

# Humidity- / Moisture Meters

## PCE-555

### Pocket thermohygrometer (Dew point)

The PCE-555 pocket thermohygrometer allows you to measure air humidity and temperature quickly and it can also calculate dew point and display wet bulb. Using this in the food industry you will be able to avoid the formation of fungus when transporting and storing food products. If used in the construction industry, you will be able to assess buildings for damp and prevent the formation of mildew by identifying condensation in walls.

- Easy to use
- The LCD shows both temperature and humidity
- Peak Hold function
- Takes MIN and MAX values
- Highly accurate
- Measures dew point and temperature



#### Technical specifications

Measurement range	0 to 100 % r.h. -30 to 100 °C
Resolution	0.01 % r.h. 0.01 °C
Accuracy	±2.0 % r.h. at 25 °C ±0.5 °C at 25 °C
Display	4.5 digit, dual display LCD
Battery	1 x 9V battery (PP3)
Dimensions	225 x 45 x 34 mm
Weight	200 g

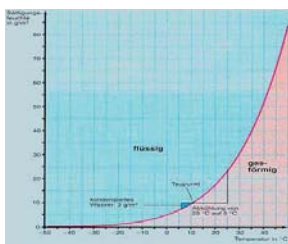


#### Contents

PCE-555 thermohygrometer, carrying case, battery and user's manual

#### Model No. Description

PCE-555 Thermohygrometer



## PCE-310

### Psychrometer (Dew point)

The PCE-310 psychrometer is an extraordinary cheap measuring instrument. It can measure environmental conditions (temperature and relative humidity) and can measure surface temperature with its external sensor which is included in the delivery. This psychrometer also offers you the ability to measure dew point and wet bulb.

- Measures relative humidity and temperature with an internal sensor and surface temperature of walls or food with its external sensor
- Dual backlight display (temperature and humidity)
- Measurement of dew point and wet bulb
- Calculates T1 - T2 differential
- Calibration kit
- MAX, MIN, Hold function
- Auto shut-off to save battery life
- ISO Certificate (optional)



#### Technical specifications

Measurement range	Temperature (internal) -20 to 50 °C Relative Humidity 0 to 100 % r.h. Temperature -21.6 to 50 °C Dew point -78.7 to 50 °C Temperature (external) -20 to 70 °C
Resolution	Temperature 0.1 °C Relative humidity 0.1 %
Accuracy	Temperature ±1 °C Relative humidity ±3 %
Response time	approx. 60 s
Humidity sensor	endurance sensor
Memory	- - -
Interface	- - -
External temperature-sensor	external temperature sensor cable of 1.1m, adjustable with 2.5 mm jack plug / dimensions with handle: 15 cm
Power	2 AAA batteries (1.5 V)
Operating conditions	-20 to 50 °C / 0 to 100 % r.h.
Dimensions	25 x 50 x 180 mm
Weight	130 g

#### Contents

PCE-310 psychrometer, external temperature sensor, 2 batteries and user's manual

#### Model No. Description

PCE-310 Psychrometer with external temperature sensor

#### Optional accessories

- PCE-310-TF Replacement temperature sensor
- CAL-SET-RF Calibration bottles for 33 % or 75 % r.h.
- CAL-RF ISO Certificate



Optional calibration bottles

## PCE-320

### Psychrometer (Dew point), with data storage and type-K temperature probes

The PCE-320 psychrometer is the bigger brother to our PCE-310. This psychrometer can measure different environmental conditions, in addition to also being able to simultaneously display the surface temperature of walls and products with its external temperature sensor. It can also calculate dew point and wet bulb. The PCE-320 also has a memory to stores up to 99 measurements.

