

## Infrared thermometer 780-ICA

### PCE-780-ICA Thermometer

#### **Infrared thermometer scanner for the display of temperature, humidity and dew point temperature / Optical alarm / Backlight / Automatic shutdown / Incl. ISO Calibration Certificate**

The PCE-780 consists of an infrared thermometer and an integrated humidity meter. With the two sensors, it can record values to determine the dew point. If this dew point is reached or undershot, there is a risk of moisture settling and mold growing. The dew point, which is calculated by the PCE-780, is displayed on the high-contrast LCD display. The control buttons can be used to set alarm values. If the surface temperatures are exceeded or undercut, the PCE-780 emits a warning tone and displays either a LOW or a HIGH alarm.

The PCE-780 also has a relative value measuring function. Thus, in the structural analysis, a temperature can be stored as a reference in the instrument by a measuring point. If further measurements are subsequently carried out, a good / bad evaluation by the PCE-780 is carried out via a colored bar graph. Furthermore, the PCE-780 offers the possibility to determine the maximum, minimum and average value of the infrared temperature.

- Infrared temperature measurement
- Air temperature and humidity measurement
- Calculation of dew point
- High contrast LCD display
- Adjustable high and low alarm
- Max, Min, Average measurement
- External temperature sensor can be connected
- Adjustable degree of emission
- **Incl. ISO Calibration Certificate**

#### **Specifications:**

Measuring range	Infrared: -76 ... 932°F / -60 ... 500°C Type K thermocouple: -83 ... 2552°F / -64... 1400°C Air temperature: -4 ... 149°F / -20 ... 65°C Wet bulb temperature: -4 ... 149°F / -20 ... 65°C Dew point: -58 ... 122°F / -50 ... 50°C Humidity: 1... 99% rh
Accuracy (at 68... 78°F / 20... 26°C ambient temperature)	Infrared 59... 95°F / 15... 35°C: ± 1.0°C / 1.8°F -22 ... 932°F / -33... 500°C: ± 2% of Mw. or ± 2°C / 3.6°F  Thermocouple type K ± 1% of Mw. or ± 1.0°C / 1.8°F

Air temperature:  $\pm 2.5^{\circ}\text{C} / 4.5^{\circ}\text{F}$

Wet bulb temperature:  $\pm 2.5^{\circ}\text{C} / 4.5^{\circ}\text{F}$

Dew point

20... 30% RH:  $\pm 2.5^{\circ}\text{C} / 4.5^{\circ}\text{F}$

31... 40% RH:  $\pm 2.0^{\circ}\text{C} / 3.6^{\circ}\text{F}$

41... 95% RH:  $1.5^{\circ}\text{C} / 2.7^{\circ}\text{F}$

Air humidity:

20... 80%:  $\pm 3\%$

Balance:  $\pm 5\%$

Resolution

$0.1^{\circ}\text{C} / 0.18^{\circ}\text{F}$

$1.0^{\circ}\text{C} / 1.8^{\circ}\text{F}$

Emissivity

0.1 ... 1

Response time

1 second

Optical resolution

12: 1

Power supply

2 x 1.5V AA battery

Battery life

Approx. 180 minutes

(without laser & display lighting)

Approx. 140 minutes (continuous operation)

Weight

$< 1 \text{ lb} / 240 \text{ g}$

Dimensions

$1.8 \times 5.6 \times 7.3 \text{ in} / 46 \times 143 \times 184.8 \text{ mm}$

**Delivery scope:**

1 x PCE-780 thermometer

1 x Type K thermocouple

2 x 1.5V AAA batteries

1 x User manual

1 x ISO Calibration Certificate