

# **OPERATION MANUAL**

## **INFRARED THERMOMETER**



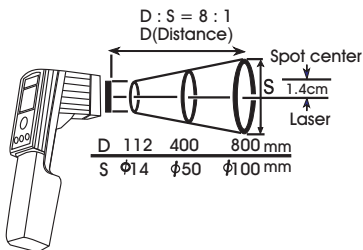
**CE**

**Model:8868**

- Precise non-contact Measurements
- Switchable C/F Temperature units
- Automatic Data Hold
- Laser target pointer
- The meter at 8 inches away measure 1 inch target.

### Wide range of application:

Food preparation, Safety and Fire inspectors , Plastic molding, Asphalt, Marine and Screenprinting, measure ink and Dryer temperature, Diesel and Fleet maintenance .



## **1. SAFETY**

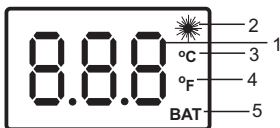
- ! Use extreme caution when the laser beam is turned On.
- ! Do not let the beam enter your eye, another person's eye or the eye of an animal.
- ! Be careful not to let the beam on a reflective surface strike your eye.
- ! Do not allow the laser light beam impinge on any gas which can explode.

## 2. GENERAL SPECIFICATIONS

<b>DISPLAY</b>	LCD with backlighting
<b>MEAS. RANGES</b>	-4° to 788°F (-20 to 420°C)
<b>SAMPLE RATE</b>	1 sec. Approx.
<b>POWER OFF</b>	Automatic shut off after 4 seconds
<b>OPERATING TEMP.</b>	0°C to 50°C (32°F to 122°F).
<b>OPERATING RH%</b>	Max. 80% RH.
<b>POWER SUPPLY</b>	9V battery
<b>POWER CURRENT</b>	Approx. 12 mA DC
<b>WEIGHT</b>	200g / 6.4 oz.
<b>SIZE</b>	6.7 x 1.7 x 1.6" (170 x 44 x 40 mm)

<b>Resolution / Ranges Accuracy " notes "</b>	1°C/F
	-4° to 788°F (-20 to 420°C)
	±2% of reading
	1. Accuracy specified is for ambient temperature 2. Accuracy specified is for emissivity of 0.95
<b>Emissivity settings</b>	0.95 fixed
<b>Distance Factor</b>	D:S = Approx. 8:1 (D=distance, S=spot)

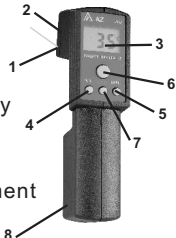
## 3. INDICATOR



1. Digital redout
2. Laser icon
3. °C . Celsius
4. °F . Fahrenheit
5. **BAT.** Battery indicator.

#### 4. FRONT PANEL DESCRIPTION

- 1 Laser pointer beam
- 2 IR sensor
- 3 LCD Display
- 4 F/C select key
- 5 Backlite select key
- 6 On/Hold key
- 7 Laser key
- 8 Battery compartment



#### 5. MEASUREMENT OPERATION

##### A. POWER ON/OFF

The meter automatically powers when the key is pressed. Press the **ON/HOLD** key to take a reading. Read the measured temperature on the LCD. (Fig.A) The meter powers OFF automatically approximately 4 seconds after the **ON/HOLD** key is released.

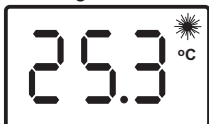
**Fig.A**



## **B. SELECTING UNITS (C/F)**

Select temperature units (degrees °C or °F) by first pressing the **ON/HOLD** key and then pressing the **C/F** key. The units will blink on the LCD. (Fig.B) Press the **C/F** key again to switch the unit (scale) again. See Fig. C.

**Fig.B**



**Fig.C**



## **C. DATA HOLD**

This meter automatically holds the last temperature reading on the LCD for five seconds after the **ON/HOLD** key is released. No extra key presses are necessary to freeze the displayed reading. (Fig.D)

**Fig.D**



## **D. BACKLITE LCD**

Select backlite by first pressing the **ON/HOLD** key and then pressing the **BACKLITE** key. Repeat the procedure to turn the backlight OFF

## **E. LASER POINTER**

To turn the laserpointer ON, press the **LASER** key while pressing the **ON/HOLD** key.(Fig.E) Press the **LASER** key again to turn the laser OFF.(Fig.F)

**Fig.E**



**Fig.F**



## **F. MEASUREMENT**

### **CONSIDERATIONS**

Holding the meter by its handle, point the IR Sensor toward the object whose temperature is to be measured. The meter automatically compensates for temperature deviations from ambient temperature. Keep in mind that it will take up to 30 minutes to adjust to wide ambient temperature changes. When low temperatures are to be measured followed by high temperature measurements, some time (several minutes) is required after the low (and before the high) temperature measurements are made. This is a result of the cooling process which must take place for the IR sensor

## **6. TROUBLESHOOTING**

### **? Meter does not turn on.**

Check voltage and replace the low battery . Or check time delay which is allowed 1 second for data to appear on-screen.

### **? Data flashing or laser comes on but no data appears . "BAT " appears on the screen .**

Check battery voltage and then replace low battery. Make sure you have correctly put the battery in the right polarity .

### **? Dashes appear on-screen.**

Check extreme temperature , measure surrounding area to see if the target exceeds the limit.

## **7. BATTERY REPLACEMENT**

A flashing display is the indication that the battery voltage has fallen into the critical region (6.5 to 7.5 V). Reliable readings can be obtained for several hours after the first appearance of the low battery indication. (Fig.G)

Open the Battery Compartment and remove the battery, then install a new battery and replace the cover.

**Fig.G**



## **8. MATERIALS SUPPLIED**

**This package contains:**

1. Meter x 1
2. Battery 9.0Volt x 1
3. Pouch x 1
4. Manual x 1

## **9. MAINTENANCE**

**Case cleaning :**

Use caution with a damp cloth to clean the exterior housing , ensure no water or soap is allowed inside the meter ,or on the infrared lens.

**Lens cleaning :**

**WARNING :** Recommend to clean the lens after a time of period using the meter and make sure the lens is clean enough to ensure the reading accuracy. By using low pressure compressed air to remove any particles on the lens , if the contamination can not be removed with air , use a soft cotton swab .

Any swab should be slightly damp, and very light pressure should be applied to the lens.

Do not use solvents to clean the lens.



## **10. WARRANTY**

The meter is warranted to be free from defects in material and workmanship for a period of one years from the date of purchase.

This warranty covers normal operation and does not cover batteries, misuse, abuse, alteration, tampering, neglect, improper maintenance, or damage resulting from leaking batteries. Proof of purchase is required for warranty repairs.

## **11. RETURN AUTHORIZATION**

Authorization must be obtained from the supplier before returning items for any reason .

When requiring a RA (Return Authorization) , please include data regarding the defective reason, the meters are to be returned along with good packing to prevent any damage in shipment and insured against possible damage or loss .

## **12. CE CERTIFICATION**

The meter conforms to the following standards:

- \* EN 50081-1/1992: EN 55022
- \* EN 50082-1/1997: EN 55024  
(EN 61000-4-2/-3/-8, ENV 50204)

, the meter complies with the essential protection requirements of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.



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- ▲ K type Thermometer
- ▲ K.J.T. type Thermometer
- ▲ K.J.T.R.S.E. type Thermometer
- ▲ pH Meter
- ▲ Conductivity Meter
- ▲ T.D.S. Meter
- ▲ D.O. Meter
- ▲ Saccharimeter
- ▲ Manometer
- ▲ Tacho Meter
- ▲ Lux / Light Meter
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