

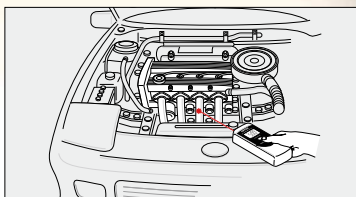
**Portable non-contact
thermometer
Wide measurement range type**

Measurement range
-40 to 510°C (-40 to 950°F)

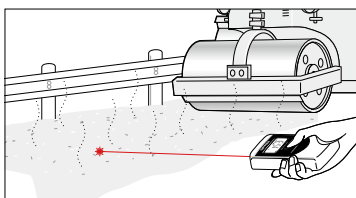
**THERMO-HUNTER®
PT-2LD**



Automotive maintenance



Asphalt construction temperature



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2 レーザ製品

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



Wide meas.
range

Built-in
laser guide

Simple
operation

Large LCD
display

Backlight

Automatic
power off

Features

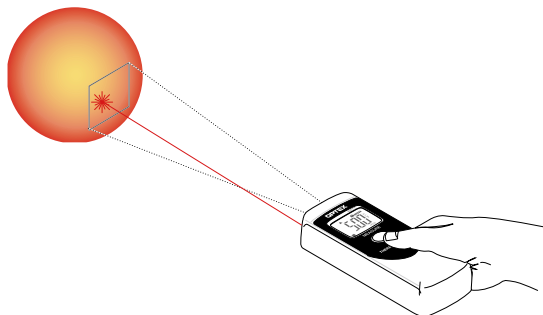
-40 to 510°C (-40 to 950°F) wide-range type

This wide-range thermometer can measure from negative temperatures, such as for frozen foods, up to 500°C (932°F).

Every PT-2LD thermometer can be used in a wide range of industries and for a wide variety of applications.

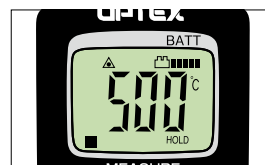
Sighting function laser marker included

The laser marker allows users to verify the measurement location even from a distance.



Large LCD and backlight function

This product uses a large LCD screen to display temperatures clearly. The included backlight function allows for reliable use even in dark locations.



Simple, one-button operation

Thanks to a simple design, users can start measurement, turn on the laser, and illuminate the backlight just by pressing one button. This allows for quick measurement immediately after taking the product out of a pocket.

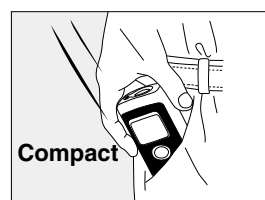


Energy-saving automatic power off function

This function is designed to save power by automatically turning off the power following the 20-second operation of the hold function after a button has been released.

Compact, pocket-sized body

The product is small and lightweight, weighing only 180 g. This compact, pocket-sized design makes it incredibly portable.

