



With automatic regulation of sampling volume flow by the aerosol sensors **welas<sup>®</sup>** under overpressure up to 10 bar or in temperatures to 120 °C

## Benefits

- Measuring range of 0.2 to 100  $\mu\text{m}$  (4 measuring ranges selectable in one device)
- Up to four measuring ranges in only 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  $\mu\text{m}$  (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  $\mu\text{m}$
- **Pressure-resistant up to 10 bar (optional)**
- **Heatable to 250 °C (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

## 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



<https://www.palas.de/product/promo3000hp>

## Datasheet

<i>Parameter</i>	<i>Description</i>
<b>Interfaces</b>	USB, Ethernet, RS232/485, Wi-Fi
<b>Measurement range (size)</b>	0.2 µm – 10 µm, 0.3 µm – 17 µm, 0.6 µm – 40 µm, 2 µm – 100 µm
<b>Size channels</b>	up to 128 (64/decade)
<b>Measuring principle</b>	Optical light-scattering
<b>Measurement range (number C<sub>N</sub>)</b>	< 1 • 10 <sup>6</sup> particles/cm <sup>3</sup>
<b>Time resolution</b>	up to 1 s
<b>Thermodynamic conditions</b>	10 – 120 °C, 2 – 10 bar <sub>g</sub>
<b>Volume flow</b>	5 l/min regulated by mass flow
<b>Data acquisition</b>	20 MHz processor, 256 raw data channels, digital
<b>Light source</b>	Xenon arc lamp 35 W
<b>Power consumption</b>	100 W
<b>User interface</b>	Touch screen, 800 • 480 pixels, 7" (17.78 cm)
<b>Power supply</b>	115 – 230 V, 50 – 60 Hz
<b>Housing</b>	Table housing, optionally with mounting brackets for rack-mounting
<b>Dimensions</b>	185 • 450 • 315 mm (H • W • D) (19")
<b>Support options</b>	Direct remote access, Palas <sup>®</sup> webserver service
<b>Weight</b>	approx. 8 kg (control unit), approx. 2.8 kg (per sensor)
<b>Operating system</b>	Windows embedded
<b>Data logger storage</b>	4 GB Compact Flash
<b>Software</b>	PDControl, FTControl, PDAnalyze
<b>Installation conditions</b>	+5 – +40 °C (control unit)

# Promo<sup>®</sup> 3000 HP

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