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Infrared Thermometer 893

## Thermometer PCE-893

## Laser temperature meter for easy measurement of surface temperatures /

**Fast response time / Adjustable emissivity / Max-Min function / Alarm function / Measuring range up to 1200 °C / 2192 °F / Thermocouples type K connectable / Software for PC connection**

The thermometer PCE-893 is suitable for simple temperature measurements. The emissivity of the surface can be adjusted on the PCE-893 thermometer. Thus, the thermometer PCE-893 is suitable for almost all surfaces. The dual laser of the thermometer PCE-893 marks the exact center of the measurement spot. This helps the user considerably with non-contact temperature measurement. The thermometer PCE-893 has a backlit display. In addition to the emissivity setting, the user can set limit value alarms over the entire measuring range of the PCE-893 thermometer. The measuring range is from -50 °C to + 1200 °C / -58 ... 2192 °F. The measuring spot ratio of the thermometer PCE-893 is 50:1.

In addition to the infrared measurement, a variety of thermocouples Type-K can be connected to the thermometer. Here measurements up to 1370 °C / 2498 °F are possible. The included software and the USB port on the thermometer allow the operator to analyze and store all measurement data on the PC both graphically and in a table.

- Dual laser shows the spot center
  - Adjustable emissivity
  - Illuminated LCD
  - Measured value transmission to a PC
  - Non-contact temperature measurement
  - Measurement spot ratio 50: 1 infrared optics
  - Temperature measurement up to 1200 °C / 2192 °F
  - Thermocouple type-K can be connected

## Typical applications of the thermometer PCE-893

- Food monitoring
  - Hygiene tests
  - Road construction
  - Control cabinet monitoring
  - Heating and air conditioning technology
  - Production monitoring
  - Temperature measurement on motors
  - Electronic components
  - Fuse box

## **Specifications:**

## Infrared measurement

Infrared measurement -50 ... 1200 °C / -58 ... 2192 °F

Resolution 0.1 at display <1000

	1 at display >1000
Accuracy	$\pm 3^{\circ}\text{C} / 5.4^{\circ}\text{F}$ (-50 ... 20 °C / -58 ... 68 °F)
	$\pm 1\% \pm 1^{\circ}\text{C} / \pm 1.8^{\circ}\text{F}$ (20 ... 500 °C / 68 ... 932 °F)
	$\pm 1.5\%$ (500 ... 1000 °C / 932 ... 1832 °F)
	$\pm 2\%$ (1000 ... 1600 °C / 1832 ... 2912 °F)

**The accuracies apply at an ambient temperature of 23 ... 25 °C (73 ... 77 °F)**

Repeatability	$\pm 1.5^{\circ}\text{C} / 2.7^{\circ}\text{F}$ (-50 ... 20 °C / -58 ... 68 °F)
	$\pm 0.5\%$ or $\pm 0.5^{\circ}\text{C} / 0.9^{\circ}\text{F}$
	(20 ... 1000 °C / 68 ... 1832 °F)
	$\pm 1.0\%$ (1000 ... 1600 °C / 1832 ... 2912 °F)

#### **Thermoelement**

Measuring range	-50 ... 1370 °C / -58 ... 2498 °F
Resolution	0.1 at display <1000
	1 at display >1000
Accuracy	$\pm 2.5^{\circ}\text{C} / \pm 3.6^{\circ}\text{F}$ (-50 ... 0 °C / -58 ... 32°F)
	$\pm 0.5\% \pm 1.5^{\circ}\text{C} / 3^{\circ}\text{F}$
	(0 ... 1370 °C / 32 ... 2498 °F)

Measurement spot ratio	50:1
Response time	150 ms
Spectral range	8 ... 14 $\mu\text{m}$
Emissivity	Adjustable 0.10 ... 1.0
Display overrange	The display will show "----"
Display laser diode	LCD with backlight
Output	<1 mW
Wavelength	630 ... 670 nm
Classification	Class 2
Power supply	9 V block battery
Operating conditions	0 ... +50 °C / 32 ... 122 °F
Storage conditions	-10 ... +60 °C / 14 ... 140 °F
Weight	ca. 282 g without battery
Dimensions	200 x 55 x 150 mm / 7.8 x 2.1 x 5.9"

#### **Delivery scope:**

- 1 x Thermometer PCE-893
- 1 x Type-K thermocouple
- 1 x Mini Tripod
- 1 x USB cable
- 1 x 9 V battery
- 1 x User manual