## **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 ٠
- Easy to use
- Compact design
- Ability to transfer data .





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	-40 to +70 °C / 0 to 100 % r.h.
conditions	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



### **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 teperature 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 accor 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)





separately, includes padlock

PCE-T100	PCE-HT110	
-30 to +70 °C	-30 to +70 °C / 5 to 98 % r.h.	
±0.7 °C < +40 °C, ±1.5 °C > +40 °C ±0.7 °C < +40 °C, ±1.5 °C > +40 °C/		
0.1 °C	0.1 °C / 0.1 % r.h.	
64,000	64,000 (32,000 depending on parameter)	
optional		
1 second to 60 min (adjustable)		
2 replaceable internal batteries of (1.5 V)		
approx. 1 year		
-30 to +70 °C / 0 to 98 % r.h.		
92 x 55 x 22 mm		
200 g		
	PCE-T100           -30 to +70 °C $\pm 0.7$ °C < +40 °C, $\pm 1.5$ °C > +40 °C           0.1 °C           64,000           0           2 replaceable interm           approx           -30 to +70 °C           92 x 55           20	



Software with connection station can be ordered separately

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### 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 acces	sories
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

## **Data Loggers**

### 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 researchQuality 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 /	current: 0 to 24 mA; ±0.5 %
Accuracy	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; ±0.5 %
	thermocouples (J, K, T): 0.1 °C; ±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 temper	ature 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 µTesla / 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 acceler- ometer (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 integraded 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-lon battery pack
- Indicator LED (incl. alarm)











recinical specificatio	กร			
Ranges	temperature	humidity	pressure	acceleration
	-10 to +65 °C	0 to 100 % r.h.	0 to 2500 mbar	$\pm 2g$ and $\pm 10g$
Accuracy	±0.1 °C (+5 to +45 °C)	±2 % r.h.	±2.5 mbar	±0.15 g
	sonst ±0.2 °C		(750 to 1100 mbar)	(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		program	mable	
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 monts 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-MSR14	5W: IP 67	
Dimensions		PCE-MSR145S: 20	) x 15 x 52 mm	
		PCE-MSR145W: 1	8 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)

## **Temperature Meters**

### **PCE-T312**

Highly accurate thermometer with two type-K channels

The PCE-T312 handheld digital thermometer had a large LCD and are accurate to within  $\pm 0.15$  %. Thanks to the backlit display you can use it under adverse conditions. The instrument has 2 type-K channels and is frequently used to measure temperature before and after carrying out an action or process, i.e. when you turn a machine on or off. Pressing the backlight key will turn on and off the display backlight and the user will be able to see the readings shown for T1 and T2.

- For type-K and type j- thermocouples
- . Data Hold function
- Min Hold and Max Hold functions •
- Low battery indicator • Shock-resistant ABS enclosure •
- 31/2 digit LCD •
- Backlight key
- Type K thermocouple and battery included



Technical specifications	;
Measurement range	-200 to 1372 °C
Resolution	up to 100 °C: 0,1 °C
	above: ±1 °C
Accuracy	up to 1000 °C: ±0.15 %, ±1 °C
	above: ±0.5 % ±2 °C
Inputs	2
Display	large LCD
Power	3 x 1.5 V batteries (included)
Operating temperature	0 to +50 °C, below 80 % r.h.
Dimensions	150 x 50 x 35 mm
Weight	200 g
	1



#### Contents PCE-T312 thermometer, thermocouple sensors, batteries and user's manual

Model No.	Description
PCE-T312	Thermometer with 2 channels
<b>Optional Acces</b>	ssories
CAL-T2	ISO Calibration, 2 channels

See page 3 for temperature sensors.

### **PCE-T390**

Thermometers with memory, RS-232 interface and software

The PCE-T390 handheld thermometer is very accurate and has an internal memory that can store up to 16,000 readings. With the software, which is included and in English, and the RS-232 interface you can transfer data to a PC for further analysis. Time interval measurements can be set by the user. The PCE-T390 can display 4 simultaneous readings and store them automatically to memory.

