



Promo® 2000 is a light-scattering aerosol spectrometer system for particle size analysis and concentration determination that can be equipped with all welas® sensors. On Promo® 2000, the welas® sensors equipped with different measurement volumes, as required, can be easily connected via fiber optic cables and interchanged as needed. These sensors allow reliable measurement in the concentration range from $< 1 \text{ particle/cm}^3$ to $10^6 \text{ particles/cm}^3$ in gases.

Promo® 2000 is famous for up to 128 size channels per measuring range and a concentration range from $< 1 \text{ particle/cm}^3$ to $10^6 \text{ particles/cm}^3$.

BENEFITS

- Measuring range from $0.2 \mu\text{m}$ to $100 \mu\text{m}$ (up to 4 measuring ranges selectable in one device)
- Very high size resolution
- Concentration range from $< 1 \text{ particle/cm}^3$ to $10^6 \text{ particles/cm}^3$
- Calibration curves for different refractive indices
- Very high and reproducible counting efficiency even from $0.2 \mu\text{m}$
- Pressure resistant up to 10 bar (optional)
- Heatable up to 250°C (optional)
- Optical fiber technology
- Easy to operate thanks to large touch display
- Calibration, cleaning, and lamp replacement can be carried out independently by the customer
- External control via RS 232 or Ethernet
- With PDAnalyze analysis software
- Optional: PDControl software available for operation as welas® digital
- Low maintenance
- Reduces your operating costs

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® 2000 H
With heating control up to 250°C for welas® aerosol sensors

<https://www.palas.de/product/promo2000h>



Promo® 2000 HP
Version with automatic regulation of the sampling flow through the welas® aerosol sensors at an overpressure of 2 to 10 bar or with heating regulation to 120°C

<https://www.palas.de/product/promo2000hp>

FEATURES

- Up to four measuring ranges can be selected in one device: $0.2 \mu\text{m} - 10 \mu\text{m}$ | $0.3 \mu\text{m} - 17 \mu\text{m}$ | $0.6 \mu\text{m} - 40 \mu\text{m}$ | $2 \mu\text{m} - 100 \mu\text{m}$
- Up to 128 size channels per measuring range
- Clear calibration curve thanks to white light source with 90° stray light detection
- Patented T-aperture: No edge zone error
- Digital single signal processing: Coincidence

DATASHEET

Measuring principle	Optical light-scattering	Measurement range (number C_N)	$< 1 \cdot 10^6$ particles/cm ³
Measurement range (size)	0.2 – 10 μ m, 0.3 – 17 μ m, 0.6 – 40 μ m, 2 – 100 μ m	Volume flow	5 l/min
Size channels	Max. 128 (64/decade)	Interfaces	USB, Ethernet (LAN), Wi-Fi, RS-232/485
User interface	Touchscreen, 800 • 480 pixel, 7" (17.78 cm)	Data logger storage	4 GB Compact Flash
Software	PDControl, FTControl, PDAnalyze	Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Light source	Xenon arc lamp 35 W	Gehäuse	Table housing, optional: with mounting brackets for rack-mounting
Support options	Direct remote access, Palas webserver service	Operating system	Windows embedded
Power consumption	100 W	Installation conditions	+5 – +40 °C (control unit)
Dimensions	185 • 450 • 315 mm (H • W • D) (19")	Weight	Control unit: approx. 8 kg, sensor: approx. 2.8 kg