APPLICATIONS

- Aerosol research
- Indoor and outdoor particle measurement
- Workplace measurement
- Test of filters, air cleaners
- Cloud research
- Emission and immission measurement
- Inhalation measurement
- Calibration

OUR CORE COMPETENCIES

- Filter test systems
- Aerosol spectrometer systems
- Fine dust monitoring systems
- Nanoparticle measurement systems
- Particle generation systems
- Dilution systems
- Clean room particle technology
- Special developments
- Calibration systems
- Services
- Training courses and seminars

NANOPARTICLE MEASURING DEVICES

Palas GmbH
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Version: July 2025

OVERVIEW

UF-CPC SYSTEM
condensation particle counter

UF-CPC 50
$C_{N\,Max}$: 10^4 particles/cm³ (single count mode)*1
d_p: 4–5,000 nm

UF-CPC 100
$C_{N\,Max}$: 10^5 particles/cm³ (single count mode)*1
d_p: 4–5,000 nm

UF-CPC 200
$C_{N\,Max}$: $2 \cdot 10^6$ particles/cm³ (single count mode)*1
d_p: 4–5,000 nm

ENVI-CPC SYSTEM
condensation particle counter for particle concentration measurement according to EN 16976:2024

d_p: 4–5,000 nm

D50 ≈ 10 nm

ENVI-CPC 50
$C_{N\,Max}$: 10^4 particles/cm³ (single count mode)*1

ENVI-CPC 100
$C_{N\,Max}$: 10^5 particles/cm³ (single count mode)*1

ENVI-CPC 200
$C_{N\,Max}$: $2 \cdot 10^6$ particles/cm³ (single count mode)*1

*1 $C_{N\,Max}$: 10^7 particles/cm³ (nephelometric mode)

DEMC SYSTEM
differential electrical mobility classifier with short/long column according to ISO 15900:2020

DEMC 1000
d_p: 4–600 nm

DEMC 2000
d_p: 8–1,400 nm

DEMC ---- X
integrated soft X-ray neutralizer

U-SMPS SYSTEM
universal scanning mobility particle sizer, different configuration possible

U-SMPS 1050/1100/1200
d_p: 4–440 nm

U-SMPS 1700*2
d_p: 2–440 nm

U-SMPS 2050*3/2100*3/2200
d_p: 8–1,200 nm

U-SMPS 2700*2
d_p: 6–1,200 nm

U-SMPS ---- X
integrated soft X-ray neutralizer

*2 only for high concentrations(min. 1,000 particles/cm³/channel)
*3 with ENVI-CPC System compliant to CEN/TS 17434:2020

U-RANGE 2000
continuous measurement of particles
U-SMPS SYSTEM in combination with FIDAS® 200
(also possible with PROMO® LED 2000)

d_p: 8–40,000 nm

NEUTRALIZER

KR-85-370
radioactive source

XRC 049
X-ray source

CHARME®
reference aerosol electrometer

$C_{N\,Max}$: $1.6 \cdot 10^7$ particles/cm³
d_p: >2 nm

AQ GUARD SMART 2000
air quality analyzer for monitoring nanoparticles

$C_{N\,Max}$: 10^8 particles/cm³
d_p: > 10 nm