



Single Touch

# Quick!

Non-Contact Temperature Measurement  
Easy-to-Carry Pocket-Sized Body

Compact



CE

## OPTEX Product Information

Portable  
Non-Contact  
Thermometer

THERMO-HUNTER

PT-2 series

(1°C display resolution)

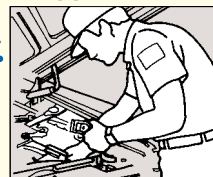
PT-02 series

(0.1°C display resolution)

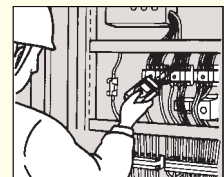
Made  
in  
Japan

- Measuring temperature range  
PT-2 series : -40 to 510° C  
PT-02 series : -40 to 200° C
- Quick response : 0.8sec (PT-2 series)
- Display resolution : 0.1° C (PT-02 series)
- Field of View : □100/1000mm
- Large, easy-to-view LCD display
- Laser beam guide & backlight (PT-2LD & PT-02LD)

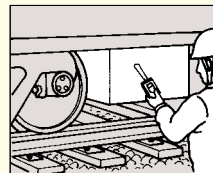
### Applications



Motor/Machine



Electric Wiring / Transformer



Transport/Automotive



Freezer / Refrigerator



**CAUTION**  
DO NOT STARE INTO BEAM  
LASER DIODE POWER MAX1.0mW  
WAVE LENGTH 670nm  
CLASS2 LASER PRODUCT

**CAUTION**  
LASER RADIATION  
DO NOT STARE INTO BEAM  
670nm/1.0mW MAX  
CLASS 2 LASER PRODUCT  
THIS PRODUCT COMPLIES WITH  
21 CFR 1040.10 AND 1040.11

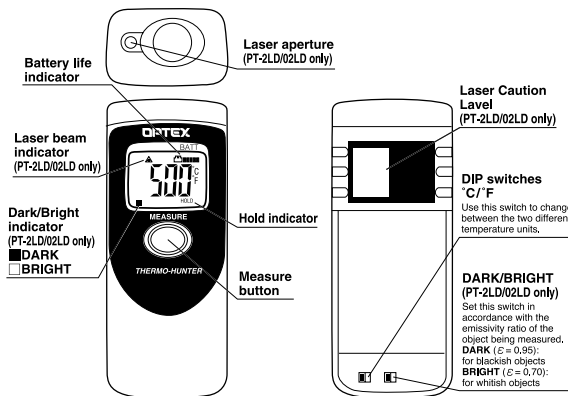
# PT-2/02series Portable Non-Contact Thermometer

## Specifications

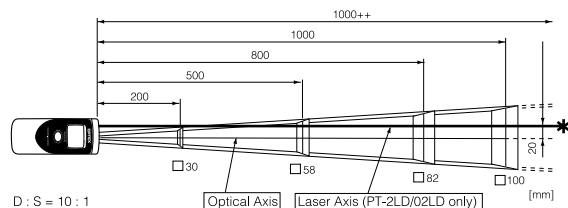
Model	PT-2L	PT-2LD	PT-02L	PT-02LD
Measuring range	-40 to 510°C (-40 to 950°F)		-40 to 200°C (-40 to 392°F)	
Display range	-51 to 538°C (-60 to 1000°F)		-50 to 230°C (-58 to 446°F)	
Field of view	□100/1000mm (D: S=10:1) square spot			
Optics	mirror/silicon filter			
Sensing element/Wavelength	Thermopile/8 to 14μm			
Response time	0.8sec/90%		1.5sec/90%	
Accuracy (ε ≈ 0.95, at 25°C ±3°C)	Less than 0°C : ±3°C; 0°C to 200°C : ±2°C; Above 200°C : ±1% of reading value (Less than 32°F : ±6°F; 32 to 400°F : ±4°F; Above 400°C : ±1% of reading value)		Less than 0°C : ±3°C; 0°C to 200°C : ±2°C (Less than 32°F : ±6°F; 32 to 400°F : ±4°F)	
Repeatability	±1°C (2°F) of reading value		±0.5°C (1°F) of reading value	
Display resolution	1°C/°F		0.1°C/°F (Above 200°C/°F: 1°C/°F)	
Sighting method	N/A	Blinking laser marker	N/A	Blinking laser marker
Emissivity ratio (ε) adjustment	0.95	0.95/0.7 (Switchable)	0.95	0.95/0.7 (Switchable)
Back-light function	N/A	Available	N/A	Available
Temperature unit	°C/°F (Switchable)			
Power supply	AA (Alkaline battery) x 2pcs.			
Battery life (Alkaline)	Approx. 60 hours	Approx. 30 hours	Approx. 60 hours	Approx. 30 hours
Ambient temperature	0 to 50°C (32 to 120°F)			
Ambient humidity	35 to 85%RH (Without dew condensation)			
Storage temperature	-10 to 60°C (14 to 140°F)			
Dimensions	H x W x D = 140 x 56 x 37mm			
Weight (Incl. battery)	175g	180g	175g	180g