- Thermometer with 4 channels •
- Data Hold and Max Hold indicators
- ٠ Average value measurement
- Low battery indicator
- Auto shut-off
- Type-K and type-J thermocouple sensor and Pt100
- Windows compatible software
- Thermocouple sensors up to 220 °C included
- Battery pack included



rechnical spe	cilication	5
Measurement	type K:	-200 to +1370 °C
range	Pt100:	-200 to +1562 °C
Resolution	type K:	0.1 °C (-200 to +1000 °C)
		1 °C (+1000 to +1370 °C)
	Pt100:	0.1 °C (-200 to +850 °C)
		1 °C (+850 to +1562 °C)
Accuracy	type K:	±0.5 % of reading +1 °C
	Pt100:	±0.4 % of reading +1 °C
Thermocouple	inputs	4
Sequence mea	surement	1 to 3599 seconds (adjustable)
Data memory		16,000 values, with four sensors,
		4,000 values each one
Display		four times display LCD
		52 x 38 mm
Power supply		6 x AAA batteries (1.5 V)
	or	optional external net power adaptor
Operating temp	perature	0 to +50 °C, < 80 % r.h.
Dimensions		174 x 68 x 42 mm
Weight		310 g

Contents

PCE-T390 thermometer, type-K thermocouple sensor, software, RS-232 cable and user's manual

Model No.	Description
PCE-T390	Thermometer with 4 channels

### **Optional Accessories**

NET-300 Net Power Adaptor USB to RS-232 cable adapter RS232-USB BOX-LT1 Carrving case CAL-T4 ISO Calibration, 4 channels

See page 3 for temperature sensors.

### **PCE-T395**

Data logger thermometer with date / clock function, RS-232 interface and software

The PCE-T395 handheld thermometer is accurate and has an internal memory that can store up to 16,000 values with date and time. With the software and the RS-232 interface you can transfer data to a PC for further analysis. Time interval measurements can be set by the user. The PCE-T395 can display 4 simultaneous readings and store them automatically to memory.

- Data logger with date and time function
- Data Hold and Max Hold indicators
- Average value measurement
- . Auto power-off
- For type-K thermocouple sensor
- Windows compatible software
- 2 x Thermocouple sensors up to 220 °C included



Technical specifi	cations
Measurement ran	ge -200 to 1370 °C
Resolution	0.1 °C (from -200 to 200 °C)
	1 °C (from +200 to 1370 °C)
Accuracy ±	0.2 % of reading measurement (-200 to 200 °C)
	+0.5 % (200 to 400 °C)
	+0.2 % (400 to 1370 °C)
Thermocouple inp	uts 4
Sequence measur	ement 3 seconds for 4 sensors
Data logger	16,000 values with date and time,
	with four sensors,
	4,000 values each one
Display	four times display LCD
	(25 mm) with clock
Power supply	9 V pack
	or optional external power adapter
Operating temperation	ature 0 to +50 °C, < 90 % r.h.
Dimensions	184 x 64 x 30 mm
Weight	250 g (battery included)

#### Contents

PCE-T395 thermometer, 2 x type-K thermocouple sensor, software, RS-232 cable, carrying case and user's manual

Model No.	Description
PCE-T395	Data logger thermometer, 4 channels
Optional Acces	sories
NET-300	Socket for mains power adapter

Socket for mains power adapter		
USB to RS-232 cable adapter		
ISO Calibration, 4 channels		

See page 3 for temperature sensors.



	Model No.
nels	PCE-T395
	<b>Optional A</b>
	NET 000

## 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 transfered to a PC with the help of the software. This thermohygrometer is extremely easy to use.

· Simultaneous display of temperature and relative humidity

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- . 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





### chnical specification

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



**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 transfered to a comuter 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 •
- .



recimical 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	1, 2, 10, 30, 60, 600,
intervals	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

#### **Optional** acce sories RS-232 to USB Adaptor RS232-USB

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/m<sup>3</sup>. 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/m<sup>3</sup> 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

**Optional accessories** 

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



Optional calibration bottles

## **Air Flow Meters**

### **PCE-A420**

"Cup style" hand anemometer

This cup anemometer measures wind speed. Probably, the most important feature of this anemometer is that it eliminates completely the need to aim the sensor into the direction of the wind. Unlike conventional rotary vane anemometers that require precise aiming and alignment for good wind speed accuracy, a cup style anemometer can capture the wind in any direction just like the professionals use.

- · Data memory: 100 point data logging (recall to display)
- . Cup style, very easy to use
- . Eliminates the need to aim into the wind
- . Selectable units: m/s, km/h, ft/min, nudos y mile/h Min. Max and Hold functions ٠
- Auto shut-off •

**Technical specifications** 

Wind speed (m/s)

(ft/min)

- Large LCD
- . ISO calibration certificate
- (optional)



0.9 to 35.0

PCE-AM81

Digital and pocket-sized anemometer capable of several units of measurement

This pocket anemometer, with rotary vane sensor, is ideal for determining wind speed (air speed) indoors as well as for outdoor environments. With this lightweight portable instrument you can test environmental conditions on the spot and guickly take all your measurements. Its lightweight impeller is highly accurate.

