

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

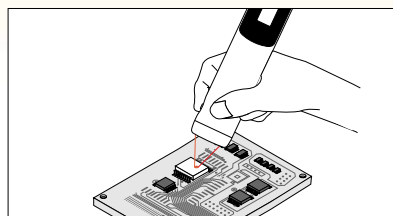
Measurement range

0 to 200°C (32 to 392°F)

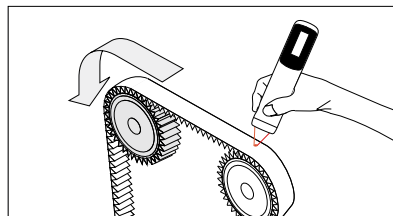
THERMO-HUNTER[®]
PT-3S



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.

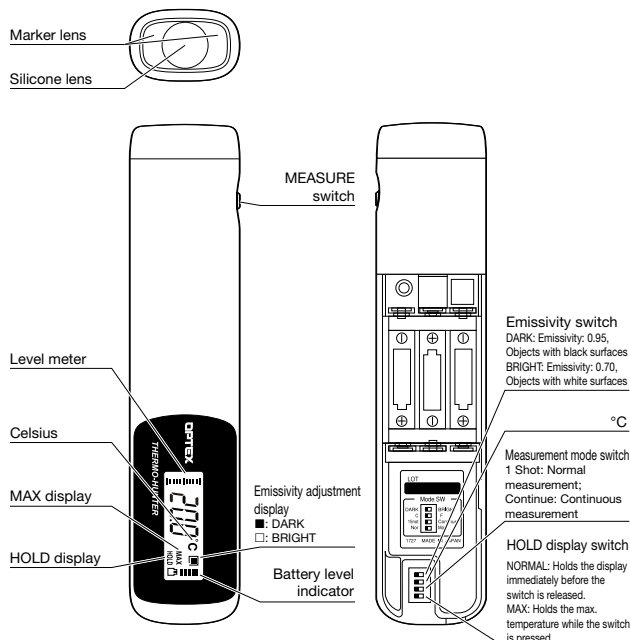


Specifications

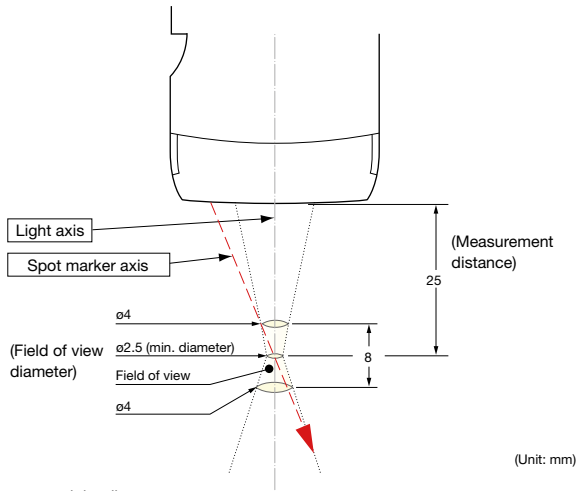
Model	PT-3S
Measurement range	0 to 200°C (32 to 392°F) (Display: -30 to 230°C (-22 to 446°F))
Field of view	ø2.5 mm/25 mm (Refer to field of view)
Optics	Silicone lens
Sensing element/ spectral response	Thermopile/8 to 14 µm
Response time	1.5 sec./90% response
Accuracy (ε≈0.95)	±3°C (5.4°F) of reading
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