

## 7. Maintenance

- (1) To clean the lens: Blow off loose particles using clean compressed air gently brushes remaining debris away with a moist cotton cloth.
- (2) Do not use solvents to clean the lens.
- (3) Do not submerge the unit water.

## 8. Disposal Of This Article



**Caution: this symbol indicates that equipment and its accessories shall be subject to a separate collection and correct disposal**

# TENMARS

## TM-301

### INFRARED THERMOMETER NON-CONTACT

USER'S MAMNUAL



## 1. Introductions

- (1). Pull and hold trigger (laser pointer is on as default setting) to turn on, LCD display reading & battery icon. Release the trigger and the reading will hold for approx.10 sec
- (2).Locating a hot spot: Aim the thermometer outside the area of interest. Scan across the area in an up and down motion until the hot spot is located while holding the activation trigger. The thermometer will continue to read the surface temperature while the activation trigger is depressed.

**Note : Holding the trigger should last about 1 second at least.**

## 2. How it works

Any object radiates infrared energy if its temperature is above absolute zero. This energy travels at the speed of light in all directions. An infrared temperature lens collects and focuses the infrared energy onto a sensor produces a small voltage output, proportional to the target temperature, which is processed and displayed.

### 3. Cautions

The infrared thermometer should be protected from the following:

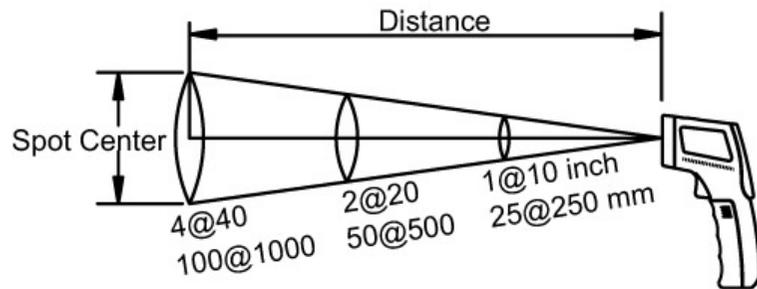
- Electro Magnetic Fields(created by arc welders, induction heaters and similar items)
- Thermal Shock (created by large or abrupt ambient temperature changes. Allow 30minutes for unit to stabilize before use.)
- Do not leave the unit on or near objects of high temperature.

### 4. Operating

- (1) °C & °F Conversion : Press the  button to switch from °C to °F readings.
- (2) Press the  button to turn the laser pointer on or off.  
Press the  button to hold MAX testing data or min testing data.  
Press  button more than 1 sec exit mode

### 5. Field of View

- (1) The farther the thermometer is from the target, the larger the target area will be. This relationship between distance and target size is normally expressed as the distance to spot, or D: S ratio.
- (2) At a distance of 10 feet, the “target “spot would be 1 foot in diameter.
- (3) The thermometer will display the average temperature across the target area.



### 6. Specifications

Temperature Range	-30°C~530°C ( -22°F~986°F )
Accuracy	±3°C (±5°F) (-30°C ~20°C /-22~68°F) ±2°C (±3°F) or 2% reading (20°C ~530°C/68°F ~986°F)
Repeatability	2% or ±2°C (±3°F)
Response Time	500ms@95%
Spectral Response	5~14 μ m
Emissivity	0.95
Resolution	0.2°C / 0.5°F
Laser Power	≤1mW
Auto Power Time	≤5 sec
Ambient Operating Range	0~40°C (32°F ~104°F) , ≤80%RH (no condensing)
Storage Temp/Humidity	-10°C ~60°C (14°F ~140°F) , ≤70%RH
Weight	≥150 g (without battery)
Size	166x95x33mm (LxWxH)
Power	9V battery,006Por IEC 6F22
Battery Life	12 hours
D:S	10:1