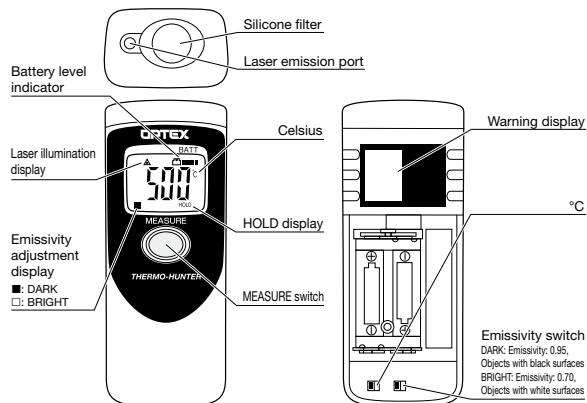


Specifications

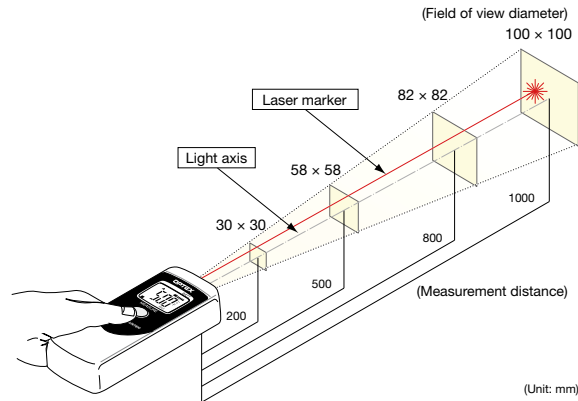
Model	PT-2LD
Measurement range	−40 to 510°C (−40 to 950°F) (Display: −51 to 538°C (−59.8 to 1000.4°F))
Field of view	100 × 100 mm / 1000 mm (Refer to field of view)
Optics	Mirror type/Silicon filter
Sensing element/spectral response	Thermopile/8 to 14 μm
Response time	0.8 sec./90% response
Accuracy (ε=0.95)	Up to 0°C (32°F): ±3°C (5.4°F), 0 to 200°C (32 to 392°F): ±2°C (3.6°F), 201°C (393.8) and up: ±1% of reading
Repeatability	±1°C (1.8°F) of reading
Display resolution	1°C (33.8°F)
Emissivity (ε) adjustment	0.95/0.70, switchable (switching via DIP switch)
Sighting function	PSC-certified laser marker (Class 2)
Functions	Backlight Automatic power off function
Power supply	AA alkaline battery ×2
Battery life	Approx. 30 hours (when using alkaline batteries)
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)
Dimensions	H × W × D = 140 mm × 56 mm × 37 mm
Weight	Approx. 180 g (including batteries)
Standard included accessories	AA alkaline batteries ×2, Strap

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

Names of components



Field of view



*How to read the diagram

At 200 mm from a measurement target, the product measures the average temperature of the square surface area (30 mm × 30 mm).

*The laser marker is located 20 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-2LD can be switched between two levels. Set the emissivity to 0.95 (DARK) for use. The tape is built with material resistant to heat up to 250°C (482°F).
Total area: 60 mm × 2000 mm

Correct use

Situations where measurement may be difficult

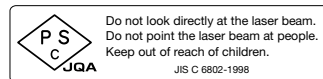
- When measuring a mirror-like surface such as shiny metal.
- (Measure after attaching optional accessory HB-250 or after creating a matte finish using paint or the like.)
- When measuring through glass.

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.
- This product is not waterproof. Do not use this product in water or in a location where it may be exposed to water.
- 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.



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

Pen-type non-contact thermometer
with $\varnothing 2.5\text{mm}$ fine-spot type

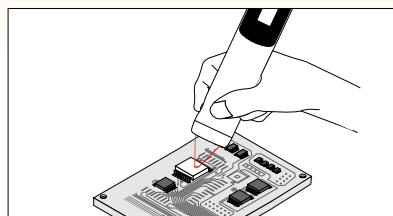
Measurement range

0 to 200°C (32 to 392°F)

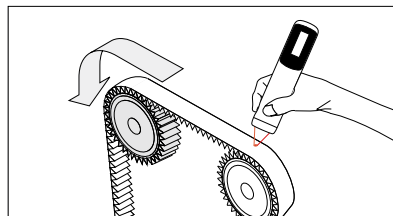
THERMO-HUNTER[®]
PT-3S



Surface temperature measurement
of electronic components



Surface temperature
measurement of belt



$\varnothing 2.5\text{ mm}$ micro-point
measurement

Red LED
spot marker

Analog
output

Continuous
measurement

MAX
hold

Small, lightweight
(120 g)

Features

$\varnothing 2.5\text{ mm}$ fine spot

With extremely small targets with a small thermal capacity, measurement using conventional contact thermometers is difficult due to the effects of heat during contact.

The PT-3S, however, is a non-contact thermometer capable of instantly measuring very small objects as small as $\varnothing 2.5\text{ mm}$. Thanks to simple, single-button operation, measurements are instantaneous.



Spot marker and alarm notifications

To ensure reliable measurement, the product includes a red spot marker indicating the field of view. In addition, the safe design notifies the user via alarm when nearing the minimum $\varnothing 2.5\text{ mm}$ measurement diameter.



Built-in continuous measurement function

The continuous measurement function allows for consecutive measurements without having to press a button.

Data sampling with analog output

The product provides $1\text{ mV}/^{\circ}\text{C}$ of analog output as standard. This is ideal for extended data acquisition when used in combination with the continuous measurement function. (Analog output cable included as standard.)



