

# Particle Counter PCE-PQC 10US Incl. Calibration Certificate



## Particle counter PCE-PQC 1xUS series incl. calibration certificate

**Measurement of particle sizes up to 25 µm / Up to 6 parallel measuring channels/ 45,000 record internal memory / Reporting according to ISO 14644-1, EU GMP Annex I, FS 209E / Extrapolation of the mass concentration in µg / m<sup>3</sup> / Ethernet, USB or (optional) Wifi connection**

The particle counters of the PCE-PQC 1xUS series measure the concentration of particles such as dust, soot, pollens, and many other aerosols in the air. These particle counters were developed to accurately determine the degree of pollution of the air. Pollution is mainly generated by combustion, material processing, manufacturing, power generation, vehicle engine emissions and the construction industry and may be invisible to the eye.

The PCE-PQC 1xUS series particle counters allow the user to measure the exact amount of dirt particles in the air. Secondly important is the degree of air pollution with pathogenic particles such as soot, which are released by heavy industry and especially by diesel vehicles without special filtering of the air. These dispersion particles are responsible for many respiratory issues, shortness of breath, bronchitis, asthma, stroke, heart attack and thus reduced labor productivity. The particle counters of the PCE-PQC 1xUS series operate in different modes (real-time, cumulative, differential, and mass concentration) and display the results on the display with the ability to graph trends and save data remotely.

- Handheld, portable, light weight with kickstand
- ▶ Battery life > 10 hours with continuous operation / Battery life > 8 days in sleep mode
- Internal memory up to 45,000 records
- Particle sizes up to 25 µm
- Color display with touch screen
- 6 measuring channels, upper 2 channels can be adjusted
- ISO 14644-1, EU GMP Annex I, FS 209E
- Mass concentration mode (**adjustable: PM 2.5 and PM 10 e.g.**)
- Ethernet, USB, PC software included, and WiFi optional
- **Incl. calibration certificate traceable to NIST ISO 21501-4**

# Specifications

Measuring range	<b>0.3 ... 25 µm</b>
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 ft <sup>3</sup> / min)
Random loss	5% at 4,000,000 particles / ft <sup>3</sup>
Battery	10 h
Light source	Long-life laser diode
Zero count	< 1 count / 5 min (< 2 particles / ft <sup>3</sup> ) 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-Ion 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	25.4 x 12.9 x 11.4 cm
Weight	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
Interface	USB
Optional interfaces	Ethernet, WiFi 802.11 b / g, RS485 or RS232
Number of measuring channels	6

Subject to change