



# Hygrometer PCE-320

## Wet bulb globe temperature

### PCE-320

With the PCE-320 Climate Meter it is possible to measure climate conditions such as temperature and relative humidity, as well as determining surface temperature of objects simultaneously by using the included external temperature sensor or using an infrared measurement. The Climate Meter offers features such as average value, maximum, minimum, and hold functions. The Climate Meter provides additional information relating to dew point temperature and the global humidity temperature. Measurement values can be directly seen on the device's LCD display, and maximum and minimum values can be registered or transferred to a PC or portable computer for further analysis.

The Climate Meter helps prevent damage to products, such as allowing for the elimination of fungus in food when being stored and during transportation. The PCE-320 Climate Meter is also very useful in the construction industry, industrial sector, or in product development. Customers frequently complain about not having a tool available that can measure ambient conditions and surface temperature of a wall both inside and outside. The device can be sent away to be calibrated by an accredited DIN ISO laboratory. We offer the possibility of ISO calibration from factory (when the device is ordered or as an annual recalibration).

- ▶ Backlit LCD
- ▶ Measures ambient humidity and temperature using an internal sensor
- ▶ Measures surface temperature using an optional external sensor
- ▶ Infrared measurement of a material temperature
- ▶ Display shows temperature and humidity simultaneously
- ▶ Determines dew point and global humidity temperature
- ▶ Average value, Maximum, Minimum and Hold functions
- ▶ Auto shut-off to protect battery life
- ▶ Software for data transmission included

General Features PCE-320	
<b>Internal probe</b>	
Temperature	-20°... 60°C / -4 ... 140°F
Relative humidity	10 ... 90% H.r.
Temperature of global	-21.6 ... 60°C / -6.8 ... 140°F
Humidity	-68 ... 60°C / -90.4 ... 140°F
Dew point temperature	depending on the sensor
<b>External</b>	
Temperature	-50 ... 500°C / -58 ... 932°F
<b>Infrared</b>	
Temperature resolution	0.1°C / 0.18°F

Relative humidity resolution	0.1%
<b>Accuracy (Internal)</b>	
Temperature	± 1.0°C / 1.8°F
Relative humidity	± 3%
Wet bulb temperature	± 1.0°C / 1.8°F
Dew point temperature	± 1.0°C / 1.8°F
<b>Accuracy (External)</b>	
Temperature	± 1% ± 1.0° C / 1.8°F
<b>Infrared</b>	
-50 ... -20°C / -58 ... -4°F	± 5.0°C / 9°F
-20 ... 500°C / -4 ... 932°F	± 2.0°C / 33.6°F ± 2%

Response time	< 4 s
Humidity sensor type	Resistance sensor
Software	From Windows 98
Memory	Maximum and minimum value
External temperature sensor	1 m / (3.3 ft) long hot wire sensor and many other available to order
Display	Multiple LCD for displaying a variety of different readings
Power	9V battery
Operating conditions	-20 ... 60°C / -4 ... 140°F
Dimensions	257 x 76 x 53 mm / 10.1 x 2.9 x 2 in
Weight	355 g / < 1 lb

Subject to change