

1. Introduction


Congratulations on your purchase of the new IRT207 Heat Seeker™ InfraRed Thermometer (IRT). This IRT is an 8:1 non-contact temperature measuring instrument using infrared technology and laser sighting. Features include a 4 digit backlit LCD, scan/hold function and auto power off (7 secs). To measure a temperature, point the unit at the object, pull the measuring trigger and hold. Make sure the target area is larger than the unit's spot size.

2. Safety Information

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in dangerous radiation exposure.

- DO NOT submerge the unit in water.
- This product is not designed for use in medical evaluations. The product can only be used to measure body temperature simply for reference. The IRT is meant for industrial and commercial uses.

LASER WARNING NOTE!



Do not point laser directly at eye.
Use caution around reflective surfaces.
Keep out of reach of children.

This instrument conforms to the following standards:

EN61326: Electrical equipment for measurement, control and laboratory use.

IEC61000-4-2: Electrostatic discharge immunity test.

IEC61000-4-3: Radiated, radio-frequency, electromagnetic field immunity test.

IEC61000-4-8: Power frequency magnetic field immunity test.

Tests were conducted using a frequency range of 80-1000MHz with the instrument in three orientations. The average error for the three orientations is $\pm 1.0^{\circ}\text{F}$ ($\pm 0.5^{\circ}\text{C}$) at 3V/m throughout the spectrum. However, between 781-1000MHz at 3V/m, the instrument may not meet its stated accuracy.



3. Specifications


Temperature Range	-4° to 608°F (-20° to 320°C)
Accuracy	$\pm 2\%$ of reading or 3.6°F (2°C), whichever is greater, above 32°F (0°C); $\pm 2\%$ of reading or 5.4°F (3°C), whichever is greater, below 32°F
Field of View	8:1
Laser Type, Output/Wavelength	Class 2, <1mW @655nm
Repeatability	$\pm 1^{\circ}\text{C}$ ($\pm 1.8^{\circ}\text{F}$)
Response Time	500 ms.
Operation Temp.	32° to 104°F (0° to 40°C) @ 10 to 90% RH
Auto Power Off	Automatically after 7 sec.
Emissivity	Fixed at 0.95
Storage Temp.	14° to 122°F (-10° to 50°C)
°F/°C Switchable	YES
Battery Type	"9V" battery (included)
Battery Life	16 hrs
Dimension	5.98 x 4.65 x 1.26 in. (152 x 118 x 32 mm)
Weight	4.22 oz. (120g) without battery
Accessory	"9V" battery, Instruction manual

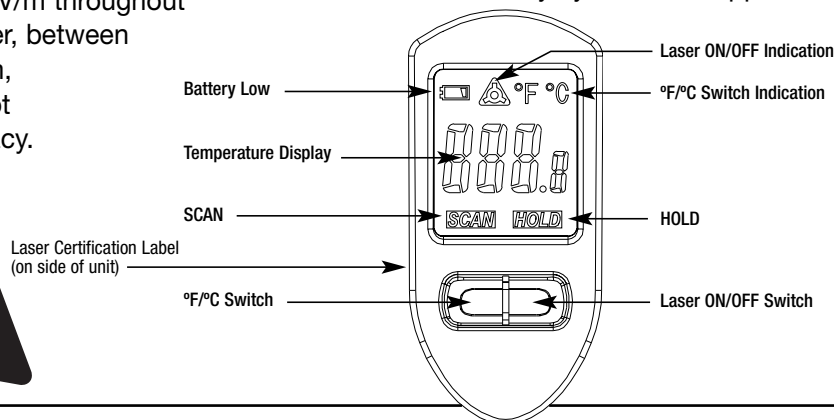
4. Operation of Instrument

4-1 Quick Start

To measure a temperature, point the unit at the target you want to measure, pull the trigger and hold. Move closer to or farther from the target until it appears about the same size as the laser's circular measurement 'spot', which has a D:S ratio (Field of View) of 8:1. The single spot of laser is used for aiming purposes only.

The unit displays temperatures in either °F or °C.

Replace the battery when the battery voltage drops below the voltage for reliable operation and the low battery symbol  appears.



NOTE:

DO NOT use solvents to clean the glass lens.

Cleaning the housing:

Use soap and water on a damp sponge or soft cloth.

5. Maintenance

Cleaning the lens: Blow off loose particles using clean compressed air. Gently brush remaining debris away with a camel's hair brush. Carefully wipe the surface with a moist cotton swab. The swab may be moistened with water.