- Real time clock and date
- Memory stores up to 99 readings
- Measures relative humidity and temperature with an internal sensor and surface temperature of walls or food with its external sensor
- Determines dew point and wet bulb
- ISO Certificate (optional)



#### Technical specifications

Measurement range	Temperature (internal) -20 to 50 °C Relative humidity 0 to 100 % r.h. Temperature -21.6 to 50 °C Dew point temperature -78.7 to 50 °C Temperature (external) -20 to 70 °C (depending on sensor)
Resolution	Temperature 0.1 °C Relative humidity 0.1 %
Accuracy	Temperature ±0.6 °C Relative humidity ±3 %
Response time	approx. 60 s
Humidity sensor	endurance sensor
Memory	stores up to 99 readings
External temperature-sensor	external temperature sensor cable of 1.1 m, adjustable with a type K heat wire temperature / dimensions with handle: 15 cm
Power supply	4 AA batteries (1.5 V)
Operating temperature	-20 to 50 °C / 0 to 100 % r.h.
Dimensions	44 x 57 x 230 mm
Weight	200 g

#### Contents

PCE-320 psychrometer, external temperature sensor, 4 batteries and user's manual

#### Model No. Description

PCE-320 Psychrometer with external temperature sensor, memory, RS-232

#### Optional accessories

- CAL-SET-RF Calibration bottles for 33 % or 75 % r.h.
  - CAL-RF ISO Certificate
- On page 3 you will find type-K temperature sensors



Optional calibration bottles

# Humidity- / Moisture Meters

## PCE-313 A

Thermohygrometer with memory and software, for professionals

In addition to relative humidity, this thermohygrometer also measures temperature. Its internal memory allows for storage of up to 16,000 readings individually or as a data logger. Once the data has been stored to memory, it can later be transferred to a PC with the help of the software. This thermohygrometer is extremely easy to use.

- Simultaneous display of temperature and relative humidity
- Sensor with 1.5 m cable
- Data logger with time and date
- Software to transfer and evaluate your data
- Auto shut-off (can be disabled)
- Data Hold
- Internal memory
- Max Hold
- ISO 9000 Certificate (optional)



### Technical specifications

Measurement range	0 to 100 % r.h. -20 to 60 °C
Accuracy	±2.5 % r.h. ±0.7 °C
Resolution	0.1 % r.h. 0.1 °C
Memory	16,000 values
Measurement quota	1 second or less
Min/Max/Peak-Hold	yes
Recalibration	optional calibration kits
Software	in English
Interface	RS-232
Display	3.5 digit LCD
Operating conditions	0 to 40 °C, < 80 % r.h.
Power	9V battery pack
Dimensions	sensor: 190 mm x 13 mm diameter device: 186 x 64 x 30 mm
Weight	320 g

### Contents

PCE-313 A thermohygrometer, data cable, software, battery pack, carrying case and user's manual

### Model No. Description

PCE-313 A	Thermohygrometer with data logger
PCE-313 S	Thermohygrometer with data logger as the PCE-313 A, but with sintered filter for adverse conditions

### Optional accessories

RS232-USB	RS-232 to USB Adaptor
CAL-RF	ISO Certificate
CAL-SET-RF	Calibration bottles for 33 % or 75 % r.h.
NET-300	Power supply (300 mA)



Optional calibration bottles

## PCE-3000

Thermohygrometer with dew point calculation, memory and software

The PCE-3000 thermohygrometer is an accurate tool which can measure dew point, relative humidity and temperature. The most important feature of this thermohygrometer is its internal memory with which you can store up to 1000 readings. You can store the data individually or in form of a data logger, allowing for measurements to be taken over a period of time without the need to monitor the device. The thermohygrometer stores the measurements with date and hour. Using the software, the readings can be transferred to a computer to be analysed.

