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## Particle Counter PCE-PQC 23EU

## Air quality monitor PCE-PQC 2xEU series incl. calibration certificate Incl. CO2 sensor / Large measuring range / PID sensor / 6 measuring channels / Factory calibrated / 2 models available

The air quality monitor of the PCE-PQC 2xEU series measures particle sizes from 0.3 µm to 25 µm with mass concentration and additionally stores the parameters temperature, relative humidity, CO2 and TVOC (PCE-PQC 23EU only). This meter is the most versatile air quality monitor available with advanced power management and the industry's first sleep mode, enabling battery operation for periods that can exceed one month with a single charge. The PCE-PQC 2xEU series can be used as a stand-alone, battery-powered instrument or simply integrated into a building automation and plant monitoring system via Ethernet, USB.

The air quality monitor PCE-PQC 2xEU series can measure not only the measurement of particle sizes and mass concentrations but also the carbon dioxide content in the air. Furthermore, the air temperature and the relative humidity are measured. The air quality monitor PCE-PQC 23EU also has a photoionization detector (PID), which can be used for the measurement of volatile hydrocarbons (VOC's).

- CO2 sensor
- PID sensor
- Temperature and humidity measurement
- Ethernet
- USB
- Wifi (optional)
- Incl. calibration certificate traceable to NIST ISO 21501-4 and JIS B9921

## **Specifications:**

Measuring range 0.3 ... 25 µm

Measuring channel sizes Factory calibrated at 0.3, 0.5, 1.0, 3.0, 5.0, 10.0 μm

Counting efficiency 50% at 0.3  $\mu$ m, 100% at > 0.45  $\mu$ m according to JIS Particle mass display PM0.5, PM1.0, PM2.5, PM5.0, PM10 and TPM

Flow 2.83 I / min (0.1 ft³ / min)
Random loss 5% at 4,000,000 particles / ft³

Battery 10 h

Light source Long-life laser diode

Zero count <1 count / 5 min (<2 particles / ft3) according to ISO 21501-4 and JIS

Counting modes Automatic, manual, real-time, cumulative /

differential, mass concentration

Alarms 1 ... 9999999 counts, adjustable

Calibration Traceable to NIST

Display 4.3" WQVGA color touch display, 480x272 px

Printer External thermal printer
Aspiration Internal pump with automatic

Flow control

Air outlet Internal HEPA filter

Battery pack Replaceable Li-lon battery

Charging time About 4 hours

Reports ISO 14644-1

EU GMP Annex 1

FS 209E

Configuration Memory for 50 custom configurations

Standards ISO 21501-4 and JIS B9921

Dimensions 13.3 x 10.5 x 21 cm

Weight 1.8 kg

Storage 45000 data sets (ring memory) consisting of

Particle counting, temp. And humidity, CO2, (PID),

sample locations Places and times up to 1000 places can be deposited

samples duration 1 s ... 99 h adjustable power supply 110 ... 240V AC 50/60 Hz operating conditions 5 ... 40°C / 41 ... 104°F

Up to 95% RH not condensing

Storage conditions 0 ... 50°C / 32 ... 122°F

Up to 98% RH not condensing

CO<sub>2</sub> sensor

Measuring range 0 ... 5000 ppm

Resolution 1 ppm

Accuracy ± 1% of v. measuring range

PID sensor

 $\begin{array}{lll} \text{Measuring range} & 0 \dots 50 \text{ ppm} \\ \text{Resolution} & 0.001 \text{ ppm} \\ \text{Accuracy} & \pm 1.5\% \\ \text{Minimum concentration} & 5 \text{ ppb} \\ \text{Response time} & < 3 \text{ sec.} \end{array}$ 

Temp. / Humidity sensor Intern 0 ... 50°C (32 ... 122°F), 15 ... 90% rh

Resolution  $0.5^{\circ}\text{C}/\pm0.9^{\circ}\text{F}$ 

Accuracy  $\pm 0.5$ °C  $/ \pm 0.9$ °F,  $\pm 2$ % RH

Interface Ethernet, USB

Optional interfaces Wifi 802.11 b / g, RS485 or RS232

Number of measuring Channels 6

## Delivery scope:

- 1 x Particle counter PCE-PQC 23EU
- 1 x Isokinetic probe
- 1 x Temperature and humidity sensor
- 1 x Cleaning filter
- 1 x Li-lon rechargeable battery
- 1 x Software for data download
- 1 x USB cable
- 1 x Power supply / battery charger
- 1 x User manual
- 1 x Calibration certificate according to NIST