- · Light weight impeller
- MAX / MIN functions .
- Several Units: m/s, km/h, nudos, millas/h, ft/min
- . Data Hold function
- ٠ LCD (8 mm)
- Handle with safety cord and user's manual ٠
- ISO calibration certificate (optional)



Technical specifications	3
Wind speed	
(m/s)	0.4 to 30,0
(ft/min)	80 to 5910
(km/h)	1.4 to 108.0
(mph)	0.9 to 67.0
(knots)	0.8 to 58.3
(Beaufort)	
Accuracy	±3 %
Resolution	0.1 m/s; 0.1 km/h; 0.1 knots
	0.1 mph; 1 ft/min
Auto shut-off	
Min / Max / Peak / Hold	yes
Indicator	LCD (8 mm)
Impeller	plastic impeller
Operating temperature	0 to +50 °C
Power	9 V battery
Enclosure	plastic
Dimensions	156 x 60 x 33 mm
Weight	160 g



#### Contents

PCE-AM81 anemometer, safety cord, battery, user's manual

Model No. Description PCE-AM81 Anemomete

**Optional accessories** CAL-LCA ISO Certificate

### **PCE-007**

Anemometer with external vane sensor, memory and software

With this anemometer you can measure wind speed and temperature of air. When you have adjusted the transverse area, the anemometer also displays directly the volumetric air flow. The measured values can be directly stored in the device and later transfer data to a computer for further analysis. The external vane sensor (connected to a 1.5 m cable) increases the mobility and flexibility for an exact wind speed measurement.

- . Measures and displays air volume
- . Memory to store up to 2000 values
- Built-in RS-232 interface .
- Software and cable included ٠
- Several units of measurement: m/s, ft/min, knots, km/h, mph ٠ . Dual LCD
- Max & Min Hold .
- Auto shut-off
- Calibration certificate-• (optional)



Technical specification	ons
Measurement ranges	
Wind speed	0.3 to 45 m/s
Air temperature	0.0 to 45.0 °C
Air volume	0.0 to 999,900 m <sup>3</sup> /min
	(it's calculated with average value)
Accuracy	±3 %; ±0.1 of reading
-	±1 °C
i	t's calculated with wind speed and surface
Resolution	0.01 m/s
	0.2 °C
	0.001 to 100 (deppending on range)
Impeller diameter	50 mm
Interface	RS-232
Memory	2000 values
Software	for Windows 95, 98, 2000 and XP Pro
Operating conditions	pressure: 500 mbar to 2 bar
	temperature: 0 to +60 °C
Indicator	4 digit LCD
Vane sensor	plastic
Power	9 V battery (PP3) for 50 hours of use
Enclosure	ABS plastic
Dimensions	device: 88 x 168 x 26.2 mm
	sensor: 60 x 130 x 25.5 mm
Weight	350 g

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-	

#### Contents

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PCE-007 anemometer with external impeller, software, interface, battery and user's manual

Model No.	Description
PCE-007	PCE-007 vane anemometer

#### **Optional accessories** R

S232-USB	RS-232 to USB adaptor
AL-LCA	ISO Certificate

#### 144 to 6895 2.5 to 126.0 (km/h) 1.6 to 78.2 (mph) (knots) 1.4 to 68.0 (Beaufort) ±2 % 0.1 m/s; 0.1 km/h; 0.1 knots Accuracy Resolution 0.1 mph; 1 ft/min Auto shut-off yes Min / Max / Peak / Hold yes large LCD, 28 x 19 mm Indicator Cup probe Ø 135 mm, plastic 0 to +50 °C, <80 % r.h Operating temperature 4 AAA batteries (1.5 V) Power Enclosure plastic 190 x 40 x 32 mm Dimensions Weight 180 g



### Contents

PCE-A420 cup anemometer, batteries, carrying case and user's manual

Model No.	Description
PCE-A420	Cup style anemometer

### **Optional accessories**

CAL-LCA ISO Certificate

## **Air Flow Meters**

### **PCE-008**

Thermo anemometer with external vane sensor, interface and software

The PCE-008 thermo anemometer is appealing for its high quality and low price. This device combines wind speed measurement with air temperature. Introducing the diameter of a channel, it also calculates the current volume. Thanks to its internal data logger you can store up to 16,000 values with date and time stamp (e.g. for measurements over a fix period of time).

