Technical Humidity Detector PCE-THB 40

PCE-THB 40 Air Humidity Meter
Digital thermometer-hygrometer-barometer with data logging functionality and up to 16 GB SD card memory

PCE-THB 40 is a digital thermometer-hygrometer-barometer with data recording functionality. This compact yet robust data logger detects ambient temperature, relative humidity and atmospheric or barometric pressure. Measurement values are displayed in real time on the large LCD screen and saved to the included SD card as a Microsoft Excel-compatible .XLS file for seamless transfer to a PC or portable computer. Data can also be transferred via an optional USB data cable complete with PC-compatible software (SOFT-LUT-US) for live visualization. Measurement quota can be freely adjusted, with data captured every 5, 10, 30, 60, 120, 300 or 600 seconds, or automatically when there is an alteration of ±1 °, ±1 % RH or ±1 hPa.

PCE-THB 40 comes manufacturer calibrated and is powered by the included batteries. An optional electric power supply is available for purchase separately. ISO-certified calibration also may be purchased as an option. Please see the accessories tab for details.

- Measures ambient temperature, relative humidity and atmospheric or barometric pressure
- Displays measurement values in real time on the large LCD screen
- Saves recorded data to the included SD card as an Excel-compatible .XLS file
- Offers selection of pressure units: hPa, mmHg or inHg
- Features a low battery indicator
- Allows measurement quota to be freely adjusted
- Easy to use with large keys and a user-friendly interface
- Comes with a solid, protective carrying case
- Manufacturer calibrated
- Optional ISO certification (see accessories)

Technical specifications:

Measurement ranges

Temperature	0 … +50°C / 32°F … 122°F

Relative humidity in air	10 … 90 % RH
Barometric pressure	10 … 1100 hPa / 7.5 … 825 mmHg / 0.29 … 32.48 inHg

Resolution

Temperature	0.1°
Relative humidity in air	0.1 % RH
Barometric pressure	0.1 hPa: 10 … 1000 hPa, 1 hPa: 1001 … 1100 hPa / 0.1 mmHg / 0.01 inHg

Accuracy

Temperature	±0.8°C / ±1.5°F
Relative humidity in air	±4 % RH: < 70 % RH ± (4 % reading + 1 % RH): ≥ 70 % RH
Barometric pressure	±2 hPa: 10 … 1000 hPa, ±3 hPa: 1001 … 1100 hPa / ± 1.5 mmHg / ± 0.1 inHg
Sampling interval	5,10, 30, 60, 120, 300 or 600 seconds, or automatic (it stores data when there is an alteration of the value of ±1 °, ±1 % RH or ±1 hPa)
Memory	SD card memory up to 16 GB (an SD card is included in the delivery contents)
Operating temperature	0 … +50ºC / 32ºF … 122ºF < 90 % RH
Power	6 x 1.5 V AAA batteries or 1 x 9 V electric power supply (optional)
Dimensions	132 mm x 80 mm x 32 mm 5.14 in x 3.14 in x 1.25 in
Weight (with batteries)	285 g / 0.62 lbs

Delivery contents:

1 x PCE-THB 40 air humidity meter
1 x SD card
1 x wall mount
6 x batteries
1 x user manual