# Print View 8 2000 P





With automatic regulation of the sampling flow through the welas<sup>®</sup> aerosol sensors at an overpressure up to 10 bar

## Description

Depending on the composition of the aerosol to be measured, i.e. the carrier gas component and the particle material, pressure changes in the carrier gas can significantly influence the particle size distribution, e.g. due to condensation or evaporation. this reason, the welas<sup>®</sup> aerosol sensors welas<sup>®</sup> 2070 P, 2100 P, 2200 P, 2300 P and welas<sup>®</sup> 2500 P are equipped with a pressure-tight cuvette to ensure isobaric and isothermal sampling into the sensor's measurement volume.

Promo<sup>®</sup> is usually calibrated for the operating volume flow. As the operating volume flow changes with pressure, it is advantageous for the user if automatic volume flow regulation for the sampling volume flow is provided for in the device.

the Promo<sup>®</sup> 2000 P the pressure of the carrier gas is measured and the required operating volume flow is automatically set to 5 l/min.

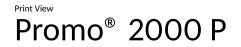
- Mass flow controller for volume flow regulation
- Absolute pressure capsule
- Filter unit

# Promo<sup>®</sup> 2000 P



#### **Benefits**

- Measuring range of 0.2 to 100  $\mu$ m (up to 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<sup>3</sup> to 10<sup>6</sup> particles/cm<sup>3</sup>
- Calibration curves for different refractive indices
- Very high and reproducible counting efficiency rate starting at 0.2  $\mu m$
- Pressure-resistant up to 10 bar (optional)
- 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 PDControl for operation as welas<sup>®</sup> digital available
- Low maintenance
- Reliable function
- Reduces your operating expenses





# Datasheet

Parameter	Description			
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 <sub>N</sub> )	< 1 • $10^6$ particles/cm <sup>3</sup>			
Volume flow	5 l/min regulated by mass flow			
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 pixel, 7"			
Housing				
	Table housing, optionally with mounting brackets for rack-mounting			
Dimensions	185 ● 450 ● 315 mm (H ● W ● D) (19")			
Support options				
A47.5.1.1	Direct remote access, Palas <sup>®</sup> webserver service			
Weight				
<b>o</b>	approx. 8 kg (control unit), approx. 2.8 kg (sensor)			
Operating system				
	Windows embedded			
Data logger storage				
	4 CD Commont Flack			
Cofficience	4 GB Compact Flash			
Software	PDControl, FTControl, PDAnalyze			
Installation conditions	LE 10 90 (control unit)			
	+5 – +40 °C (control unit)			





## **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

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