

Hygrometer PCE-313 S

Hygrometer with SD memory card and sintered hood tester of humidity to measure relative humidity and temperature, with internal memory through the SD card (1 to 16 GB) / interface for real time data transference / powered by battery or mains component / additional connection for thermo-elements/

The PCE-313S Hygrometer has been designed for the professional use in the air-conditioning sector. The PCE-313S Hygrometer determines both relative humidity and ambient temperature. The PCE-313S Hygrometer can be connected to type K thermo-elements to detect, for instance, the temperature of a wall by means of a surface probe. The internal memory of the PCE-313S Hygrometer allows to record humidity and temperature values, with a free adjustment of the measurement rate for real time measurements or data storage thanks to its SD memory card (1 to 16 GB). The PCE-313S Hygrometer can be previously programmed via the keypad so the device can record values without the need of being present during the process. For long term records, we recommend you to power the PCE-313S Hygrometer by means of a mains component (optional). Recorded values can be transferred to a PC for further analysis (xls file in the SD card). This property allows to check measured values or design a graphic by means of the Excel calculation program.

Characteristics

- Measures temperature, humidity, dew point and temperature via the connection to a thermo-element.
- Memory with possibility of real time registration by means of the SD memory card (1 to 16 GB)
- Data is directly stored in Excel format in the SD card.
- The SD card can be formatted in the Hygrometer
- Data-Hold Function
- External sensor for an easy and flexible measurement of the environmental conditions.
- Low battery indication
- Large LCD display
- Connection for tripod
- Measurement rate adjustment from 1 to 3600 seconds
- Easy-to-use
- Solid case
- 2 GB SD card and card reader included in the delivery
- Optional software for real time data transference to a computer or portable computer (no additional software is required for data analysis).

Technical Specifications

Ranges

- Relative humidity 5 ... 95 % H.r.
- Temperature 0 ... +50 °C
- Type K -50 ... +1300 °C

- Calculated dew point -25,3 ... +48,9 °C
- Wet bulb temperature -21 ... +50 °C

Resolution

- Relative humidity 0,1 % H.r.
- Temperature 0,1 °C
- Type K 0,1 °C
- Calculated dew point 0,1 °C
- Wet bulb temperature 0,1 °C

Accuracy

- Temperature $\pm 0,8$ °C
- Relative humidity ≥ 70 % H.r. ± 3 % of the measurement value.. + 1 % H.r.
<70 % H.r. ± 3 % H.r.
- Type K $\pm (0,4$ % + 0,5 °C)

Memory

SD card (1 ... 16 GB)

Measurement rate

adjustable, 1 ... 3600 seconds

Display

LCD de 52 x 38 mm, with backlight

Interface

RS-232

Operating conditions

0 ... +50 °C
< 85 % H.r.

Power supply

6 x 1,5 V batteries/
9 V mains adapter (optional)

Dimensions

177 x 68 x 45 mm

Weight

approx. 490 g

Delivery contents:

- 1 x PCE-313S Hygrometer (with sintered hood)
- 1 x combined sensor for temperature and humidity
- 1 x SD card (2 GB)
- 1 x card reader
- 6 x batteries
- 1 x user's manual