Energy-saving automatic power off function

This function is designed to save power by automatically turning off the power following the 10-second operation of the hold function.

Pocket-sized pen type

The PT-3S is a pen-type thermometer that is perfect for using at a desk. This makes use easy through the familiar sensation of holding a pen.

The product is also designed to be compact for easy storage in a pocket. This makes carrying the product around much more convenient.

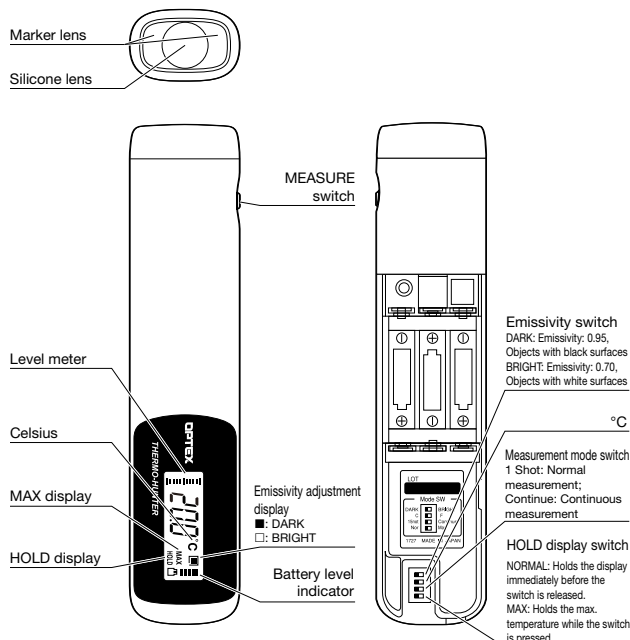


Specifications

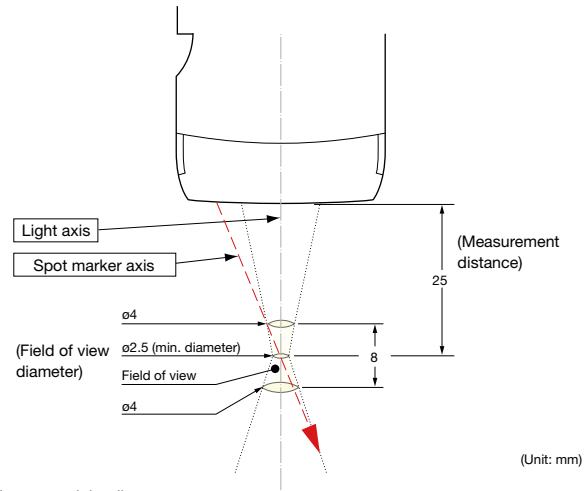
Model	PT-3S
Measurement range	0 to 200°C (32 to 392°F) (Display: -30 to 230°C (-22 to 446°F))
Field of view	ø2.5 mm/25 mm (Refer to field of view)
Optics	Silicone lens
Sensing element/ spectral response	Thermopile/8 to 14 µm
Response time	1.5 sec./90% response
Accuracy (ε≈0.95)	±3°C (5.4°F) of reading
Repeatability	±1°C (1.8°F) of reading
Display resolution	0 to 200°C (32 to 392°F): 0.1°C (32.2°F), -30 to 0°C (-22 to 32°F), 200 to 230°C (392 to 446°F): 1°C (33.8°F)
Emissivity (ε) adjustment	0.95/0.70, switchable (switching via DIP switch)
Sighting function	Red LED spot marker
Functions	Analog output function: 1 mV/°C (output resolution: 0.25°C (32.5°F)) Continuous measurement function (switching via DIP switch) Hold function (NORMAL/MAX switchable / switching via DIP switch) Automatic power off function
Power supply	AAA alkaline battery ×3
Battery life	Approx. 40 hours (when using alkaline batteries)
Ambient temperature	0 to 50°C (32 to 122°F)
Ambient humidity	35 to 85% RH (no condensation)
Storage temperature	-20 to 70°C (-4 to 158°F)
Dimensions	H × W × D = 175 mm × 38 mm × 25.5 mm
Weight	120 g (including batteries)
Standard included accessories	AAA alkaline battery ×3, Analog output cable, Dedicated protective case

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

Names of components



Field of view



*How to read the diagram

At 25 mm from a measurement target, the product measures the average temperature of a 2.5 mm diameter surface area (surface area within the circle).

