Promo® 2000 H

The welas® aerosol sensors welas® 2070 H, HP, 2100 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

- Very high size resolution
- Concentration range from < 1 particle/cm^3 to 10^6 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 250ºC (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

FEATURES

- Up to three measuring ranges in one device 0.2 μm – 10 μm | 0.3 μm – 17 μm | 0.6 μm – 40 μm
- Up to 128 size channels per measuring range
- Unique calibration curve thanks to white light source with 90º scattered light detection
- Patented T-aperture: No edge zone error
- Digital single signal processing: Coincidence detection and correction on the single signal
- Selectable sensors for optimized measurement with regard to concentration
- On-site calibration and adjustment (particle size and volume flow)

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

DATASHEET

Measuring principle	Optical light-scattering
Measurement range (number C_N)	$< 1 \cdot 10^6$ particles/cm^3
Measurement range (size)	$0.2 - 10\ \mu m$, $0.3 - 17\ \mu m$, $0.6 - 40\ \mu m$, $2 - 100\ \mu m$
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
Housing	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