

Portable non-contact thermometer
Waterproof, shock-resistant type
(high-resolution)

Measurement range

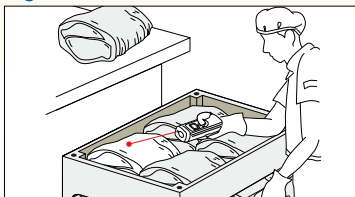
-30 to 200°C (-22 to 392°F)

THERMO-HUNTER®

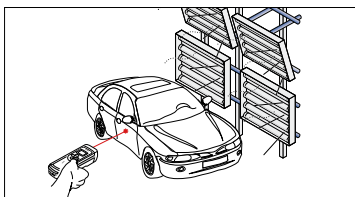
PT-7LD



Temperature control of delivered
ingredients for food



Temperature control for painted
surfaces of cars



レーザー光
ビームをのぞきとらないこと
最大出力 1.0mW 波長 630~670nm
クラスIIレーザー製品

レーザー光が直接あるいは鏡面体で反射して
目に入らないようにご注意ください。



Waterproof/
dustproof IP67

Shock-resistant
structure

Continuous
measurement

Data
memory

Upper/lower
limit alarm

Built-in
laser marker

Backlight

Antibacterial
resin body

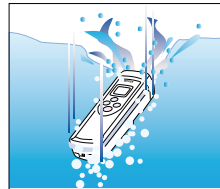
Features

±1°C (1.8°F) high-accuracy measurement at room temperature

Between 0.1 and 100.0°C (32.2 and 212°F), the product is capable of an accuracy of ±1.0°C (1.8°F).

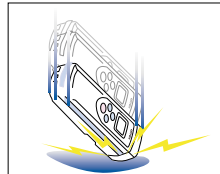
This is extremely beneficial in situations where accuracy is required.

Washable waterproof/dustproof body



This product is designed to solve the problem of equipment breaking down after water or dust gets inside. The PT-7LD offers IP67 protection (JIS protection level 7) for a waterproof and dustproof design. The product can be used with wet hands and washed without problem.

Excellent shock-resistant structure



The product construction is designed to withstand drops from a height of 1 m. This provides protection from accidental drops. For users, this gives the added benefit of peace of mind.

99-entry data memory function

This product is equipped with a memory function capable of recording up to 99 data entries. This eliminates the need for a PC or a data logger. This function is ideal for HACCP, which is considered an important factor for controlling and recording food temperatures.

Antibacterial resin body with no need for disinfecting

The PT-7LD is a non-contact thermometer, so temperatures can be checked without having to touch the target, which is especially helpful in the food industry where cleaning instruments to prevent secondary infection can be troublesome. In addition, the product is made with the world's first antimicrobial resin, making it ideal for sanitary equipment management. This is an HACCP-recommended product.



What is HACCP?

Hazard Analysis and Critical Control Points (HACCP) is a safety management method adopted in Japan that uses constant management and recording of records to analyze the causes of harm caused by microorganism throughout the manufacturing process for foods with a focus on specific items determined to be of importance. In each analysis process, one of the most important aspects of management is the measurement and recording of temperatures.

Continuous measurement function

Measurement can be initiated even without pressing the button. Linking this function with the alarm function allows for even greater improvements.

Silicone filter resistant to radiant heat

Ever run into a situation where bringing the thermometer close to a measurement target causes the lens to become distorted due to radiant heat, thus preventing accurate measurement of temperatures? This product adopts a heat-resistant silicone filter to prevent such problems.

Upper/lower limit alarm function with audio and visual notifications

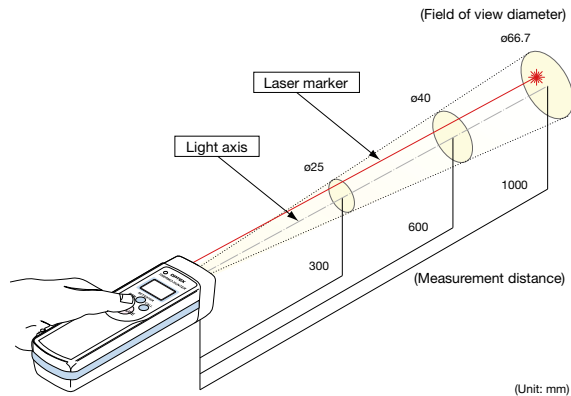
Exceeding the set temperature causes the buzzer to sound and one of two LED colors to be shown (red for upper limit, and green for lower limit). This allows users to immediately detect temperature errors even without looking at the display screen, greatly improving work efficiency.

