



EN 16450 approved fine dust aerosol spectrometer for simultaneous measurement of PM_{2.5} and PM₁₀, featuring a separate sensor for existing ceiling glands

Benefits

- Type-approved and certified according to latest EN requirements (EN 15267)
- High flexibility for installation due to separation of sensor unit and control unit
- Continuous and simultaneous real-time measurement of multiple PM values
- Additional information on particle number concentration and particle size distribution
- Adjustable time resolution starting at 1 minute
- Light source: LED with high stability and long life-time
- Long service life
- Low maintenance
- External check of calibration on site possible
- Intuitive and easy to operate
- Reliable function, very high data availability (> 99)
- 2 pumps in parallel operation for additional operational safety due to redundancy
- Permanent monitoring of status, among others on-line monitoring of calibration
- Remote monitoring, maintenance and control easily possible
- Cloud zone via Palas server for worldwide data retrieval
- No radioactive material
- No consumables
- Low energy consumption
- Reduces your operating expenses

Applications

- Regulatory pollution control in monitoring networks
- Ambient air monitoring campaigns
- Long-term studies
- Emission source attribution
- Emission dispersion studies (e.g. fires, volcanoes)



<https://www.palas.de/product/fidas200e>

Datasheet

Parameter	Description
Interfaces	USB, Ethernet, RS232/485, Wi-Fi
Measurement range (size)	0.18 - 100 µm (3 measuring ranges)
Size channels	64 (32/decade)
Measuring principle	Optical light-scattering
Measurement range (number C_N)	0 - 20,000 particles/cm ³
Time resolution	1 s - 24 h, 15 min in type approved operation
Volume flow	4.8 l/min $\hat{=}$ 0.3 m ³ /h
Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Power consumption	approx. 200 W
User interface	Touch screen, 800 • 480 pixel, 7"
Power supply	115 - 230 V, 50 - 60 Hz
Housing	Table housing, optionally with mounting brackets for rack-mounting (control unit)
Dimensions	450 • 320 • 180.5 mm (H • W • D), 19"
Weight	9.3 kg (control unit only)
Operating system	Windows embedded
Data logger storage	4 GB
Software	PDAnalyze Fidas®
Aerosol conditioning	Thermal with IADS
Measurement range (mass)	0 - 10.000 µg/m ³
Reported data	PM ₁ , PM _{2.5} , PM ₄ , PM ₁₀ , TSP, C _N , particle size distribution, pressure, temperature, humidity
Installation conditions	+5 - +40 °C
Sampling head	Sigma-2

Palas GmbH

Partikel- und Lasermesstechnik
Greschbachstrasse 1
76229 Karlsruhe
Germany

Managing Partner:

Dr.-Ing. Maximilian Weiß

Commercial Register:

register court: Mannheim
company registration number: HRB 103813
USt-Id: DE143585902



Contact: E-Mail: mail@palas.de Internet: www.palas.de Tel: +49 (0)721 96213-0 Fax: +49 (0)721 96213-33