*The measurement fields of view stated above are measurement diameters with an optical response of 90%. The size of the measurement target must be approx. 1.5 times larger than the measurement diameters 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-3S can be switched between two levels. Set the emissivity to 0.95 (DARK) for use. The tape is built with material resistant to heat up to 250°C (482°F).
Total area: 60 mm × 2000 mm

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.
- This product is not waterproof. Do not use this product in water or in a location where it may be exposed to water.
- 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.

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

Portable non-contact thermometer
Waterproof, shock-resistant type

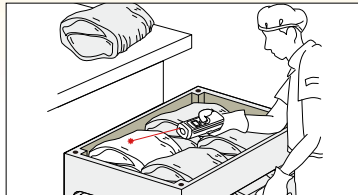
Measurement range
0 to 500°C (32 to 932°F)

THERMO-HUNTER®

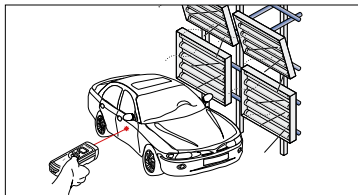
PT-5LD



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 650nm-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

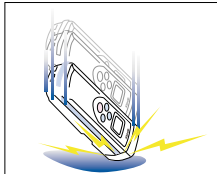
Features

Washable waterproof/dustproof body



This product is designed to solve the problem of equipment breaking down after water or dust gets inside. The PT-5LD 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-5LD 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.

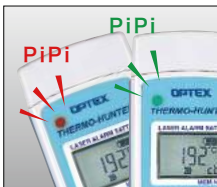
Continuous measurement function

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



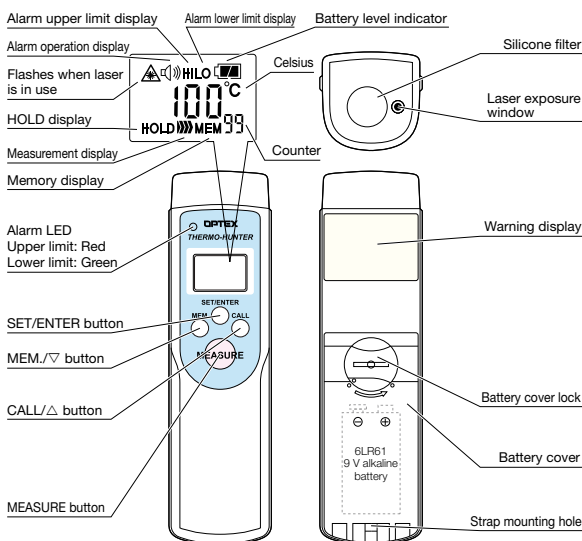
Exceeding the set temperature causes the buzzer to sound and one of two LED colors to be shown (red for upper limit, and green for lower limit). This allows users to immediately detect temperature errors even without looking at the display screen, greatly improving work efficiency.

Specifications

Model	PT-5LD
Measurement range	0 to 500°C (32 to 932°F) (Display: -10 to 650°C (14 to 1202°F))
Field of view	ø66.7 mm/1000 mm (Refer to field of view)
Optics	Mirror type/Silicon filter
Sensing element/spectral response	Thermopile/8 to 14 μm
Response time	0.7 sec./90% response
Accuracy (ε=0.95)	0 to 200°C (32 to 392°F): ±2°C (3.6°F), 201 to 500°C (393.8 to 932°F): ±1%
Repeatability	±1°C (1.8°F) of reading
Display resolution	1°C (33.8°F)
Emissivity (ε) adjustment	0.95/0.70, 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 battery ×1, Quick manual

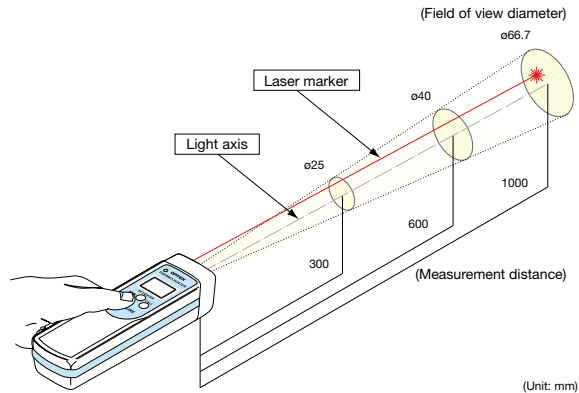
*Note that specifications are subject to change without prior notice for product improvement purposes.

