U-SMPS 1050/1100/1200



U-SMPS (Universal Scanning Mobility Particle Sizers) have been successfully used worldwide for many years for the precise selection of particle size with simultaneous measurement of the particle concentration in the sub-micron range. Depending on the combination of classifying column (DMA), control unit (DEMC), and particle counter, they cover ranges from a few nanometers to several micrometers. Different combinations are possible depending on the application and customer requirements.

Palas U-SMPS System can be operated directly with max. two different counters and also accepts third-party products of well-known manufacturers for direct comparison.

Benefits

- Particle size distributions from 4 nm to 440 nm
- Continuous and fast-scanning principle of measurement
- High resolution in up to 64 size classes / decade
- Suitable for concentrations of up to 10^8 particles/cm^3
- Universally connects to DMAs and nanoparticle counters from other manufacturers
- Graphic display of measurement values
- Intuitive operation using 7″ touchscreen and GUI
- Integrated data logger
- Supports multiple interfaces and remote access
- Low maintenance

* Please contact Palas® for further details.

Applications

- Filter test
- Aerosol research
- Environmental and climatic studies
- Inhalation experiments
- Interior and workplace measurements

Model Variations



U-SMPS 1050 X/1100 X/1200 X

Version for various applications of 4 – 440 nm with integrated X-ray ionization

https://www.palas.de/en/product/usmps1050x_1100x

DATASHEET

Measurement range (number C_N)	0 – 10^8 particles/cm^3
Measurement range (size)	4 – 440 nm
Volume flow (sheath air)	2.5 – 14 l/min (others on request)
Size channels	Max. 256 (128/decade)
User interface	Touchscreen, 800 • 480 pixel, 7″ (17.78 cm)
Data logger storage	4 GB
Software	PDAnalyze
Power supply	90 – 264 V, 50/60 Hz
Installation conditions	+10 – +30 °C (others on request)
Adjustment range (voltage)	1 – 10,000 V
Data Management	Prepared for connection to the Palas Cloud MyAtmosphere (“MyAtmosphere-ready”); Internet access and separate registration required. The MyAtmosphere terms of use apply.

NORMS AND CERTIFICATES

ISO 15900:2010, ISO 27891:2015