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## **Technical Infrared Thermometer PCE-780**

## Digital infrared thermometer scanner for the display of temperature, humidity and dew point temperature / Optical alarm / Backlight / Automatic shutdown

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

## Technical 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 Infrared

(at 68... 78°F / 20... 26 ° C ambient 59... 95°F / 15... 35 °C: ± 33°F / 1.0°C

temperature)

-22... 932°F / -33... 500°C:  $\pm$  2% of Mw. or  $\pm$  35°F /

2°C

Thermocouple type K

 $\pm$  1% of Mw. or  $\pm$  33°F / 1°C Air temperature:  $\pm$  36.5°F / 2.5°C

Wet bulb temperature:  $\pm$  36.5°F / 2.5°C

Dew point

20... 30% RH: ± 36.5°F / 2.5°C

31... 40% RH: ± 35°F / 2°C

41... 95% RH: 34.7°F / 1.5°C

Air humidity: 20... 80%:  $\pm$  3% Balance:  $\pm$  5%

Resolution 32.2°F / 0.1 °C

33°F / 1 °C

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 lb / 240 g

Dimensions 1.8 x 5.6 x 7.3 in / 46 x 143 x 184.8 mm

## **Delivery contens:**

1 x PCE-780 digital infrared thermometer

1 x Type K thermocouple

2 x 1.5 V AAA batteries

1 x User manual