



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

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

## APPLICATIONS

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



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