

PARTICLE COUNTER

PCE-PCO 2



- » Captures 6 particle sizes
- » Measures air temperature, dew point and relative humidity
- » 2.8" TFT full-color LCD screen
- » Built-in camera for image and video recording
- » Cumulative, differential and concentration particle counting modes
- » Stores up to 5,000 data sets to memory
- » Power-saving automatic shutdown feature
- » PM channels: PM 2.5, PM 10, including mass concentration mode ($\mu\text{g}/\text{m}^3$)
- » Free software download on PCE Software web page

This is a portable handheld particle counter used to monitor particulate matter (PM) concentrations in the air. Designed to aid in indoor air quality (IAQ) assessments, this particle counter also measures formaldehyde air temperature, dew point and relative humidity.

The particle counter is ideal for monitoring clean rooms, exposure to exhaust, smoke and other harmful air pollutants, and levels of airborne combustible dust such as agricultural dust, carbonaceous dust, chemical dust, metal dust, plastic dust and wood dust.

A variety of materials are explosive in dust form. Some examples include: food (e.g., candy, sugar, spice, starch, flour and feed), grain, tobacco, plastics, wood, paper, pulp, rubber, pesticides, pharmaceuticals, dyes, coal and metals (e.g., aluminum, chromium, iron, magnesium and zinc). These materials are used in agriculture, chemical manufacturing, pharmaceutical production, furniture, textiles, fossil fuel power generation, recycling operations, metal working and processing (including additive manufacturing and 3D printing) and many other industries and processes.

In addition to being a combustion hazard, certain kinds of dust can be a health hazard.

Specification

Particle	
Measuring channel sizes	0.3, 0.5, 1.0, 2.5, 5.0, 10
Measuring range	0.3 ... 10 µm
Counting efficiency	50 % at 0.3 µm; 100 % at particle size > 0.45 µm
Flow volume	2,83 l/min
Coincidence error	<5% at 2,000,000 particles per ft³

Particle	
Measuring range	0 ... 2000 µg/m³
Resolution	1 µg/m³
Measuring channel sizes	PM2,5, PM10

Dew point	
Measuring range	0 ... 10 °C
Resolution	0,1 °C
Accuracy	±1°C

Dew point	
Measuring range	10 ... 40 °C
Resolution	0,1 °C
Accuracy	±0.5°C

Dew point	
Measuring range	40 ... 50 °C
Resolution	0,1 °C
Accuracy	±1°C

Relative humidity	
Measuring range	0 ... 20 % RH
Resolution	0,1 % RH
Accuracy	±5 % RH

Relative humidity	
Measuring range	20 ... 40 % RH
Resolution	0,1 % RH
Accuracy	±3.5 % RH

Relative humidity	
Measuring range	40 ... 60 % RH
Resolution	0,1 % RH
Accuracy	±3 % RH

Relative humidity	
Measuring range	60 ... 80 % RH
Resolution	0,1 % RH
Accuracy	3.5 % RH

General technical data	
Display type	LCD with backlight
Display size	2,8 Inch
Display resolution	320 x 240 pixels
Storage medium	Internal memory
Storage capacity	80 MB
Memory capacity (additional information)	Micro SD card 5000 data records
Interface	Mini-USB
Sensor	Laser scattered light
Operating time	4 h
Automatic power-off from...to	3 ... 60 min.
Menu language	English, French, German, Spanish
Protection class (device)	IP20
Connector type	Device-europlug
(Rechargeable) battery	1 x 7,4 V internal , Lithium polymer battery
Capacity	1200 mAh
Operating conditions	0 ... 50 °C , 10 ... 90 % RH
Storage conditions	0 ... 50 °C , 10 ... 90 % RH
Dimensions (L x W x H)	240 x 75 x 55 mm
Weight	420 g

Relative humidity

Measuring range 80 ... 100 % RH

Resolution 0,1 % RH

Accuracy ± 5 % RH

Temperature

Measuring range 0 ... 10 °C

Resolution 0,1 °C

Accuracy ± 1 °C

Temperature

Measuring range 10 ... 40 °C

Resolution 0,1 °C

Accuracy ± 0.5 °C

Temperature

Measuring range 40 ... 50 °C

Resolution 0,1 °C

Accuracy ± 1 °C