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## PCE PCE-PQC 22EU Particle Counter

## Particle counter PCE-PQC 1xEU series incl. calibration certificate Measurement of particle sizes up to 25 $\mu$ m / Up to 6 parallel measuring channels / Internal memory / Reporting according to ISO 14644-1, EU GMP Annex I, FS 209E / Extrapolation of the mass concentration in $\mu$ g / m<sup>3</sup> / Ethernet, USB or (optional) Wifi connection

The particle counters of the PCE-PQC 1xEU series measure the concentration of particles such as dust, soot, pollens and many other aerosols in the air. To accurately determine the degree of pollution of the air, the particle counters were developed. Pollution is mainly generated by combustion, material processing, manufacturing, power generation, vehicle engine emissions and the construction industry. With the help of the PCE-PQC 1xEU series particle counters the exact amount of dirt particles in the air can be measured.

Of greater importance is the degree of pollution of the air with pathogenic particles such as soot, which are released by the industry and especially by diesel vehicles without special filtering in the air. Such dispersion particles are responsible inter alia for reduced visibility, the inhalation of toxic substances and thus reduced labor productivity. It has also been known for some time that the particles also make a not inconsiderable contribution to many medical diseases such as asthma, bronchitis, skin and lung diseases. The particle counters are designed for easy and quick use. The particle counters of the PCE-PQC 1xEU series operate in different modes (real-time, cumulative, differential, mass concentration, ...) and display the results on the display,

- Internal memory
- Particle sizes up to 25 µm
- Color display
- Handy
- 6 measuring channels
- ISO 14644-1, EU GMP Annex I, FS 209E
- Mass concentration
- Ethernet, USB
- Incl. calibration certificate traceable to NIST ISO 21501-4 and JIS B9921

## **SPECIFICATION**

Measuring range	0.3 25 μm
Measuring channel sizes	Factory calibrated at 0.3, 0.5, 1.0, 2.5, 5.0, 10.0 μm
Counting efficiency	50% at 0.3 μm 100% at > 0.45 μm according to JIS
Flow	2.83 l / min (0.1 ft3 / min)
Random loss	5% at 4,000,000 particles / ft³

10 h Light source Long-life laser diode < 1 count / 5 min (< 2 particles / ft<sup>3</sup>) Zero count According to ISO 21501-4 and JIS Automatic, manual, real-time, cumulative / Counting modes Differential, mass concentration 1 ... 9999999 counts, adjustable Traceable to NIST Calibration 4.3" WQVGA color touch display, 480x272 px External thermal printer Internal pump with automatic Aspiration Flow control Internal HEPA filter Air outlet Replaceable Li-Ion battery Battery pack About 4 hours Charging time Reports ISO 14644-1 EU GMP Annex 1 FS 209E Configuration Memory for 50 custom configurations Standards ISO 21501-4 and JIS B9921 Dimensions 25.4 x 12.9 x 11.4 cm 1.0 kg Storage 45000 data sets (ring memory) consisting of Particle count, temp and humidity, locations and times Sample locations Up to 1000 locations can be stored 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 USB

Interface **Optional interfaces** Number of measuring channels

Ethernet, WiFi 802.11 b / g, RS485 or RS232 6

## **DELIVERY SCOPE**

Battery

Alarms

Display Printer

Weight

- 1 x Particle counter PCE-PQC 20EU
- 1 x Temperature and humidity sensor
- 1 x Isokinetic probe
- 1 x Cleaning filter
- 1 x Li-Ion 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