

# 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

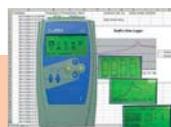
- PCE-CB Kit software (software in English, Docking-Station and RS-232 cable for PC)
- RS232-USB RS-232 to USB adaptor
- PCE-SAFE Anti-theft / metal wall support, padlock included
- CAL-T1 ISO Certificate for the temperature logger PCE-T100
- CAL-RF ISO Certificate for the temperature and humidity logger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

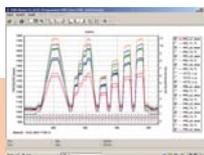
PCE-TPHL	Cable with connectors and open ended wires to connect to the DaqPro and measurement converter
PCE-TA-601	Optical revolutions adaptor, 10 to 20000 r.p.m.
PCE-PS-403	Pressure adaptor, 1/4" thread, 3.5 to 3500 kPa
PCE-LX-02	Light adaptor, 0 to 50000 lux
PCE-AM-402	Wind speed velocity adaptor, impeller, 0.2 to 30 m/s
PCE-SL-406	Sound adaptor, 30 to 130 dB(A)
PCE-EMF-824	EMP adaptor, 0 to 20 $\mu$ 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	$\pm 0.1$ °C (+5 to +45 °C) sonst $\pm 0.2$ °C	$\pm 2\%$ r.h.	$\pm 2.5$ mbar (750 to 1100 mbar)	$\pm 0.15$ 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 $\pm 2$ °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)