- Simultaneously displays relative humidity and temperature
- Accurate to within ±2 % of relative humidity
- Dew point measurement
- Software and data cable included
- Memory stores up to 1000 readings
- RS-232 interface
- ISO 9000 Certificate (optional)



### Technical specifications

Measurement range	0 to 100 % r.h. 0 to 50 °C
Accuracy	±2 % r.h. ±0.5 °C
Resolution	0.01 % r.h. 0.01 °C
Dew point	-25.3 to 48.9 °C
Memory	1000 readings
Timed measurement intervals	1, 2, 10, 30, 60, 600, 1800 or 3600 seconds
Min Max Peak Hold	yes
Recalibration	yes, in PCE Group
Software	in English
Interface	RS-232
Display	16mm dual display LCD
Power	9V battery pack
Sensor dimensions	200 x 15 mm
Measurer dimensions	203 x 76 x 38 mm
Weight	315 g

### Contents

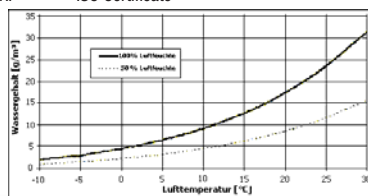
PCE-3000 thermohygrometer with sensor, software, RS-232 cable, battery, carrying case and user's manual

### Model No. Description

PCE-3000	Thermohygrometer with memory
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### Optional accessories

RS232-USB	RS-232 to USB Adaptor
CAL-RF	ISO Certificate



## PCE-WM 1

Thermohygrometer to measure relative and absolute humidity [g/m³] and dew point

The PCE-WM 1 Thermohygrometer simultaneously measures relative humidity and temperature. It comes with an external sensor to measure surface temperature and it can calculate dew point and absolute humidity in g/m³. The two external probes, the thermohygrometer probe and the temperature probe, each have a 1m long spiral cable.

- Measures relative humidity and temperature
- Calculates absolute humidity in g/m³ and dew point
- Data Hold function maintains readings on the display
- External probe with spiral cable
- Auto shut-off function
- ISO Certificate (optional)



### Technical specifications

Measurement range	10 to 95 % r.h. -20 to 80 °C
Accuracy	±2 % r.h. ±0.5 °C
Resolution	0.1 % r.h. 0.1 °C
Dew point	-25.3 to 48.9 °C
Memory	-
Timed measurement intervals	-
Min Max Peak Hold	yes
Recalibration	yes
Software	-
Interface	-
Display	3.5 digit LCD
Power	9V battery pack
Sensor dimensions	150 x 30 mm
Device dimensions	165 x 80 x 33 mm
Weight	380 g

### Contents

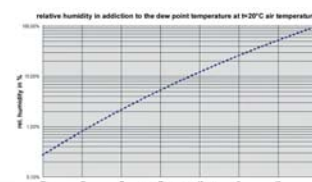
PCE-WM 1 thermohygrometer with combi probe and temperature probe, battery pack, carrying case and user's manual

### Model No. Description

PCE-WM 1	Thermohygrometer to measure dew point and temperature
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### Optional accessories

PCE-WM-KF	Spare combi probe (humidity + temp.)
CAL-RF	ISO Certificate



# Data Loggers

## PCE-HT 71

Mini data register for temperature and humidity, with USB connection

Self-sufficient data register with internal sensors to measure environmental temperature and humidity. The register is ideal for continuous testing of warehouses, transport, containers, etc. Using the software, the device can be programmed and data retrieved and transferred to computer to allow for analysis of data or graphical representation of the data.

- Memory for 32,000 readings (16,000 readings for temperature and 16,000 for humidity)
- Measurement time intervals adjustable from 1 s up to 2 h
- Device works self-sufficiently
- USB connector for connection to a computer
- Easy to use
- Compact design
- Ability to transfer data
- Includes software



### Technical specifications

Measurement range	-40 to +70 °C / 0 to 100 % r.h.
Accuracy	±0.5 °C / ±2 % r.h.
Resolution	0.1 °C / 0.1 % r.h.
Sampling time	1 s to 2 h, adjustable
Start and finish date	programmable
Memory	32,000 readings 16,000 by parameter
Software	yes, to read and programme
Operating conditions	-40 to +70 °C / 0 to 100 % r.h. without condensation
Power	replaceable internal battery, 3 year battery life
Dimensions	30 x 25 x 130 mm
Holder	wall mount included
Weight	30 g



