



**0215-A900
INFRARED THERMOMETER
OPERATION MANUAL**

PLEASE SCAN QR CODE TO
WATCH THE OPERATION
VIDEO OF PRODUCTS.



1. Description

- This is capable of non-contact (infrared) temperature measurements at the touch of a button.
- The built-in laser pointer increases target accuracy while the backlight LCD and handy push-buttons combine for convenient, ergonomic operation.
- The Non-contact Infrared Thermometer can be used to measure the temperature of objects' surface that is improper to be measured by traditional (contact) thermometer (such as moving object, the surface with electricity current or the objects which are uneasy to be touched).
- Proper use and care of this meter will provide years of reliable service.

2. How it Works

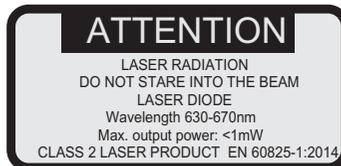
Infrared thermometer measure the surface temperature of an object. The unit's optics sense emitted, reflected, and transmitted energy, which is collected and focused onto a detector. The unit's electronics translate the information into a temperature reading which is display on the unit, in units with a laser, the laser is used for aiming purposes only.

3. Feature

- Unit: °C, °F
- Circular laser sighting
- Display backlight
- Automatic power off
- Automatic data hold
- Adjustable emissivity
- High and low alarm

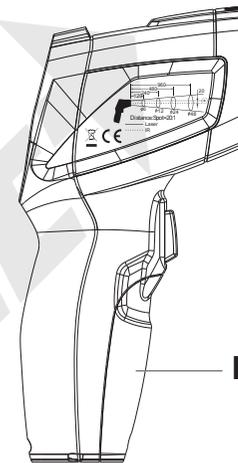
4. Safety

- 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 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.
- Use the suitable battery (9V dry battery).



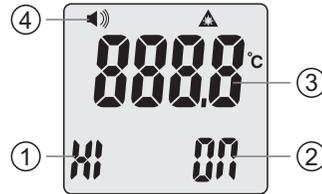
13. Battery Replacement

1. If the battery power is insufficient, the low-power symbol (☐) will be displayed on the LCD screen. Please replace the 9V battery in time.
2. Open battery cover, take out the battery from the instrument and replace with a new 9-Volt battery and put the battery cover back.



Battery Cover

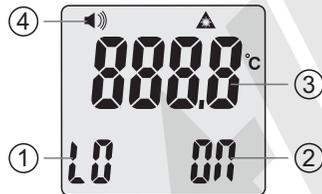
12. Function Setting Mode



Notice:

1. "HI" indicates that the high temperature alarm value setting is in progress at this time.
2. "ON" means to turn on the high temperature alarm function. "OFF" means to turn off the high temperature alarm function.
3. High temperature value.
4. The buzzer symbol will be light when the high temperature alarm appears.

- When the "SET" button is pressed for the fourth time, the LCD will show the following interface:
Press the "Laser & Backlight" on/off button at this time to turn on/off the low temperature alarm function.

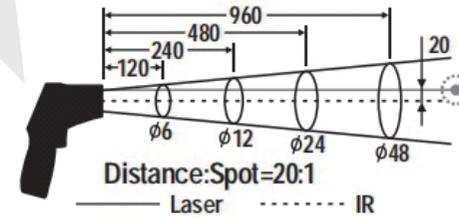


Notice:

1. "LO" indicates that the low temperature alarm value setting is in progress at this time.
 2. "ON" means to turn on the low temperature alarm function. "OFF" means to turn off the low temperature alarm function.
 3. Low temperature value.
 4. The buzzer symbol will be light when the low temperature alarm appears.
- Press the "SET" button for the fifth time to enter the emissivity setting interface. Press the "UP" or "DOWN" button to adjust the value of the emissivity.
 - Press the "SET" button for the sixth time to exit the setting mode and enter the test mode interface.

5. Distance & Surface Area

- To achieve accurate measurements, the target must be larger than the thermometer's measuring area. The measured temperature is the average temperature of the area measured.
- The smaller the target, the smaller the measurement distance between thermometer and target object has to be. When accuracy is critical, make sure the target is at least twice as large as the spot size.
- The distance to target/size of IR focal spot ratio is 20:1. With a distance of 20 cm to the target, the size of the IR focal spot is thus 1 cm.

