



Scattered-light aerosol spectrometer system for process measurement technology and monitoring applications with two sensors for quasi simultaneously measurements

Benefits

- Measuring range of 0.2 to 100 μm (4 measuring ranges selectable in one device)
- Up to four measuring ranges in only one device:
 - 0,2 μm - 10 μm
 - 0,3 μm - 17 μm
 - 0,6 μm - 40 μm
 - 2 μm - 100 μm (additionally for sensors 2300 and 2500)
- Up to 128 size channels per measuring range
- Concentration range of 1 particle/ cm^3 to 10⁶ particles/ cm^3
- Calibration curves for different refractive indices
- Very high and reproducible counting efficiency rate starting at 0.2 μm
- Optical fibre technology
- Simple operation with a large touch display
- Calibration, cleaning and lamp replacement can all be performed independently by the customer
- External control by RS 232 or Ethernet
- With analysis software PDAnalyze
- Optional: Software PDCControl for operation as welas® digital available
- Low maintenance
- Reliable function

Applications

- Emission monitoring of installations
- Control of grinding and classification processes
- Monitoring of production processes in the food, pharmaceuticals and chemicals industries
- Testing of complete filters, inertial and wet separators or electrostatic precipitators

Model Variations



Promo® 3000 H

With heating regulation up to 250 °C for welas® aerosol sensors

<https://www.palas.de/product/promo3000h>



Promo® 3000 HP

With automatic regulation of sampling volume flow by the aerosol sensors welas® under overpressure up to 10 bar or in temperatures to 120 °C

<https://www.palas.de/product/promo3000hp>



<https://www.palas.de/product/promo3000>

Datasheet

<i>Parameter</i>	<i>Description</i>
Interfaces	USB, Ethernet, RS232/485, Wi-Fi
Measurement range (size)	0.2 µm – 10 µm, 0.3 µm – 17 µm, 0.6 µm – 40 µm, 2 µm – 100 µm
Size channels	up to 128 (64/decade)
Measuring principle	Optical light-scattering
Measurement range (number C_N)	< 1 • 10 ⁶ particles/cm ³
Time resolution	up to 1 s
Thermodynamic conditions	10 – 40 °C, -100 – 50 mbar
Volume flow	5 l/min
Data acquisition	20 MHz processor, 256 raw data channels, digital
Light source	Xenon arc lamp 35 W
Power consumption	100 W
User interface	Touch screen, 800 • 480 pixels, 7" (17.78 cm)
Power supply	115 – 230 V, 50 – 60 Hz
Housing	Table housing, optionally with mounting brackets for rack-mounting
Dimensions	185 • 450 • 315 mm (H • W • D) (19")
Support options	Direct remote access, Palas [®] webserver service
Weight	approx. 8 kg (control unit), approx. 2.8 kg (per sensor)
Operating system	Windows embedded
Data logger storage	4 GB Compact Flash
Software	PDControl, FTControl, PDAnalyze
Installation conditions	+5 – +40 °C (control unit)

Promo[®] 3000



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