

ENVI-CPC 200



The ENVI-CPC 200 is currently the only butanol-based particle counter with high efficiency, which can directly determine the highest concentrations of $2 \cdot 10^6$ particles in single counting mode in high resolution without dilution. It is part of our modular nanoparticle measurement system. It can be combined arbitrarily with different systems to measure ultrafine particles. Likewise, it is particularly suitable for long-term measurement of combustion or other aerosols with high concentrations of nanoscaled particles. The patented evaporator and condensation module is maintenance-free.

The system meets the requirements of the current standard EN 16976:2024 (Harmonized measurement of number concentrations using CPC) in all areas. It can be operated directly with a NAFION® based sampling system if desired. The pumps required for this are already integrated.

BENEFITS

- The unique, patented way of providing the working fluid for unattended operation for months
- Ambient air monitoring without a dilution system
- Intuitive user interface with sophisticated software for data evaluation
- Limitless, integrated network connectivity that supports remote operation and data storage on the internet
- Powerful software package
- Low maintenance

APPLICATIONS

- Aerosol Research
- Environmental measurements
- Environmental monitoring measurement networks
- Workplace safety and occupational exposure studies
- Traffic emission monitoring
- Health studies
- Mobile aerosol studies

FEATURES

- Automatic measurement data storage
- Measurement of the particle size distribution of condensed particles for quality assurance
- Integrated pump
- Integrated computer with 7" touchscreen

DATASHEET

Measurement (number C_N)	range	$2 \cdot 10^6$ particles/cm ³ (single count mode)	Measurement (size)	range	4 – 5,000 nm
Volume flow		0.9 l/min (others on request)	Time resolution		min. 1 s
Interfaces		USB, Ethernet (LAN), RS-232/485	User interface		Touchscreen, 800 • 480 pixel, 7" (17.78 cm)
Detection efficiency (at low particle size)		D50 = 10 +/- 1 nm; D90 < 20 nm (others on request)	Data acquisition		Digital, 20 MHz processor, 256 raw data channels
Light source		Long term stable LED	Installation conditions		+10 – +30 °C (others on request)
Accuracy		5% (Einzelzählmodus)	Response time		$t_{90} < 3$ s
Arbeitsflüssigkeit		Butanol	Dimensions		330 • 380 • 240 mm (H • W • D)
Weight		Approx. 10 kg	Data Management		Prepared for connection to the Palas Cloud MyAtmosphere ("MyAtmosphere-ready"); Internet access and separate registration required. The MyAtmosphere terms of use apply.

NORMS AND CERTIFICATES

EN 16976:2024-09, ISO 27891:2015