Names of components



Waterproof, shock-resistant type PT-5LD

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-5LD can be switched between two levels. Set the emissivity to 0.95 (DARK) for use. The tape is built with material resistant to heat up to 250°C (482°F). Total area: 60 mm × 2000 mm

Correct use

Situations where measurement may be difficult

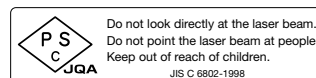
- When measuring a mirror-like surface such as shiny metal.
- (Measure after attaching optional accessory HB-250 or after creating a matte finish using paint or the like.)
- When measuring through glass.

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:
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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



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

Measurement range

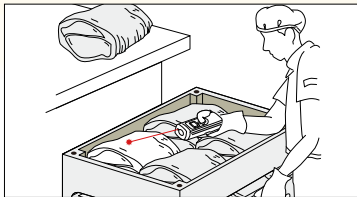
-30 to 200°C (-22 to 392°F)

THERMO-HUNTER®

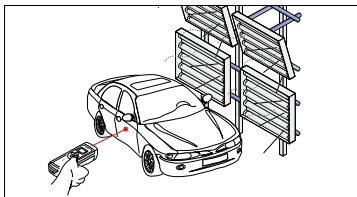
PT-7LD



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に反射して
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

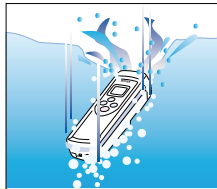
Features

±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).

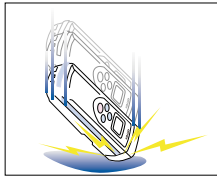
This is extremely beneficial in situations where accuracy is required.

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

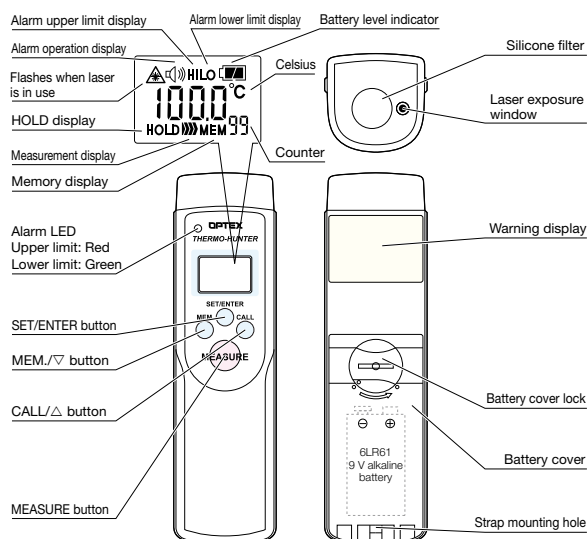
Exceeding the set temperature causes the buzzer to sound and one of two LED colors to be shown (red for upper limit, and green for lower limit). This allows users to immediately detect temperature errors even without looking at the display screen, greatly improving work efficiency.

Specifications

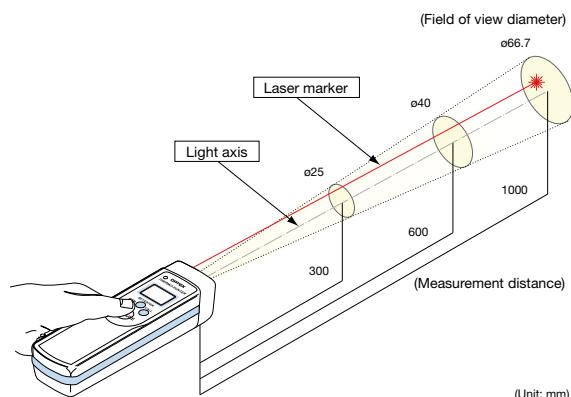
Model	PT-7LD
Measurement range	−30.0 to 200.0°C (−22 to 392°F) (Display: −40 to 220.0°C (−40 to 428°F))
Field of view	ø66.7 mm/1000 mm (Refer to field of view)
Optics	Mirror type/Silicone filter
Sensing element/spectral response	Thermopile/8 to 14 μm
Response time	0.7 sec./90% response
Accuracy (ε=0.95)	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.