### Contents

PCE-HT 71 data logger, software, battery, wall mount and user's manual

### Model No.

### Description

PCE-HT 71 Mini data logger



## PCE-T100 & PCE-HT110

Data logger with backlight display for continuous measurements of temperature or temperature and relative humidity simultaneously (software is optional)

The data logger determines the temperature (PCE-T100) or the temperature and the humidity of the air (PCE-HT110). The most important feature of this data logger is its memory (up to 64,000 values) which allows the user to take measurements over a period of time. This is useful in food processing for upright freezers in supermarkets, refrigerated trucks or warehouses, and for the industrial sector relating to warming and cooling processes, machine temperature or in warehouses. The current measurement is displayed in the LCD and it is recorded to memory so you can read the value at the time of measurement, or if you prefer, you can transfer the data to a PC and process this data for analysis or presentation. You will be able to remove the numeric columns and for example, in the food processing sector, you will recognize quickly if there has been a temperature change and what time it occurred. The internal real time clock allows the user to organize the events accurately. You can adjust time interval measurements as you require. The enclosure is resistant to dust and exposure to water, and the electronic component is shock resistant and against rough handling that might occur in the industrial sector. The data logger has a backlight display in case of insufficient light conditions.

- Measure and record the temperature or the temperature and humidity
- Memory: up to 64,000 readings
- Optional software and optional RS-232 cable to transmit the data to a computer for analysis
- Display with backlight
- Real time clock and data adjustment (5 sec / month departure)
- Measurement intervals and time adjustment (1 s to 60 min)
- Battery included
- Battery status shown on the display
- Wall mounting clip included
- Ingress protection IP 64: water proof for all weather applications
- ISO Certificate (optional)



### Technical specifications

Model	PCE-T100	PCE-HT110
Measurement range	-30 to +70 °C	-30 to +70 °C / 5 to 98 % r.h.
Accuracy	±0.7 °C < +40 °C, ±1.5 °C > +40 °C	±0.7 °C < +40 °C, ±1.5 °C > +40 °C / ±3 % r.h.
Resolution	0.1 °C	0.1 °C / 0.1 % r.h.
Memory	64,000	64,000 (32,000 depending on parameter)
Software and RS-232 cable	optional	
Sampling time	1 second to 60 min (adjustable)	
Power	2 replaceable internal batteries of (1.5 V)	
Battery life	approx. 1 year	
Operating conditions	-30 to +70 °C / 0 to 98 % r.h.	
Dimensions	92 x 55 x 22 mm	
Weight	200 g	



Software with connection station can be ordered separately



Anti-theft system available separately, includes padlock

### Contents

Data logger (model PCE-T100 or PCE-HT110), wall mounting clip, batteries and user's manual (Software is available as an optional accessory)

### Model No.

### Description

PCE-T100 Temperature logger with internal sensor  
PCE-HT110 Temperature and humidity logger with combined sensor

### Optional accessories

- PCE-CB Kit software (software in English, Docking-Station and RS-232 cable for PC)
- RS232-USB RS-232 to USB adaptor
- PCE-SAFE Anti-theft / metal wall support, padlock included
- CAL-T1 ISO Certificate for the temperature logger PCE-T100
- CAL-RF ISO Certificate for the temperature and humidity logger PCE-HT110

## PCE-932

Pressure meter with external sensors for ranges up to 400 bar, optional RS-232 cable and software

This handheld pressure meter is used to measure high ranges of pressure in the industrial sector and in research and development. You can connect a pressure sensor, up to a maximum of 400 bar, to the unit (with a 1.2m long connecting cable). The integrated RS-232 interface can be used to transfer data to a computer, using the optional software and data cable. This pressure meter comes calibrated, but if you want, we can offer you an optional laboratory calibration ISO (with certificate).

