

Contact / Non-Contact Food Temperature Meter PCE-IR 100



PCE-IR 100 is both an infrared non-contact thermometer for measuring surface temperature and a contact thermometer with probe for measuring core temperature of food. This food-grade thermometer allows for quick and easy testing of food surface temperatures without contamination using the infrared sensor, while also offering the possibility of testing food internal temperatures using the food-quality sensor probe, making the thermometer a useful tool for complying with the hazard analysis and critical control points (HACCP) system.

The HACCP system was established to ensure food safety and consistent product quality. Food cannot be put into circulation if it doesn't meet strict safety standards like those in the HACCP. Temperature checks should be made frequently throughout the food supply chain. It is particularly important to test perishable food temperature during transport, as food products can travel significant distances to reach their final destination.

- ▶ Ideal for use in food processing, food inspection, food safety, food quality control, food preparation and food catering applications
- ▶ Aids in compliance with the hazard analysis and critical control points (HACCP) system
- ▶ Sensor probe folds into unit for convenient storage
- ▶ Accurately covers a wide measurement range
- ▶ Quick response time
- ▶ Minimum, maximum and lock functions
- ▶ Enables continuous measurement over a period of time
- ▶ IP 65 ingress protection rating allows hygienic cleaning
- ▶ Easy to use: LEDs indicate temperatures below 4°C / 39.2°F, temperatures between 4°C / 39.2°F and 60°C / 140°F, and temperatures above 60°C / 140°F

*****ATTENTION*** Our temperature sensors are designed for industrial and laboratory surface temperature measurement ONLY. They are not designed or certified for body temperature measurement or for medical use.**

Specifications

Non-contact measurement with infrared sensor

Temperature range	-33 ... 220°C / -27 ... 428°F
Resolution	0.2°C / 0.36°F
Accuracy	-33 ... 0°C / -27.4 ... 32°F: $\pm 1^\circ\text{C}$ / 1.8°F + 0.1 / degree 0 ... 65°C / 32 ... 149°F: $\pm 1^\circ\text{C}$ / 1.8°F 65 ... 200°C / 149 ... 392°F: $\pm 1.5\%$ of reading
Response time	< 500 ms
Wavelength	8 ... 14 μm
Emissivity	Adjustable in intervals of 0.1 ... 1.0 (default is 0.95 - ideal for food)
Distance to target ratio	Spot (FOV) = 2.5:1
Minimum diameter of the measurement point	11.5 mm / 0.44 in

Contact measurement with sensor probe

Temperature range	-55 ... 330°C / -67 ... 626°F
Resolution	0.2°C / 0.36°F
Accuracy	Below -5°C / 23°F: $\pm 1^\circ\text{C}$ / 1.8°F Between -5°C ... 65°C / 23 ... 149°F: $\pm 0.5^\circ\text{C}$ / 0.9°F Above 65°C: $\pm 1.0\%$ of reading
Response time	7 ... 8 seconds
Sensor dimensions	Diameter: 3.2 mm / 0.13 in, Length: 150 mm / 5.91 in
Sensor type	Thermal element (type-K)

General characteristics

Repeatability	Within the accuracy of the device
Functions	Max / Min / Lock
Operating temperature	0 ... 50°C / 32 ... 122°F
Dimensions (with battery)	190 x 22 x 38 mm / 7.48 x 0.87 x 1.5 in
Power	2 x 1.5V AAA batteries
Operating time	Approx. 40 hours of continuous use
Measurement point illumination	LED
Holding of values on the display	15 seconds
Display	4 positions
Ingress protection rating	IP 65

Subject to change

