

Air Quality Particle Counting Meter PCE-PCO 2



PCE-PCO 2 Air Quality Particle Counting Meter

Portable handheld device for monitoring particulate matter (PM) concentrations in the air / 0.3 µm, 0.5 µm, 1.0 µm, 2.5 µm, 5.0 µm and 10 µm particle sizes, Measures air temperature, dew point and relative humidity

This is a portable handheld air quality particle counting meter or 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 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. Exposure (such as skin contact, eye contact and inhalation) can be linked to sneezing, a stuffy or runny nose, itchy or red eyes, headaches, fatigue, fever, cough, shortness of breath, dermatitis, asthma, bronchitis, pneumonia (e.g., Legionnaires' disease and hypersensitivity pneumonitis) and cancer.

When inhaled, PM 2.5 and PM 10 particles can settle deep into the lungs and result in damaging health effects. Since the PCE-PCO 2 particle counter monitors PM 2.5 and PM 10 particles, the device has many practical health and safety applications. Heating, ventilation and air conditioning (HVAC) technicians use PM 2.5 and PM 10 particle counters for HVAC system performance and filtration audits. In addition, industrial hygienists and workplace safety professionals rely on PM 2.5 and PM 10 particle counters when evaluating occupational health and safety risks related to hazardous and combustible dust.

- ▶ 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 (µg/m³)**
- ▶ Free software download on PCE Software web page

Subject to change

Specifications

Particle specifications

Particulate matter channels	PM 2.5 / PM 10
Particle concentrations	0 ... 2000 µg / m ³
Resolution	1 µg / m ³

Particle counter specifications

Particle sizes (in micrometers)	0.3 / 0.5 / 1.0 / 2.5 / 5.0 and 10 µm
Flow rate	2.83 l / min
Coincidence error	< 5 % at 2,000,000 particles per cubic foot
Counting efficiency	50 % at 0.3 µm; 100 % with particle size > 0.45 µm
Memory capacity	Stores up to 5,000 data sets
Counting modes	Cumulative, differential, concentration

Temp. and humidity measurement specifications

Air temp. measuring range	0 ... +50 °C / +32 ... +122 °F
Dew point temp. measuring range	0 ... +50 °C / +32 ... +122 °F
Humidity measuring range	0 ... 100 % RH
Air temp. accuracy	+10 ... +40 °C / +50 ... +104 °F: ± 0.5 ° Others: ± 1 °
Dew point temp. accuracy	0 ... +10 °C / +32 ... +50 °F: ± 1 ° +10 ... +40 °C: / +50 ... +104 °F ± 0.5 °
Humidity accuracy	0 ... 20 % RH: ± 5 % 20 ... 40 % RH: ± 3.5 % 40 ... 60 % RH: ± 3 % 60 ... 80 % RH: 3.5 % 80 ... 100 % RH: ± 5 %

General device specifications

Operating conditions	0 ... +50 °C / +32 ... +122 °F, 10 ... 90 % RH, non-condensing
Storage conditions	-10 ... +60 °C / +14 ... +140 °F, 10 ... 90 % RH, non-condensing
Display	2.8", 320 x 240 pixel, backlit, TFT full-color LCD screen
Power supply	1 x rechargeable battery
Battery life	Approx. 4 hours of continuous operation at full charge
Battery recharge time	Approx. 2 hours using AC charger

More information

Manual



More product info



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