

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

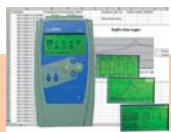
- PCE-CB Kit software (software in English, Docking-Station and RS-232 cable for PC)
- RS232-USB RS-232 to USB adaptor
- PCE-SAFE Anti-theft / metal wall support, padlock included
- CAL-T1 ISO Certificate for the temperature logger PCE-T100
- CAL-RF ISO Certificate for the temperature and humidity logger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

DaqPro

8 channel data logger which accepts NTC, thermocouples, electrical current, voltage...

Data logger with 8 input channels of universal use which provides almost all the requirements in the industrial sector. With its high resolution and fast Analog to Digital converter (ADC), DaqPro meets the majority of data logging requirements in most industrial applications. Its unique ability to display measured values and analyze them in real-time on a graphical interface minimizes the need to download collected data to a computer for further analysis.

- Highest quality
- Automotive testing
- External research
- Quality assurance
- Heating sector, air conditioning and ventilation applications
- Plant trouble-shooting
- Electricity transients fail detection
- Plant and monitoring stations
- 8 channels for measurement
- Inputs: 0 ... 24 mA, 0 ... 5 mA, 0 ... 5 mV, 0 ... 10 V, NTC, Pt100, thermocouples, pulses and frequency
- Alarm output
- Memory: 512 KB, accuracy: 16 bits
- Calibration certificate
- Powerful analysis software for Windows and carrying case



Technical specifications

Ranges / Accuracy	current: 0 to 24 mA; $\pm 0.5\%$ voltage: 0 to 50 mV or 0 to 10 V; $\pm 0.5\%$ frequency (0 to 5 V): 20 to 4.000 Hz pulse counter (0 to 5 V): 0 to 65,000 PT100: -200 to +400 °C; 0.1 °C; $\pm 0.5\%$ thermocouples (J, K, T): 0.1 °C; $\pm 0.5\%$
Memory	up to 512,000 values
Sampling time	adjustable: 4,000 values/sec for 1 value/hour
Interface	USB
Connection	terminal strip
Operating temperature	0 to +50 °C
Indicator	graphical display LCD 64 x 128
Housing	plastic (ABS)
Dimensions	182 x 100 x 28 mm
Weight	450 g
Power	internal battery of 7.2 V or electricity network
Battery life	40 hours

Contents

DaqPro, internal battery, operator's manual

Model No.

Description

DaqPro 8 channel data logger

Optional accessories

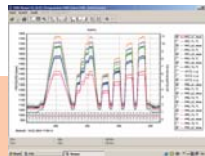
PCE-TPHL	Cable with connectors and open ended wires to connect to the DaqPro and measurement converter
PCE-TA-601	Optical revolutions adaptor, 10 to 20000 r.p.m.
PCE-PS-403	Pressure adaptor, 1/4" thread, 3.5 to 3500 kPa
PCE-LX-02	Light adaptor, 0 to 50000 lux
PCE-AM-402	Wind speed velocity adaptor, impeller, 0.2 to 30 m/s
PCE-SL-406	Sound adaptor, 30 to 130 dB(A)
PCE-EMF-824	EMP adaptor, 0 to 20 μ Tesla / 0 to 200 mGauss

Serie PCE-MSR145

Data logger for continuous measurement, 2,000,000 values like temperature, humidity, pressure and acceleration, longlife rechargeable battery pack

The MSR 145 is a miniaturised universal datalogger for measuring and recording different physical measurement parameters. It contains a temperature sensor, a humidity sensor with integrated temperature, a pressure sensor and a 3-axis accelerometer (X, Y and Z axes). The measurement parameters can be transferred to a PC either once data logging is completed or during the data logging process. The software enables users to customise the way in which the MSR 145 measures and records data according to their requirements. The integrated clock (RTC) allows data from as many MSR 145 units as required to be synchronised and merged into a single data record.

- Available as standard model and as waterproof model
- For temperature, relative humidity with integrated temperature sensor, pressure (e.g. altimeter, water level, barometer) and triaxial acceleration (e.g. location determination)
- Memory for 2,000,000 values
- USB- interface
- Software included
- Real time clock and data adjustment
- Measurement intervals and time adjustment (1 s to 12 h)
- Longlife rechargeable Li-Ion battery pack
- Indicator LED (incl. alarm)



Technical specifications

Ranges	temperature -10 to +65 °C	humidity 0 to 100 % r.h.	pressure 0 to 2500 mbar	acceleration $\pm 2g$ and $\pm 10g$
Accuracy	± 0.1 °C (+5 to +45 °C) sonst ± 0.2 °C	$\pm 2\%$ r.h.	± 2.5 mbar (750 to 1100 mbar)	± 0.15 g (at 25 °C)
Sampling time	1 s to 12 h	1 s to 12 h	10 s to 12 h	50 s to 12 h
Memory	2,000,000 values			
Start and finish date	programmable			
Alarms	adjustable			
Indicator	3 x LED			
Interface	USB			
Software	included			
Dew point	calculated in the PC after transfer (accuracy ± 2 °C)			
Power	Lithium-Polymer-Battery 170 mAh			
Battery life	many months with sampling rate 1 value per minute			
Operating conditions	-20 to +65 °C / 500 mbar to 2500 mbar (absolute)			
Ingress protection	PCE-MSR145S: IP 60 PCE-MSR145W: IP 67			
Dimensions	PCE-MSR145S: 20 x 15 x 52 mm PCE-MSR145W: 18 x 14 x 60 mm			
Weight	18 g / 20 g			

Contents

Data logger PCE-MSR145, software with USB cable and operator's manual

Model No.

Description

MSR145S-TH	2 channel data logger (temperature, humidity)
MSR145S-TP	2 channel data logger (temperature, pressure)
MSR145S-TA	2 channel data logger (temperature, acceleration)
MSR145S-THP	3 channel data logger (temperature, humidity, pressure)
MSR145S-THA	3 channel data logger (temperature, humidity, acceleration)
MSR145S-THPA	4 channel data logger (temperature, humidity, pressure, acceleration)
MSR145W-TH	2 channel data logger, waterproof (temperature, humidity)
MSR145W-TP	2 channel data logger, waterproof (temperature, pressure)
MSR145W-TA	2 channel data logger, waterproof (temperature, acceleration)
MSR145W-THP	3 channel data logger, waterproof (temperature, humidity, pressure)
MSR145W-THA	3 channel data logger, waterproof (temperature, humidity, acceleration)
MSR145W-THPA	4 channel data logger, waterproof (temperature, humidity, pressure, acceleration)

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

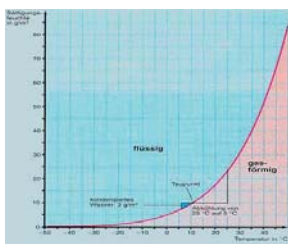


Contents

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	cab. 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 simultaneous 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	cab. of 1.1 m, adjustable with a type K beat 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

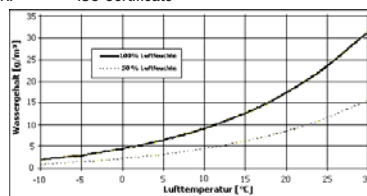
PCE-3000 thermohygrometer with sensor, software, RS-232 cable, battery, carrying case and user's manual

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

