

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. This allows continuous operating times of up to one year without maintenance and cleaning - unique.

The system meets the requirements of the current standard CEN / TS 16976:2016 (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
- Depending on the sensor used (exchangeable by the user), the ENVI-CPC 200 counts up to $2 \cdot 10^6$ particles/cm³ in count mode
- Ambient air monitoring without a dilution system
- Integrated computer with 7" touch screen
- Intuitive user interface with sophisticated software for data evaluation
- Integrated data logger
- Limitless, integrated network connectivity that supports remote operation and data storage on the internet
- Powerful software package

APPLICATIONS

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

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	Interfaces		USB, Ethernet (LAN), RS-232/485
User interface		Touchscreen, 800 • 480 pixel, 7" (17.78 cm)	Detection efficiency (at low particle size)		D50 = 7 +/- 0.7 nm; D90 < 14 nm
Data acquisition		Digital, 20 MHz processor, 256 raw data channels	Light source		Long term stable LED
Installation conditions		+10 – +30 °C (others on demand)	Accuracy		5% (Einzelzählmodus)
Response time		$t_{90} < 3$ s	Operation liquid		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. MyAtmosphere terms and conditions of use apply.			