

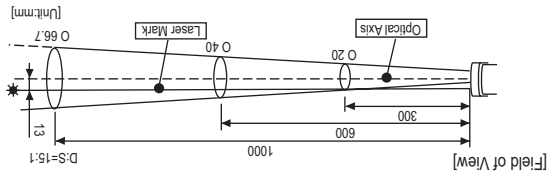
NOTE: If any water drop is on the filter and/or the area around the object being measured, the thermometer measures the water drop resulting in an incorrect measurement. Be sure to dry the filter and the area around the object measured prior to taking the measurement.

The size of the object being measured should be sufficiently larger than the field of view (spot size). The smaller the object, the closer the infrared unit should be to the object.

For Correct Measurement:

The laser beam points .5" (13mm) to the left from the center of the field of view. The laser marker functions as a sighting method and not a sensing element. It is possible to take temperatures with this thermometer at a distance of 39ft. (1,000mm) or more away from the measured object if there are no obstacles; however, it is important to note that the measuring field of view enlarges in proportion to the distance between the unit and the object being measured. This instrument has an optical resolution of 15:1

Remarks:



For the non-contact thermometer (Infrared Thermometer), the field of view (spot size) is specified depending upon the distance from the thermometer to the measured object. The temperature value displayed is the average temperature within the spot size. To take an accurate measurement, check the correlation between the size of the object and the distance to it.

Field of View:

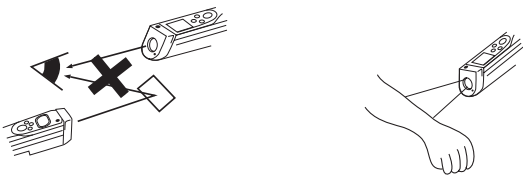
CAUTION:

- Never look into the laser directly or point it toward the eyes. Laser may cause eye damage.
- This product is not a clinical thermometer and therefore cannot be used for medical purposes.
- Do not touch the optical lens.
- Do not leave in direct sunlight or expose to excessive dust, extreme temperatures or humidity for long periods of time.
- Keep away from strong electromagnetic fields or electric charges.
- The laser output is made of a plastic prism that protrudes from the thermometer at an angle.
- Please be careful when handling it.

Cleaning:

Optical Lens: Dust, dirt or scratches on the optical lens can cause incorrect measurements. Remove dust with a camera lens blower or if necessary, carefully wipe with a lens cleaning cloth and solution.

Unit: Clean with soft, dry cloth or if necessary, a soft, damp cloth. Do not use any chemical solvent such as thinner, alcohol, etc. as this will damage the plastic surface.



Limited Warranty: One year from date of purchase for parts and labor against defects and workmanship. Warranty is void for misuse, neglect, accident, other improper use of the unit, repaired or altered outside of our factory or if the serial number is removed, defaced or changed. At manufacturers option, unit will be repaired or replaced. For replacement or repairs, please return unit to the distributor where the unit was purchased



HVAC/Refrigeration

- Scan thermal insulation of ducts.
- Take suction line temperatures for superheat.
- Check temperatures of furnace exteriors, steam traps & heat exchangers.
- Scan refrigeration equipment and display cases.
- Measure discharge air temperature in a high ceiling just by pointing at the air vent.

Electrical

- Check high voltage equipment or transformers from a safe distance.
- Detect problem fuses, wires, insulators, connectors, splices & switches.
- Scan electric/distribution panels.

Foodservice

- Fast and convenient screening tool for both cold and hot foods for Food Safety & HACCP.
- Absolutely no contamination or damage to the product.
- Easily take temperatures of products moving on conveyors or hard to reach places.
- Verify equipment performance, sanitation & process temperature conditions.
- Scan cooling systems, refrigerated display cases, trucks and storage areas before loading or stacking.

Automotive

- Check rotor/drum temperature for sticking pistons.
- Detect overheating electrical components, connectors & wiring harnesses.
- Pinpoint radiator core restrictions.
- Detect coolant sensor temperatures.
- Diagnose cooling systems.
- Quickly check temperatures for misfiring sparkplugs, dead cylinders, fuel injectors, axle bearings, air duct vents, tire and asphalt for racers.
- Catalytic converter diagnosis.

Mechanical Industrial Equipment

- Check temperature of moving motors and machinery.
- Enhance preventative maintenance.
- Measure temperature of boiler operations and steam systems.
- Verify performance of machinery and equipment.

