

## Particle Counter PCE-PQC 20US Incl. Calibration Certificate



## Air particle counter PCE-PQC 2xUS series

Counting of 6 particle sizes / Flow rate of 2.83 I / min / 4.3" color touch display / Ethernet and USB (optional Wifi) / Incl. temperature and humidity sensor

The PCE-PQC 2xUS series air particle counters are portable detection systems that include particles of specific sizes in the air. Furthermore, the air temperature and the relative humidity are monitored. The fixed flow rate of 2.83 I / min complies with current standards for air particle counter ISO 21501-4 and JIS B9921. Due to the compact design, the air particle counter of the PCE-PQC 2xUS series can be used in a variety of ways. These include the monitoring and inspection of clean rooms, filter systems in operating theaters and bottling plants in the pharmaceutical industry.

The internal memory of the air particle counter is sufficiently large for up to 45000 data sets. These data sets each include the metering parameters, temperature and humidity sensor readings, locations, and timestamp. An optionally available printer enables the measurement results to be printed directly. On the other hand, the stored data records of the air particle counter can be read out and processed via the supplied software via Ethernet, USB or Wifi.

- ► Captures 6 particle sizes
- ► Flow rate 2.83 I / min
- ► Including software package
- ▶ 4.3" color touch display
- ► Ethernet and USB interfaces
- ▶ Installed in a stainless steel housing

## **Specifications**

Measuring range 0.3 ... 25 μm

Measuring channel sizes Factory calibrated at 0.3, 0.7, 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  $2.83 \text{ l/min } (0.1 \text{ ft}^3 / \text{min})$ Random loss 5% at 4,000,000 particles  $/ \text{ ft}^3$ 

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

CO2 sensor

Measuring range 0 ... 5000 ppm

Resolution 1 ppm

Accuracy ± 1% of v. measuring range

PID sensor

Measuring range  $0 \dots 50 \text{ ppm}$ Resolution 0.001 ppmAccuracy  $\pm 1.5\%$ 

Subject to change



Minimum concentration 5 ppb Response time < 3 sec.

Temp. / Humidity sensor

0 ... 50°C (32 ... 122°F), 15 ... 90% rh

Intern

Resolution  $0.5^{\circ}C / \pm 0.9^{\circ}F$ 

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

Interface Ethernet, USB

Wifi 802.11 b / g, RS485 or RS232 Optional interfaces

Number of measuring 6

Channels