PROMO® LED 2000



The new light-scattering aerosol spectrometer Promo® LED 2000 can be equipped with different sensors for particle size analysis and concentration determination from 0.145 to 100 µm can be fitted with different sensors. The heart of the optical sensors is the new LED technology with an extra-long lifetime at the highest stability in particle sizing and counting applications.

BENEFITS

- Self-explanatory operation
- Quick and highly resolved measurement of particle size distribution
- Long lifetime on lamp due to new LED-Technology
- Large measurement range from 0.145 up to 100 µm
- Photometer mode for measurements according to DIN EN 13274-7

APPLICATIONS

- Process monitoring of particle size and concentration
- Measurement of penetration of face masks
- Measurement of fractional efficiency of particle size

FEATURES

- Long-life LED technology
- Up to four measuring ranges can be selected in one device: 0.145 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° stray light detection
- Patented T-aperture: No edge zone error, coincidence detection and correction on the individual signal
- Selectable sensors for optimized measurement with regard to concentration
- On-site calibration and adjustment (particle size and volume flow)

https://www.palas.de/en/product/promoled2000

DATASHEET

Measuring principle	Optical light scattering with integrating photometer
Measurement range (number C_N)	< 1 • 106 particles/cm3
Measurement range (size)	0.145 – 100 μm
Volume flow	5 l/min
Size channels	Max. 64 (32/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	PDAnalyze
Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Light source	LED
Support options	Direct remote access, Palas webserver service
Operating system	Windows 10 IoT (LTSC)
Power consumption	Approx. 200 W
Installation conditions	+5 – +40 °C (control unit)
Pressure	-100 – +50 mbar
Dimensions	185 • 483 • 313 mm (H • W • D) (19″), external sensor: 240 • 180 • 120 mm (H • W • D) (19″)
Weight	Control unit: approx. 8.2 kg, sensor: approx. 3.2 kg

NORMS AND CERTIFICATES

EN 13274-7