







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 $< 1 \text{ particle/cm}^3 \text{ to } 10^6 \text{ particles/cm}^3$
- 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

FEATURES

- Up to three measuring ranges in one device 0.2 μ m 10 μ m | 0.3 μ m 17 μ m | 0.6 μ m 40 μ m
- Up to 128 size channels per measuring range
- Unique calibration curve thanks to white light source with 90° 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