Names of components



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

Correct use

Situations where measurement may be difficult

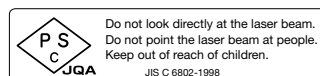
- When measuring a mirror-like surface such as shiny metal.
(Measure after attaching optional accessory HB-250 or after creating a matte finish using paint or the like.)
- When measuring through glass.

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.

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

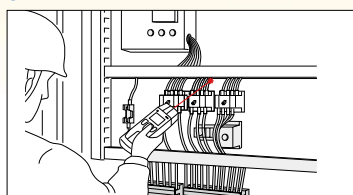
Portable non-contact thermometer
Long range with narrow FOV type

Measurement range
-30 to 600°C (-22 to 1112°F)

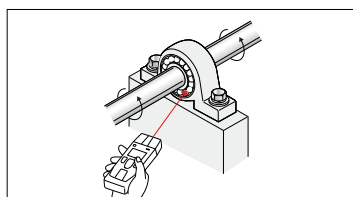
THERMO-HUNTER®
PT-S80, PT-U80
(with USB output)



Checking for abnormal heat
generation on switchboards



Checking for abnormal heat
generation in bearings



- EL backlight with illuminance sensor
- Large 3-row display LCD
- Coaxial laser marker
- Upper/lower limit alarm
- USB output (U80 only)
- Data recording

Features

Striving for easier readability

The product's LCD is equipped with an EL backlight to make measurement results more easily readable. In addition, the large-size LCD screen includes a three-area display for a brighter, bigger presentation of information. Designed to be energy-efficient, the EL backlight includes an illuminance sensor that automatically turns the display off whenever it is not needed.

POINT ① Built-in EL backlight

POINT ② 34 x 34 mm large LCD screen



Display (full-sized)

In the pursuit of convenience

In order to make the most effective use of measured data, the PT-U80 is equipped with a function that allows data recorded onto the unit to be transmitted to a PC via USB. The captured data can then be applied to a report form prepared in advance for easy report creation. Configuration of various settings and performing various operations on the PT-U80 can also be done from the PC. Access the Optex FA homepage to download the necessary PC software.

POINT ① Easy connection to PC via USB

POINT ② Comes equipped with simple report form

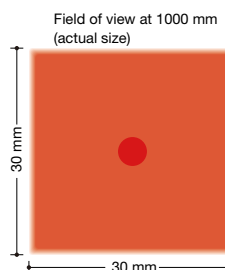


Dedication to being easy to understand

Knowing an exact measurement point is difficult if the location of the laser pointer is not in line with the actual measurement point. The PT-80, however, is equipped with a coaxial laser marker (PSC-certified high-brightness laser) that provides a constant red dot at the center of the measurement area.

POINT

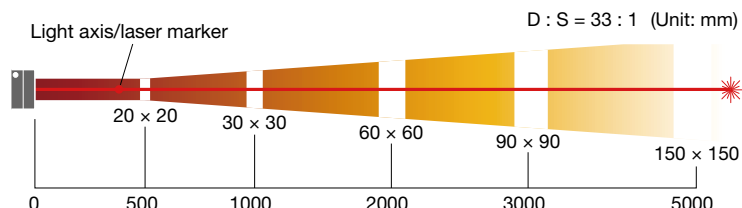
Built-in coaxial laser marker for easy determination of measurement location



Dedication to enabling simple measurement

At a distance of 1 m, the PT-80 measurement area is 30 x 30 mm. At a distance of 5 m, the product's long-focus design provides a measurement area of 150 x 150 mm. This enables safe, reliable measurement even in situations where approaching the target can be dangerous.

