ENVI-CPC 100







The ENVI-CPC 100 is a butanol-based particle counter with high efficiency for monitoring ultrafine particle (UFP) concentrations in the ambient air. The Model 100 is designed for typical concentrations of up to 10^5 particles/cm 3 . It is part of our modular nanoparticle measurement system. It can be combined with different systems 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.

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 $^{\text{\tiny B}}$ based sampling system if desired. The pumps required for this are already integrated.

优势

- The unique, patented way of providing the working fluid for unattended operation for months
- 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

特点

- 可扩展至U-SMPS 扫描电迁移率粒径谱仪
- 自动测量数据存储
- 用于质量控制的凝结粒子粒径分布测量
- 集成泵
- 配备7 英寸触摸屏的集成计算机

应用领域

- 气溶胶研究
- 环境测量
- 环境监测网络
- 工作场所安全与职业暴露研究
- 交通排放监测
- 健康研究
- 移动气溶胶研究

技术数据

测量原理 Optical sensor for determining the number concentration and size distribution

of condensed particles

测量范围(数量浓度) 0,1 - 100.000 P/cm³ (single count mode)

测量范围(粒径) Approx. 5μm

体积流量 0.9 l/min +/- 2% (optional 0.5 l/min additional)

Time resolution 1s - 60s

接口 USB, Ethernet (LAN), RS-232/485

User interface Touchscreen, 800 • 480 pixel, 7" (17.78 cm)

Detection efficiency (at low parti-

cle 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 电源 115 – 230 V, 50/60 Hz

Installation conditions +10 - +30 °C (others on request)

Accuracy 5% (single count mode), 10% (nephelometric mode)

Response time $t_{90} < 3 s$

Working fluid n-Butanol (>99.5%)

Dimensions 330 • 380 • 240 mm (H • W • D)

重量 Approx. 10 kg

Resolution Min. 1s

Data Management Prepared for connection to the Palas Cloud MyAtmosphere ("MyAtmosphere

ready"); Internet access and separate registration required. The MyAtmo-

sphere terms of use apply.

标准和证书

EN 16976:2024-09, ISO 27891:2015