P-DAP 2000

The new P-DAP 2000 system for emission measurement is equipped with a highly resolving aerosol photometer for an extensive measurement range of mass concentration which is specially developed for the operation in monitoring applications.

Operation principle

Emission measurement with high-resolution process LED aerosol photometer

The P-DAP 2000 is equipped with a photometer mode, which enables the operator to perform distinct measurements concerning mass concentration, especially at very low particle concentrations independent of particle size distribution.

The heart of this high-resolution aerosol photometer is the new LED technology with an extra-long lifetime at the highest stability in particle measurement. The advantages of a white light source with 90° light scattering in concentration measurements were implemented with LED technology.

The sensor is connected via a light wave conductor with the control unit and can be installed flexibly at the aerosol measurement site.

The P-DAP system has a sample lance for the exhaust fumes and a supply unit for diluting air.

Benefits

- Self-explanatory operation
- Photometer mode for particle measurement
- Flexible sensor installation independent from position of the control unit
- Quick and highly resolved measurement
- Long lifetime on lamp due to new LED technology

DATASHEET

Measuring principle	Optical light scattering at single particles
Volume flow	5 l/min
Size channels	64 (32/decade)
Interfaces	USB, Ethernet (LAN), RS-232
User interface	Touchscreen, 800 • 480 pixel, 7″ (17.78 cm)
Data logger storage	4 GB Compact Flash
Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Light source	LED
Operating system	Windows embedded
Power supply	115 – 230 V, 50/60 Hz
Power consumption	Normal operation: 60 W, max. 200 W
Installation conditions	+5–+40 °C
Pressure	-100 – 50 mbar
Dimensions	Control unit: 184 • 483 • 313 mm (H • W • D), sensor: 185 • 125 • 305 mm (H • W • D)
Weight	Control unit: 8.2 kg, sensor: 3.2 kg

APPLICATIONS

- Process monitoring of mass concentration in gases, especially in emission measurements

Mehr Informationen:
https://www.palas.de/product/P-DAP2000