Standard accessories : "AA" (Alkaline Battery) x 2pcs. Optional accessories : Black tape, Protective pouch  
 \* Design and specifications may change for product improvement without prior notice.

## Display and Functions



## Field of View



※ The laser axis (PT-2LD/02LD only) is located 20mm left from the optical axis.  
 ※ The optical resolution values stated in "Field of View" are at 90% energy. The size of target object should be sufficiently larger than the field of view (spot size) shown in the above illustration.

## Safe Usage

<b>WARNING</b>	Do not look into the laser beam, nor point it directly at eyes. Even the reflection is harmful. This laser may cause eye injury or damage to your health. (PT-2LD/02LD only)
<b>CAUTION</b>	This product is not a clinical thermometer; therefore, cannot be used for medical purposes.

## Environmental Warnings

- ⊘ **AVOID GETTING THE THERMOMETER WET. DO NOT USE IN WATER.**  
This thermometer is not waterproof.
- ⚠ **KEEP THE THERMOMETER AWAY FROM STRONG ELECTROMAGNETIC SOURCES OR LARGE ELECTROMAGNETIC FIELDS.**  
Usage in such environments may cause irreparable damage or incorrect measurement.
- ⚠ **KEEP THE THERMOMETER AWAY FROM DIRECT SUNLIGHT, DUST, HIGH TEMPERATURES AND HIGH HUMIDITY DURING USE AND STORAGE.**  
This may cause irreparable damage or incorrect measurement.
- ⚠ **DO NOT EXPOSE THE THERMOMETER TO SUDDEN TEMPERATURE CHANGES.**  
Sudden temperature change of the environment may cause incorrect measurement. In such cases, wait until the thermometer reaches steady temperature before taking measurement.

## Usage Warnings

- ⚠ **AVOID MEASURING SHINY OBJECTS.**  
Shiny objects, of which emissivity value is low, reflect surrounding temperatures. As this thermometer's sensitivity to emissivity is fixed at 0.95/0.70, the displayed temperature could differ from the actual temperature of the object, which has the different emissivity value. When you wish to measure shiny objects like metals, put a piece of optional black tape or apply black paint/marker on the surface and measure the masked area using emissivity setting of 0.95.
- ⚠ **DO NOT LET THE THERMOMETER TOUCH THE OBJECT THAT IS BEING MEASURED.**  
This is a non-contact thermometer. Touching or getting too close to the objects with high temperatures may cause irreparable damage or incorrect measurement.

Products mentioned in this catalogue are equipped with Class 2 laser.  
 In case of re-export to foreign countries, please confirm the relevant regulation for laser products in the destination country.

### [Option] Black Tape HB-250



- Dimensions: 60 x 2000mm
- ※ Withstand heat up to 250°C

### [Hint for accurate measurement]

The black tape (HB-250) is designed for more accurate measurement, especially if the target object has a shiny surface. Apply HB-250 on the surface of the target and measure the area covered by HB-250 with emissivity setting at 0.95.

### [Option] PH-3



Protective Pouch for PT-2&3 with lear window & belt clip.



Easy to carry with detachable belt clip.



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