Infrared Thermometers are widely used in all types of industries including food, veterinary, paper, pharmaceuticals, rubber, textiles, gas/electric utilities, cement, chemical, asphalt, roofing, electronics, glass, plastics, metals, carpet/floor covering, tires and many more.

Specifications:

| | |
|---|---|
| Measurement Range 15006 | 32°F~932°F (0°C~500°C) |
| Display Range 15006 | 14°F~1202°F (-10°C~650°C) |
| Field of View (FOV) | At D= 1 meter (39.4"); S = 66.7 mm (2.6"); D: S=15:1 |
| Optics | Mirror / Silicon Filter |
| Sensing Element | Thermopile |
| Spectral Response | 8-14 μ m |
| Response Time | 0.7 Sec. / 90% |
| Accuracy (E=0.95) 15006 | ±3.6°F from 32°F~392°F (±2°C from 0°C~200°C); Above 394°F (201°C) ± 1% ±1.8°F from 32°F~212°F (±1°C from 0°C~100°C) otherwise ±3.6°F (±2°C) |
| Repeatability | ± 1.8°F (1°C) of reading value |
| Display Resolution 15006 | 1°F (1°C) |
| Sighting Method | Non-coaxial Laser Marker (Class 2) |
| HOLD Time | 15 Seconds |
| Continuous Measurement Mode | ON/OFF Switchable |
| Memory | 99 Point Memory |
| High/Low Limit Temp. for Alarm LED/Buzzer | ON/OFF Switchable |
| Emissivity (E) Adjustment 15006 | DARK (E = 0.95) / BRIGHT (E = 0.70) Switchable |
| Temperature Unit | °C / °F Switchable |
| Power Supply | 9V Alkaline Battery (1 piece) |
| Battery Life | 12 Hours (With Maximum Load) |
| Ambient Temperature | 32°~122°F (0°~50°C) |
| Ambient Humidity | 35~85% RH (Without Dew Condensation) |
| Storage Temperature | 14°~140°F (-10°~60°C) |
| Protective Structure | *IP67 Compliant |
| Material | ABS (Antibacterial) |
| Dimension | H x W x D = 6.3" x 1.7" x 1.65" (160mm x 44mm x 42mm) |
| Weight | 0.441 lbs. (200g) Including Battery |

USER'S MANUAL



ThermoTrace®

Infrared Thermometer

Every object radiates invisible infrared light based on its temperature. Through a set of optics and a sensing element, the Infrared Thermometer detects this amount of radiant energy and instantaneously displays the corresponding temperature. This revolutionary method of instantaneous and non-contact temperature measurement harnessed in a compact unit of advanced electronic technology is truly the "next generation" thermometer.



Your Infrared Thermometer will be an indispensable temperature instrument. With experience, you will begin to maximize the benefits and convenience of this remarkable technology and you will encounter many situations where only an Infrared Thermometer can do the job.

Models 15006 and 15006-40

- It can only take surface temperature. For objects with no surface, like air, you must take the surface temperature of a vent, grill or a piece of paper held in the air (which is at the same temperature as air).
 - The distance to the target object is limitless and you can even take the temperature of a cloud in the sky! The size of the object, however, must be within the field of view.
 - It cannot go through transparent surfaces like glass or clear plastic. It will measure the temperature of the first surface, which is the transparent surface.
 - Accuracy can be affected by the amount of steam, dust, flame, etc. that may be obstructing the sight path.
 - For shiny or oxidized metallic surfaces, the infrared light (i.e. temperature) of surrounding objects can be reflecting off the surface, affecting the accuracy.
- Emissivity (E):**
Emissivity ratio is the rate of energy emitted from an object's surface. It is affected by its surface condition, primarily by how reflective the surface is. Dark or painted surfaces and shiny or oxidized metallic surfaces do reflect the infrared (i.e. temperature) from surrounding objects. The entire E spectrum is 1.0 to 0.1 and the perfect non-reflective laboratory "blackbody" is 1.0. Everything else is measured as a ratio against it and most things fall within the range of .70 and .95 - the most common being .95. You can think of it like "calibrating" against your target object. If you are unsure of the object's E and consequently its measured temperature or if the target object is outside of the .95 (Dark) to .70 (Bright) range, paint a small section black or attach an electrical, masking or other tape to the surface. Wait for the temperature of the tape to stabilize and measure this section for accurate results.

