



The **welas[®]** aerosol sensors **welas[®] 2070 P, 2100 P, 200 P, 2300 P, and welas[®] 2500 P** are equipped with a pressure-tight cuvette to ensure isobaric and isothermal sampling into the sensor's measurement volume.

The **Promo[®]** system 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. In the **Promo[®] 3000 P**, the pressure of the carrier gas is measured, and the required operating volume flow is automatically set to 5 l/min.

优势

- 测量范围为0.2至100 μm （在一台设备中可选择4个测量范围）
- 仅一台设备中可配置多达4个测量范围：
 - 0,2 μm – 10 μm
 - 0,3 μm – 17 μm
 - 0,6 μm – 40 μm
 - 2 μm – 100 μm （仅限于**welas[®] 2300**和**welas[®] 2500**传感器）
- 每个测量范围支持多达128个粒径通道
- 浓度范围从< 1 颗粒/ cm^3 至 10^6 颗粒/ cm^3
- 不同折射率的校准曲线
- 从0.2 μm 开始具有很高且可重现的计数效率
- 光纤技术
- 操作简便，配有大尺寸触摸显示屏
- 客户可以独立进行校准、清洁和更换灯泡
- 外部控制可通过RS 232 或以太网实现
- PDAanalyze 分析软件
- 可选：PDControl 软件支持**welas[®] digital** 运行
- 维护成本低
- 功能可靠

应用领域

- 设施的排放监测
- 研磨与分级工艺控制
- 食品、制药及化工行业生产过程监测
- 完整过滤器、惯性分离器、湿式分离器或静电除尘器的测试

特点

- Up to four measuring ranges: 0.2 μm – 10 μm | 0.3 μm – 17 μm | 0.6 μm – 40 μm | 2 μm – 100 μm
- Up to 128 size channels per measuring range
- Clear calibration curve thanks to white light source with 90° scattered light detection
- Patented T-aperture: No edge zone error, coincidence detection and correction on the individual signal

技术数据

测量原理	Optical light-scattering
测量范围(数量浓度)	$< 1 \cdot 10^6$ particles/cm ³
测量范围(粒径)	0.2 – 10 μ m, 0.3 – 17 μ m, 0.6 – 40 μ m, 2 – 100 μ m
体积流量	5 l/min
Size channels	Max. 128 (64/decade)
Time resolution	≤ 1 s
接口	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
软件	PDControl, FTControl, PDAnalyze
Thermodynamic conditions	+10 – +40 °C, -100 – 50 mbar
Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Light source	Xenon arc lamp 35 W
外壳	Table housing, optional: with mounting brackets for rack-mounting
Support options	Direct remote access, Palas webserver service
Operating system	Windows embedded
电源	115 – 230 V, 50/60 Hz
Power consumption	100 W
Installation conditions	+5 – +40 °C (control unit)
Dimensions	185 • 450 • 315 mm (H • W • D) (19")
重量	Control unit: approx. 8 kg, sensor: approx. 2.8 kg