



Depending on the aerosol composition to be measured, i.e., the carrier gas component and the particle material, pressure and temperature changes in the carrier gas can significantly influence the particle size distribution, e.g., due to condensation or evaporation.

For this reason, the welas[®] aerosol sensors welas[®] 2070 H, HP, 2100 H, HP, 2200 H, HP, 2300 H, HP and welas[®] 2500 H, HP are equipped with a heatable and, as required, pressure-tight cuvette to ensure isobaric and isothermal sampling into the sensor's measurement volume.

The Promo[®] 2000 H model variant also offers heating regulation for temperatures up to 250 °C for the aerosol sensors with heatable cuvette.

BENEFITS

- Measuring range from 0.2 μm to 100 μm (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 μm
- 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

FEATURES

- Up to three measuring ranges can be selected in one device: 0.2 μm – 10 μm | 0.3 μm – 17 μm | 0.6 μm – 40 μm

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