



# Multifunction

PT-7LD offers reliability as a measuring instrument equipped for practical application requests in the field.

## New Product Information

### Portable Non-Contact Thermometer

## THERMO-HUNTER PT-7LD

**NEW**

**Waterproof: IP67**

#### New Function

- Hi/Lo Alarm: Buzzer & LED
- 99-Point Data Memory
- Normal/Continuous mode

#### Features

- Measuring Range:  $-30.0$  to  $200.0^{\circ}\text{C}$
- Resolution:  $0.1^{\circ}\text{C}/^{\circ}\text{F}$
- Quick Response:  $0.7\text{sec.}$
- Laser Marker
- 2-mode Emissivity
- Back Light
- Hygienically Clean Body



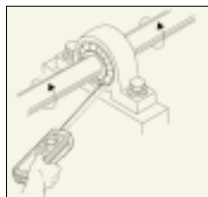
#### Application



Freezer/Refrigerator



Electric Wiring/Transformer



Bearing



Motor/Machine

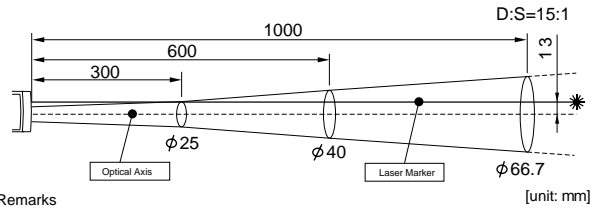
# PT-7LD Portable Non-Contact Thermometer

## Specification

Model	PT-7LD
Measuring range	- 30.0 to 200.0 ( - 22.0 to 392.0°F )
Display range	- 40.0 to 220.0 ( - 40.0 to 428.0°F )
Optics	mirror/silicon filter
Sensing element/Wavelength	Thermopile/8 to 14μm
Response time	0.7sec./90%
Accuracy( 0.95 at 25 ±3 )	-0.0 : ±3.0 , 0.1 to 100.0 : ±1.0 , 100.1 to 200.0 : ±2.0
Temperature unit	°C/°F Selectable
Display resolution	0.1 /°F
Repeatability	± 1.0 of reading value
Sighting method	Laser beam marker( Class2 )
HOLD time	15 seconds
Back-light function	Available
Emissivity( ) Adjustment	HOT( = 0.95 )/COLD( = 0.85 )Selectable
Continuous measurement mode	ON/OFF Selectable
High/Low Alarm LED/Buzzer	ON/OFF Selectable
Memory	99-point memory
Power supply	9V layer-built alkaline dry battery( 1 piece )
Battery life	15 Hours( With alkaline battery, max load )
Ambient temperature	0 to 50
Ambient Humidity	35 to 85%RH( Without due condensation )
Storage temperature	- 10 to 60
Protective structure	IP67
Material	ABS( Antibacterial )
Dimension	H × W × D = 160 × 44 × 42mm
Weight	200g( incl. Battery )

Accessories: 9V layer-built alkaline dry battery(1 piece), Quick Reference card.  
Design and specifications are subject to change for product improvement without prior notice.

## Field of view



Remarks  
The laser marker points 13mm off to the left from the optical axis.  
The optical resolution values stated in " Field of View " are at minimum 90% energy.  
The size of measuring object should be sufficiently larger than the field of view (spot size) shown in the above illustration.  
The temperature value displayed on LCD is the average temperature within the spot size.

## LCD Display & Overview of features

**HI/LO Alarm**  
High Alarm: LED(red) & Buzzer(high tone)  
Low Alarm: LED(green) & Buzzer(low tone)

**Battery Level Indicator**

**iC/iF Selectable**

**Emissivity( )**  
0.95 or 0.85 selectable

**Backlight**

**99-point Data Memory**  
Internal memory stores up to 99 reading

**LASER Indicator**

**HOLD**  
Hold the last reading for 15sec.

**MEM.NO.**

## INTERNATIONAL PROTECTION

A rating system defined by the standards of IEC (International Electrotechnical Commission) to determine grades of protection pertaining enclosures for various environments.

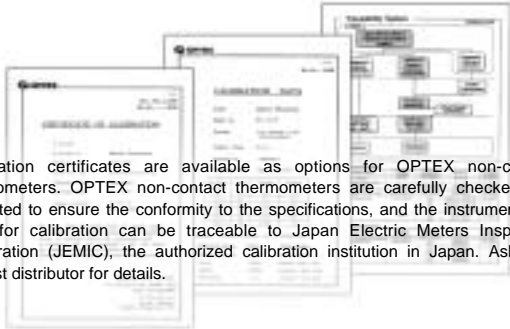
### IP67

Protection against accidental contact by the human body and foreign bodies  
**IP6 : No dust comes inside the body**  
NOTE: Dust Protection herein means against dusts under 75μm

Protection against the penetration of liquids  
**IP 7: No water comes inside the body by immersing in water for 30 minutes in 1m depth.**

## OPTEX infrared non-contact thermometers " Quality assured "

Calibration certificates are available as options for OPTEX non-contact thermometers. OPTEX non-contact thermometers are carefully checked and calibrated to ensure the conformity to the specifications, and the instrumentation used for calibration can be traceable to Japan Electric Meters Inspection Corporation (JEMIC), the authorized calibration institution in Japan. Ask your nearest distributor for details.



## 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.
<b>CAUTION</b>	This product is not a clinical thermometer; therefore, can not be used for medical purposes.

## Environmental Warnings

- ⊘ **KEEP THE THERMOMETER AWAY FROM DROPPING WATER AND DO NOT USE IN WATER.**  
This thermometer has waterproofing, but it cannot be operated in the water. Water drops on the filter or the area around it may cause incorrect measurement. Wipe up the filter and the area around it completely before taking measurement.
- ⚠ **KEEP THE THERMOMETER AWAY FROM STRONG ELECTROMAGNETIC SOURCES.**  
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.

## 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 0.95/0.85, the displayed temperature could differ from the actual temperature of objects, which has different emissivity value. When you wish to measure shiny object like metals, put a piece of optional black tape or apply black paint/marker on the surface of the measuring object.
- ⚠ **DO NOT LET THE THERMOMETER TOUCH THE OBJECT THAT IS BEING MEASURED.**  
The unit is a non-contact thermometer's. Touching or getting too close to the objects with high temperatures may cause irreparable damage or incorrect measurement.

Product mentioned in this catalogue equips a laser element classified Class2. In case of re-export to foreign countries, please confirm the relevant regulation for laser products in the destination country.



**OPTEX CO., LTD.**  
4-7-5 Nihonhama Otsu 520-0801 JAPAN  
TEL: +81-77-524-6049 FAX: +81-77-524-1491  
URL: www.optex.co.jp