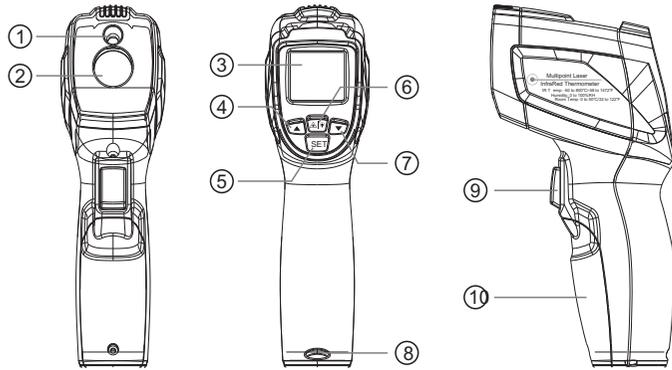


6. Specification

Infrared system	temperature range	-30°C~800°C/-22°F~1472°F
	temperature resolution	0.1°C 0.1°F (-22°F~1000°F), other range 1°F
	temperature accuracy	±3.0°C (at -30°C~20°C) ±(1% of reading+1)°C (at 20°C~450°C) ±(2% of reading)°C (at 450°C~800°C)
	distance to spot size (D:S)	20:1
	emissivity	adjustable 0.10~1.00
	response time	<150ms
	spectral response	8~14μm
Temperature and humidity system	diode laser	output<1mW, wavelength 630~670nm class 2 laser product
	ambient temperature range	0°C~50°C/32°F~122°F
	dew point temperature range	0°C~50°C/32°F~122°F
	temperature resolution	0.1°C/0.1°F
	temperature accuracy	±1.0°C±1.8°F
	humidity range	0%RH~100%RH
	humidity resolution	0.1%RH
humidity accuracy	±5%RH (20%RH~80%RH), other range ±7%RH	
Automatic power off	about in 10 seconds	
Power supply	1×9V battery	
Dimension (H×W×D)	170×45×85mm	
Weight	196g	

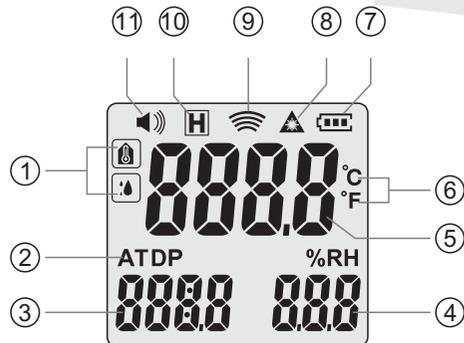
7. Panel Description

- 1-Laser Hole
- 2-Infrared Sensor
- 3-Display Screen
- 4-Up Button
- 5-Set Button
- 6-Laser and Backlight ON/OFF Button
- 7-Down Button
- 8-Lanyard Hole
- 9-Power ON/Measure Button
- 10-Battery Cover



8.LCD Screen Description

- 1-Air Temperature and Dew Point Temperature Symbol
- 2-Air Temperature and Dew Point Temperature Characters
- 3-Air Temperature or Dew Point Temperature Value
- 4-Humidity or Emissivity Value
- 5-The Displayed Area of Current Temperature Value
- 6-°C/°F Symbol
- 7-Battery Power Symbol
- 8-Laser On/Off Symbol
- 9-Measurement Symbol
- 10-Data Hold Symbol
- 11-Buzzer Alarm Symbol



9.Measure Mode

- **Regular Measurement Mode**
This mode is used to measure the surface temperature.
- **Dew Point Temperature Measurement Mode**
The meter bears a sensor that can measure environment temperature, relative humidity and dew point temperature.

10.Measurement Operation

- Hold the meter by its Handle Grip and point it toward the surface to be measured.
- Pull and hold the Trigger to turn the meter on and begin testing. The display will light if the battery is in good condition. Replace the battery if the display does not light.
- Release the Trigger and the HOLD display icon will appear on the LCD indicating that the reading is being held. In HOLD status, short press the Laser/Backlight button to turn on or turn off the laser. And long press the Laser/Backlight button to turn on or turn of the backlight.
- The meter will automatically power off after approximately 10 seconds after the trigger is released.

11.Function Setting Mode

- When the "SET" button is pressed for the first time, the AT or DP symbol will flash. Press the "UP" or "DOWN" button to switch between AT measurement and dew point measurement.
- When the "SET" button is pressed for the second time, the °C or °F will flash. Press the "UP" or "DOWN" button to switch the unit.
- When the setup button is pressed for the third time, the LCD will show the following interface:
Press the "Laser & Backlight" on/off button at this time to turn on/off the high temperature alarm function.