



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**

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

**Single
Touch**

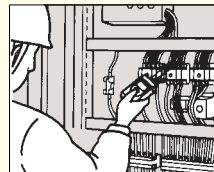
Compact

- 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)

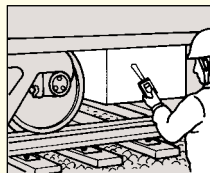
Applications



Motor/ Machine



Electric Wiring / Transformer



Transport/Automotive



Freezer / Refrigerator



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

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

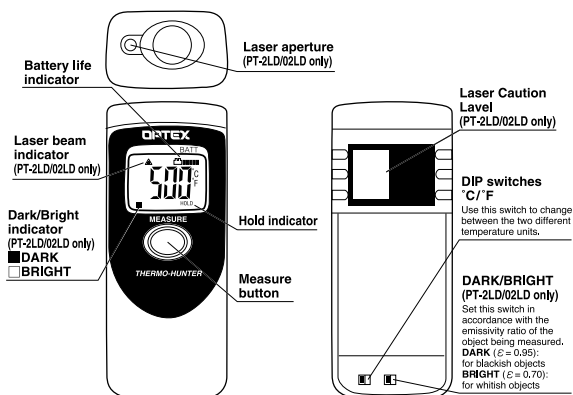
PT-2/02series Portable Non-Contact Thermometer

Specifications

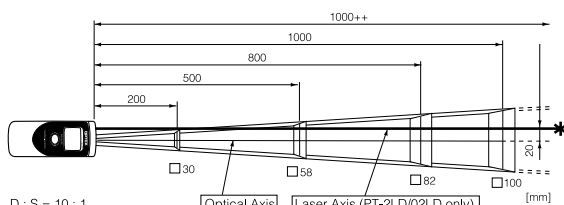
Model	PT-2L	PT-2LD	PT-02L	PT-02LD
Measuring range	-40 to 510°C (-40 to 950°F)		-40 to 200°C (-40 to 392°F)	
Display range	-51 to 538°C (-60 to 1000°F)		-50 to 230°C (-58 to 446°F)	
Field of view	□100/1000mm (D: S=10:1) square spot			
Optics	mirror/silicon filter			
Sensing element/Wavelength	Thermopile/8 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



D : S = 10 : 1

* 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

WARNING	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)
CAUTION	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 clear window & belt clip.



Easy to carry with detachable belt clip.



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