SET Button
- G. Measurement Trigger
- H. Battery Compartment Cover




## LCD Display Description

- 1. Low Battery Indicator
- 2. Measurement Icon
- 3. Current Reading
- 4. Switch Off "REF" Function
- 5. Threshold Value Selection
- 6. Temperature Unit ( $^{\circ}\text{C}/^{\circ}\text{F}$ )
- 7. Reference Temperature
- 8. REF Icon



## Battery Replacement

- 1. When the Low Battery icon " " appears, replace the meters battery.
- 2. Open the battery compartment, replace the 9V battery and close the battery compartment cover



## Specifications

Range	-50°C ~ 580°C / -58°F ~ 1076°F
Accuracy	-50°C ~ 0°C / -58°F ~ 32°F : $\pm 4^{\circ}\text{C}$ / 7.2°F
	0°C ~ 580°C / 32°F ~ 1076°F : $\pm 2^{\circ}\text{C}$ / 3.6°F
Emissivity	Adjustable 0.1~1.0
Optical	D:S = 13:1
Response Time	$\leq 500\text{ms}$
Resolution	0.1°C / 0.1°F
Spectral Response	8~14 $\mu\text{m}$
Polarity Display	Auto Display, "-" indicates negative, while positive shows no sign
Diode Laser	Output <1mW, Wavelength 630~670nm, Class II
Auto Power Off	Meter shuts off automatically after 60 seconds of inactivity
Operating Temperature	0°C ~ 50°C / 32°F ~ 122°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	Operating: 10~95%RH / Storage: <80%RH
Power Supply	9V Battery
Weight	$\pm 176\text{g}$ (with battery)
Dimensions	155.5 x 98.8 x 27.5 mm

## Important Notes

- Not recommended for measuring shiny or polished metal surfaces like stainless steel and aluminium.
- Do not make measurement through transparent surface such as glass.
- If the surface of the object under test is covered with frost, oil, grime etc, clean before taking measurement.

## Field Of View

The meter's field of view is 13:1, for example, if the meter is 13 inches from the target spot, the diameter of the target must be at least 1 inch. Other distance ratios are shown below in the field of view diagram.

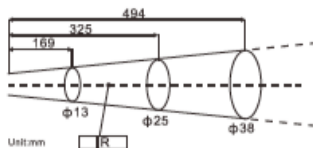
The object under test should be larger than the spot size calculated by the field of view diagram. The smaller the target object is, the closer the meter should be to it for accurate measuring.

When accuracy is critical, make sure the target is at least twice as large as the spot size.

**Distance & Spot Size:** As distance (D) from the object increases, the spot size (S) of the area measured by the unit becomes larger.

**Locating A Hot Spot:** To find a hot spot, first aim the thermometer to the outside of the target area, then scan across in an up and down motion until the hot spot is located.



$$D:S=13:1$$



## Maintenance Notes

- Do not use volatile liquids to clean the unit - wipe with soft, dry cloth
- Do not disassemble the unit - always have a qualified technician handle any repairs
- Do not immerse the unit in water
- Do not store unit in an area with high temperature or humidity





## Operation Instructions

1. Hold the meter by its handle grip and point it toward the surface to be measured.
2. Pull and hold the trigger to turn the meter on. The "SCAN" icon will appear during testing.
3. Reference temperature setting: press the SET button one time during scanning the temperature by holding the trigger button. To reset the reference value, aim at a new reference spot, press the SET a second time.
4. Threshold value setting: After power on the meter, press the shift left button " " or shift right button " " to select the suitable threshold value from 0.5°C (1°F), 3°C (5°F), 5°C (10°F) or OFF to turn off the reference temperature function.
5. The scanned temperature will be compared with the set reference temperature automatically. If the scanned temperature is hotter than the reference temperature by more than the threshold, the LCD color will turn from green to red along with the fast beeper sound to warn users. If the scanned temperature is colder than the reference temperature by more than the threshold, the LCD color will turn from green to blue along with the slow beeper sound to warn users. The LCD color will be in green if the scanned temperature is within the threshold. The LCD color will be in yellow during normal measurement after switch off the Reference Temperature mode.
6. The meter will automatically shut off after around 60 seconds of inactivity.

### Notes:

1. If the meter used in an ambient temperature with wide temperature change, allow it at least 30 minutes to adjust to it
2. The laser is designed for aiming only.

## Button Function

1. SET button: in scanning mode, press SET button for around 3 seconds to enter into the emissivity adjust mode, then press " " to increase the value or " " to decrease the value. After you finish setting the emissivity, press and hold the SET button to exit the emissivity adjust mode. **NOTE: The default emissivity is set at 0.95.**
2. Shift Left/Shift Right Button: After powering on the meter, press the Shift Left Button " " or shift right button " " to select the Threshold Value.

Altronic Distributors warrants this product for one year from date of purchase from Altronics or its resellers to the consumer. If this item is part of an installation or another product, please contact the installer or supplier for your warranty.

During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse or incorrect installation (i.e. failure to install and operate device according to specifications in the supplied instruction manual), neglect, shipping accident, or no fault found, nor by use in a way or manner not intended by the supplier.

For repair or service please contact your **PLACE OF PURCHASE**.

If this item was purchased directly from Altronics please make a warranty claim by:

**1. FOR MAIL ORDER CUSTOMERS (includes school and trade orders),**

- a) Calling your nearest store location and quoting your tax invoice number.
- b) Upon contacting Altronics, we will issue an R.A. (Return Authorisation). As Altronics have a number of service agents throughout Australia, a copy of the R.A. will be emailed, faxed or mailed to you with full instructions of how and where to send the goods. The freight for shipping goods back to Altronics for all repairs is at the customers expense.
- c) A copy of the R.A. form, (or at the very minimum, the R.A. number) must accompany the goods to effect the repair.
- d) Altronics will pay the return freight to the customer where the warranty claim has been accepted.
- e) Please quote the R.A. number in any correspondence to us.

**2. FOR OVER THE COUNTER PURCHASES to make a warranty claim, please return the goods to us in any of our stores, with a copy of your proof of purchase (tax invoice).**

- a) Upon leaving the goods at one of our stores, an R.A. number will be issued to you.
  - b) Once repaired, you will be contacted, advising that the goods are ready to be collected from the store.
- It is at Altronics discretion as to whether the goods will be repaired or replaced (whilst under warranty); and as to whether identical goods will be used to replace the item due to changes of models / products.

Note: Under no circumstances should you attempt to repair the device yourself or via a non-authorised Altronics service centre, as this will invalidate the warranty!

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.