- Pressure measurement for several conditions and systems
- Maximum pressure up to 400 bar (depending on sensor)
- It's not necessary to recalibrate if you change the sensor
- RS-232 interface
- Optional software to transfer data to a computer
- Several units adjustable (bar, psi, mWs, etc.)
- MIN, MAX, Data Hold functions
- Auto shut-off to save battery life (can be disabled)
- ISO Certificate (optional)



### Technical specifications

Measurement range	0 to 400 bar (depending on sensor / pressure connection)
Selectable measuring units	bar, psi, Kg/cm <sup>2</sup> , mm/Hg, inch/Hg, mH <sub>2</sub> O, inch/H <sub>2</sub> O, atmospheres
Pressure connection	optional, voltage DC 5V (maximum sensor output DC 100 mV (see ranges))
Zero function for offset correction	via keypad
Functions	pressure, Min and Max, Hold, transfer to a PC through integrated RS-232 interface
Auto shut-off	to save battery life (can be disabled)
Measurement interval	every 0.8 sec. approximately
Indicator	large LCD (61 x 34 mm)
Operating temperature	0 to +50 °C
Operating humidity	0 to 80 % r.h.
Enclosure	ABS plastic
Battery life	indicated on the display
Power	9 V battery pack
Dimensions	180 x 72 x 32 mm
weight	345 g

### Technical specifications (sensors)

Model	PS-100-20	PS-100-50	PS-100-100	PS-100-400
Range	0 to 20 bar	0 to 50 bar	0 to 100 bar	0 to 400 bar
Accuracy	±0.5 % of measurement range			
Resolution	0.02 bar	0.05 bar	0.1 bar	0.5 bar
Screw thread	1/4 "			
Operating temperature	maximum +80 °C			
Dimensions	Ø 30 mm x length 85 mm			
Cable length	1.2 m			
Weight	160 g			

### Contents

Pressure meter PCE-932, user's manual (pressure probes are not included in the delivery)

Model No.	Description
PCE-932	Pressure meter PC-932

### Optional accessories

PS-100-20	Pressure probe for 20 bar
PS-100-50	Pressure probe for 50 bar
PS-100-100	Pressure probe for 100 bar
PS-100-400	Pressure probe for 400 bar
SOFT-LUT-D	Software with RS-232 cable
RS232-USB	RS-232 to USB Adaptor
CAL-PS	ISO Certificate



## PCE-THB 38

Thermometer, hygrometer and barometer all-in-one, with dew point calculation

The PCE-THB38 thermo-hygrometer and barometer can measure and display digitally the relative humidity, temperature and barometric pressure. Temperature is measured using an RTD sensor and relative humidity is measured using a capacitive sensor with a high repeatability. The barometer also calculates dew point. All this is contained with one complete climatological meter.

- Measures temperature, humidity and barometric pressure
- Calculates dew point
- Selection of units of pressure: hPa (mbar), mmHg and inHG
- Minimum, maximum and Hold functions
- Internal sensor is protected
- Compact design
- ISO Certificate (optional)



### Technical specifications

Measurement ranges	
- Barometric pressure	10 to 1100 hPa (mbar)
- Temperature	0 to +50 °C
- Relative humidity	10 to 95 % r.h.
- Dew point (calculation)	-25 to +49 °C
Resolution	
- Barometric pressure	0.1 hPa <1000 hPa, 1 hPa >1000 hPa
- Temperature	0.1 °C
- Relative humidity	0.1 % r.h.
- Dew point	0.01 °C
Accuracy	
- Barometric pressure	±1.5 hPa <1000 hPa, ±2 hPa >1000 hPa
- Temperature	±0.8 °C
- Relative humidity	±3 % of reading ±1 % r.h. < 70 % r.h. ±3 % r.h. >70 % r.h.
Operating temperature	
Power	0 to +50 °C
Dimensions	4 x 1,5 V battery AAA
Weight (incl. batteries)	210 x 40 mm
	160 g



### Contents

PCE-THB38 Thermo-hygrometer-barometer, batteries and user's manual

Model No.	Description
PCE-THB 38	Thermo-hygrometer and barometer

### Optional accessories

CAL-THB	ISO Certificate (for barometric pressure)
CAL-RF	ISO Certificate (for thermometer and hygrometer)