



The ENVI-CPC 50 is a butanol-based particle counter with high efficiency, especially for the smallest nanoparticles. It can monitor concentrations of ultrafine particles (UFP) in outdoor air. The Model 50 is designed for concentrations up to  $10^4$  particles/cm<sup>3</sup>. This makes it ideal for long-term measurement- alone or as part of an overall system for measuring the size distribution and concentration of UFP.

The patented evaporator and condensation module is maintenance-free. This allows continuous operating times of up to one year without maintenance and cleaning - unique so far.

The system meets the requirements of the standard EN 16976:2024 (Harmonized measurement of number concentrations using CPC) in all areas. It can be operated directly with a NAFION<sup>®</sup> 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 of months
- Intuitive user interface with sophisticated software for data evaluation
- Limitless integrated network connectivity that supports remote operation and data storage in 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

- Expandable to U-SMPS spectrometer
- 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	$10^4$ particles/cm <sup>3</sup> (single count mode), $10^4 - 10^7$ particles/cm <sup>3</sup> (nephelometric 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	Power supply		115 – 230 V, 50/60 Hz
Installation conditions		+10 – +30 °C (others on demand)	Accuracy		5% (single count mode), 10% (nephelometric mode)
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.			