POINT Long-focus design for measurement from a distance



Specifications

Model	PT-S80	PT-U80 (with USB output)
Measurement range	-30 to 600°C (-22 to 1112°F)	
Field of view	30 × 30 mm / 1000 mm (D : S = 33 : 1)	
Optics	Si lens	
Sensing element	Thermopile	
Measurement spectral response	8 to 14 μm	
Response time	0.5 sec./90% response	
Accuracy (ε≈0.95)	-30.0 to 0°C (-22 to 32°F): ±3°C (5.4°F), 0.1 to 200°C (32.2 to 392°F): ±2°C (3.6°F), 201 to 600°C (393.8 to 1112°F): ±1%	
Repeatability	±1°C (1.8°F) of reading	
Display resolution	-30.0 to 199.9°C (-22 to 391.8°F): 0.1°C (32.2°F), 200 to 600°C (392 to 1112°F): 1°C (33.8°F)	
Sighting function	PSC-certified coaxial laser marker (Class 2)	
HOLD time	15 seconds	
Continuous measurement switching	-	ON/OFF switchable
USB output	-	Yes
Data recording	Single-entry memory	35-entry memory (150 entries max.)
Backlight	EL backlight with illuminance sensor	
Upper/lower temperature limit alarm	Alarm LED and buzzer, ON/OFF switchable	
Emissivity (ε) adjustment	0.95/0.85/0.70 (switchable)	Variable emissivity (0.3 to 1.20, 0.01 per step)
Display function	NOR/MAX/MIN	
Power supply	AA alkaline battery ×2	
Battery life	Approx. 15 continuous hours (at max. load)	
Ambient temperature	0 to 50°C (32 to 122°F)	
Ambient humidity	35 to 85% RH (no condensation)	
Storage temperature/humidity	-10 to 60°C (14 to 140°F)/35 to 85% RH	
Material	ABS/TEEE	
Dimensions	H × W × D = 182 mm × 56 mm × 38 mm	
Weight	Approx. 250 g (including batteries)	
Standard included accessories	AA alkaline batteries ×2 (for operation checking), Instruction manual, Dedicated carrying case, USB cable (PT-U80 only)	

*1: The dedicated PT-U80 software is available for free download from the Optex FA homepage.

*2: Peripheral devices connected to the PC may prevent correct operation.

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

Options/Accessories

Black tape for glossy objects

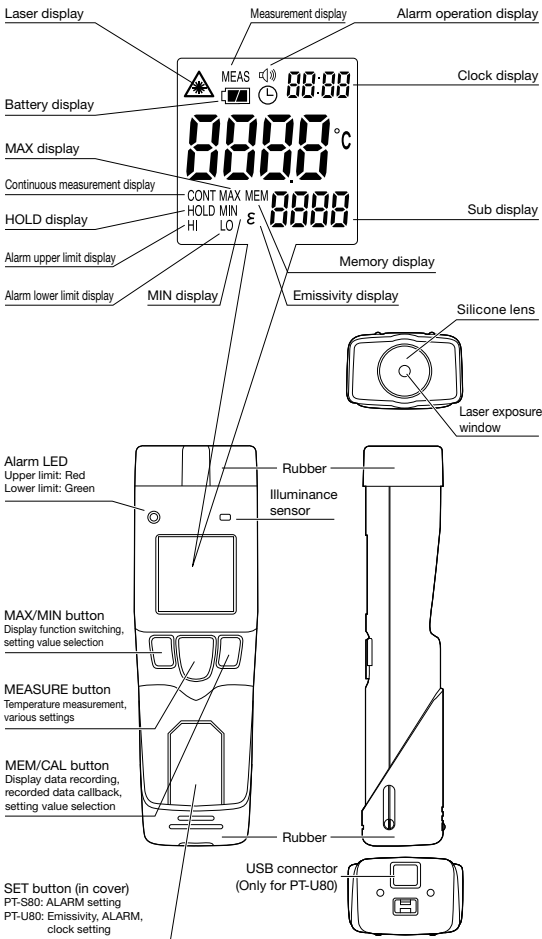
HB-250



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. When using the tape, set the emissivity to ε = 0.95. The tape is built with material resistant to heat up to 250°C (482°F).

Total area: 60 mm × 2000 mm

Names of components



Correct use

Situations where measurement may be difficult

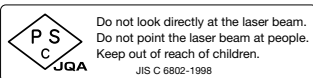
- When measuring a mirror-like surface such as shiny metal.
*(Measure after attaching optional accessory HB-250 or after creating a matte finish using paint or the like.)
- When measuring through glass.

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.
- This product is not waterproof. Do not use this product in water or in a location where it may be exposed to water.
- 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

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