

# MFP NANO PLUS 4000



The MFP Nano plus 4000 is specially designed to clearly determine the separation efficiency of HEPA and ULPA filter media in accordance with DIN EN 1822-3 and ISO 29463-3. The U-SMPS is a modern and powerful nanoparticle measuring device with a measuring range of 5 nm to 1  $\mu\text{m}$  for particle size and quantity analysis. In the MFP Nano plus 4000, the separation efficiency at a specific size is measured simultaneously with one UF-CPC condensation core counter each in raw and clean gas.

## 优势

- Real-time determination of the fraction separation efficiency above 20 nm
- The measuring time for determining the fraction separation efficiency is halved by measuring the particle concentration in the raw and clean gas.
- No dilution necessary!
- Combining two UF-CPC versions, the UF-CPC for the highest concentrations, up to 2,000,000 particles/ $\text{cm}^3$  (single count mode) in the raw gas and the UF-CPC 50 for top counting rates at low concentrations
- Internationally comparable measurement results in accordance with DIN EN 1822-3 and ISO 29463-3
- Simple use of different test aerosols, such as NaCl / KCl or DEHS (others on request)
- Simple measurement of the fraction separation efficiency and determination of the MPPS range
- High reproducibility of the test method
- Cleaning can be performed independently by the customer
- Short set-up times, fast throughput times
- Mobile set-up, easy to move on castors

## APPLICATIONS

- Testing of filter media and small mini filters in product development and production monitoring
- Testing capability according to DIN EN 1822-3 (HEPA / ULPA) and ISO 29463-3
- Fractional efficiency measurement for other filter media in the range of approx. 20 nm to 1  $\mu\text{m}$

## 特点

- Measurement of fractional efficiency and pressure loss vs. volume flow
- Simultaneous use of two condensation core counters (UF-CPC 50)
- Customized filter adapters and adaptations in the air duct possible

## DATASHEET

气溶胶	Dusts (e.g., SAE dusts), salts (e.g., NaCl, KCl), liquid aerosols (e.g., DEHS)	滤材测试面积	100 cm <sup>2</sup>
测量范围(粒径)	U-SMPS: 10 – 800 nm	体积流量	0.48 – 5.76 m <sup>3</sup> /h - pressurized operation
电源	115 – 230 V, 50/60 Hz	Differential pressure measurement	0 – 2,500 Pa (others on request)
Inflow velocity	1.3 – 16 cm/s (others on request)	Compressed air supply	6 – 8 bar
Dimensions	Approx. 760 • 2,100 • 985 mm (H • W • D)		

## 标准和证书

EN 1822-3, ISO 29463-3