

Particle Counter PCE-RCM 10







PCE-RCM 10 Particle Counter

Portable handheld device for monitoring particulate matter (PM) concentrations in the air / 2.5 μ m and 10 μ m particle sizes / Measures air temperature and relative humidity

PCE-RCM 10 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 air temperature and relative humidity (RH). The particle counter can be powered either by the built-in rechargeable battery or the USB port. The USB port also is used to charge the battery. At full charge, the battery provides up to 5 hours of continuous operation or unlimited operation when plugged into a USB power source. The particle counter displays all measurements simultaneously on the device's 2.4" full-color LCD screen. PM values appear the largest in the colors green, yellow, gold, orange, pink and red. This visual color-coding system makes it easy to recognize when PM concentration levels become dangerous, allowing for quick action.

When inhaled, PM 2.5 and PM 10 particles can settle deep into the lungs and result in damaging health effects. Since the PCE-RCM 10 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.

- Particulate matter (PM) channels: PM 2.5, PM 10
- Particle sizes (in micrometers): 2.5 μm, 10 μm
- ▶ Temperature measuring range: -20 ... +70 °C / -4 ... +158 °F
- ▶ Humidity measuring range: 0 ... 100 % RH
- ▶ 2.4" full-color LCD with user-friendly graphics
- ▶ 240 x 320 pixel display resolution
- ▶ Powered by integrated rechargeable battery or by AC power (via USB port)
- ▶ Battery offers up to 5 hours of continuous use at full charge
- Portable handheld design for indoor air quality (IAQ) monitoring in the field and on the go

Specifications

General device specifications

Display 2.4" full-color LCD
Display resolution 240 x 320 pixels

Power supply Built-in 1000 mAh rechargeable battery or 5 V

USB port

Battery life Up to 5 hours of continuous use at full charge

Charging time Up to 2 hours with device power off

Charging interface USB port

Operating conditions $0 \dots +50 \,^{\circ}\text{C} / +32 \dots +122 \,^{\circ}\text{F}$ Storage conditions $-10 \dots +60 \,^{\circ}\text{C} / +14 \dots +140 \,^{\circ}\text{F}$

Particle specifications

Particulate matter channels PM 2.5 / PM 10 Particle sizes (in micrometers) 2.5 μ m, 10 μ m Particle concentrations 0 ... 2000 μ g / m³ Resolution 1 μ g / m³

Temperature specifications

Temp. measuring range -20 ... +70 °C / -4 ... +158 °F

Accuracy \pm 1 °C Resolution 0.1 °C

Relative humidity (RH)

specifications

Humidity measuring range 0 ... 100 % RH

Accuracy ± 3.5 % RH (20 ... 80 % RH)

± 5 % RH (0 ... 20 % RH / 80 ... 100 % RH)

Resolution 0.1 % RH