- · Measures wind speed and temperature
- . Measure in several units, m/s, knots, km/h,
- mph / air flow in m³/h Temperature in °C or °F
- Data logger (16,000 values) ٠
- Data-Hold function
- MIN / MAX function •
- Average function •
- RS-232 interface ISO calibration • certificate (optional)



#### **Technical specifications**

Measurement ranges	ŝ
Wind speed	0.2 to 25 m/s
Air temperature	0 to 50 °C
Air volume	0 to 9,900 m3/min
	(it's calculated with the average value)
Resolution	
Wind speed	0.1 m/s
Air temperature	0.1 °C
Air volume	0.001 to 100 m <sup>3</sup> /min
Accuracy	
Air volume	±2 % (of reading); +0.2 m/s
Air temperature	±0.8 °C
Impeller diameter	72 mm
Impeller location	precious stone support
Memory	16,000 values
Memory sequence	adjustable between 2 seconds
	and 9 hours
Interface	RS-232
Indicator	dual LCD for simultaneous measurements of
	air speed and temperature / 37 x 47 mm
Power	4 AA (Mignon) 1.5 V
Auto power-off	yes, after 20 minutes
Dimensions	200 x 76 x 35 mm
Weight	515 g

### Contents

PCE-008 thermo anemometer, carrying case, battery, user's manual, software and RS-232 interface

Model No.	Description	
PCE-008	Thermo anemometer	
Optional accessories		
RS232-USB	RS-232 to USB adapter	

#### RS232-USB CAL-LCA

ISO Certificate



### **PCE-424**

Professional thermo-anemometer for measurement of air speed

This thermo-anemometer makes accurate air speed and temperature measurements in fan systems. The hot wire heats up with a constant temperature and the current that you must measure cools it down. The combination of hot wire and standard thermistor delivers rapid and precise measurements even at low air velocities.

- · Displays air speed and air temperature simultaneously
- Automatic temperature compensation
- . Telescopic probe extends up to 1m • ISO calibration certificate (optional)



echnical specifications		
Aeasurement range		
Speed	0.2 to 20 m/s	
Temperature	0 to +50 °C	
Accuracy		
Speed	±1 %; ±1 dgt (full range)	
Temperature	±0.8 °C	
Resolution	0.1 m/s	
	0.1 °C	
Probe lenght	280 to 950 mm	
Probe diameter	minimum - maximum	
	from 8 to 12 mm	
Dperating conditions	barometric pressure:	
	500 mbar to 2 bar	
	temperature:	
	-10 °C to +50 °C	
ndicator	dual LCD	
Power	6 1.5 V batteries	
Inclosure	ABS plastic	
Dimensions	185 x 78 x 38 mm	
Veight	355 a	

### Contents

PCE-424 thermo anemometer, telescopic probe with cable, batteries, carrying case and user's manual

#### Model No. Description PCE-424

Thermo anemometer PCE 424

### **Optional accessories**

CAL-LCA ISO Certificate



Thermistor for measurement velocity

Thermistor for measurement temperature and temperaturecompensation

### **PCE-009**

Thermo-anemometer with memory, RS-232 interface and software

This thermo-anemometer is an economical solution for measuring with high accuracy and for its multiple functions. You can also transfer data to a PC or a portable computer. It can store up to 16,000 in its internal memory.

- · Measures air speed and temperature
- Air flow measurement
- Ideal for low air speeds
- . Several units of measurement: m/s, km/h, ft/min,knots,
- miles/h
- Maximum, minimum values are displayed and Data Hold function
- Auto shut-off
- Memory to record up to 16,000 values
- RS-232 interface ISO calibration certificate
- (optional)



Technical specificatio	ns
Measurement ranges	
Air speed	0.2 to 20.0 m/s
Air temperature	0.0 to +50.0 °C
Air volume	0 to 36,000 m <sup>3</sup> /min
Resolution	
Air speed	0.1 m/s
Air temperature	0.1 °C
Air volume	0.001 to 1 m <sup>3</sup> /min
Accuracy	
Air speed	±1 % (of reading)
Air temperature	±0.8 °C
Thermocouple	removeable telescopic hot wire
	normal lenght 280 mm
	extended lenght 940 mm
	maximum diameter 12 mm
	minimum diameter (heat) 8 mm
Memory	16,000 values
Memory space	adjustable between 2 sec. and 9 hours
Interface	RS-232
Indicator	large LCD (58 x 34 mm)
Power	4 AA batteries 1.5 V
Auto shut-off	after 5 min
Dimensions	200 x 76 x 38 mm
Weight	515 g

### Contents

PCE-009 thermo anemometer with logger and thermocouple with 1.5m cable, RS-232 interface, software, 4 batteries, carrying case and user's manual

Model No. Description PCE-009

Thermo anemometer PCE-009

### **Optional accessories**

RS-232 to USB adaptor RS232-USB CAL-LCA ISO Certificate