Specifications

Model	PT-7LD
Measurement range	−30.0 to 200.0°C (−22 to 392°F) (Display: −40 to 220.0°C (−40 to 428°F))
Field of view	ø66.7 mm/1000 mm (Refer to field of view)
Optics	Mirror type/Silicone filter
Sensing element/spectral response	Thermopile/8 to 14 μm
Response time	0.7 sec./90% response
Accuracy (ε=0.95)	Up to 0.0°C (32°F): ±3.0°C (5.4°F), 0.1 to 100.0°C (32.2 to 212°F): ±1.0°C (1.8°F), 100.1 to 200.0°C (212.2 to 392°F): ±2.0°C (3.6°F)
Repeatability	±1.0°C (1.8°F) of reading
Display resolution	0.1°C (32.2°F)
Emissivity (ε) adjustment	0.95/0.85, switchable (display switching)
Sighting function	PSC-certified laser marker (Class 2)
Functions	Continuous measurement function (ON/OFF switchable) Upper/lower temperature limit alarm function (ON/OFF switchable LED and buzzer) Data memory function (99 entries) Backlight Automatic power off function
Power supply	9 V alkaline battery ×1
Battery life	Approx. 12 hours (when using alkaline batteries at max. load)
Ambient temperature	0 to 50°C (32 to 122°F)
Ambient humidity	35 to 85% RH (no condensation)
Storage temperature	−10 to 60°C (14 to 140°F)
Degree of protection	IP67 (equivalent to Grade 7 in the JIS protection rating)
Material	ABS (anti-bacterial specification)
Dimensions	H × W × D = 160 mm × 44 mm × 42 mm
Weight	Approx. 200 g (including batteries)
Standard included accessories	9 V alkaline battery ×1, Quick manual

*Note that specifications are subject to change without prior notice for product improvement purposes.

Field of view



*How to read the diagram

At 300 mm from a measurement target, the product measures the average temperature of a 25 mm diameter surface area (surface area within the circle).

*The laser marker is located 13 mm to the left of the light axis.

*The measurement fields of view stated above are measurement diameters with an optical response of 90%. The size of the measurement target must be sufficiently larger than the figures shown in the above diagram.

Options/Accessories

Black tape for glossy objects

HB-250



When attached to the surface of an object with unknown emissivity or a glossy object, this tape provides an emissivity of 0.95, enabling accurate non-contact temperature measurement. Emissivity on the PT-7LD can be switched between two levels. Set the emissivity to 0.95 (HOT) for use. The tape is built with material resistant to heat up to 250°C (482°F). Total area: 60 mm × 2000 mm

Selection guide

Stationary-type

CS

SA-80

BA

BA-TC

BS

BS-02

BF

Portable-type

PT-7LD

PT-5LD

PT-S80
PT-U80

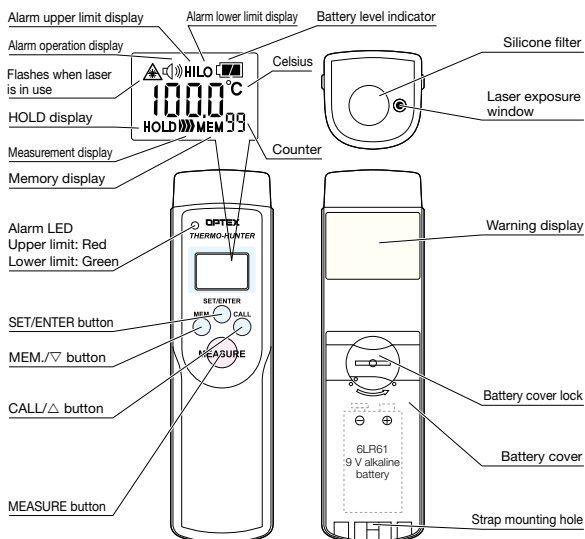
PT-2LD

PT-3S

Q & A

Support

Names of components



Correct use

Situations where measurement may be difficult

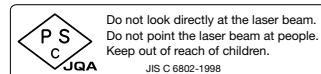
- When measuring a mirror-like surface such as shiny metal.
(Measure after attaching optional accessory HB-250 or after creating a matte finish using paint or the like.)
- When measuring through glass.

Correct use

- Be sure to read the instruction manual thoroughly before using the product.
- This instrument is not a thermometer for taking body temperatures. It is not intended for use in medical practices.
- Although this product is waterproof, it cannot be used for underwater measurements. Moreover, any droplets adhering to the filter or around the filter can cause measurement errors. Be sure to wipe well before use.
- Sudden changes in ambient temperature can cause measurement errors. Please ensure the product is not subject to sudden temperature changes during use.
- Avoid using the product near objects that generate strong electromagnetic waves.

Laser beam

- This product uses a Class 2 laser that conforms to JIS C 6802.
- Use the product according to the affixed warning labels.
- This product is a portable device that features a laser marker certified by JQA (Japan Quality Assurance Organization).



Exporting

- Laser warning labels
- Product specifications and warning labels may differ slightly depending on the laws and compliance standards of the export destination country. Contact us for details.