

Fine dust measurement device Fidas® 2



EN 16450 approved fine dust measurement device for simultaneous measurement of PM2.5 and PM10

Benefits

- Type-approved and certified according to latest EN requirements (EN 15267)
- Continuous and simultaneous real-time measurement of multiple PM values
- Additional information on particle number concentration and particle size distribution
- Adjustable time resolution from > 1 s to 24 h
- Light source: LED with high stability and long lifetime
- 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)

Model Variations



Fine dust measurement device Fidas® 200 E

EN 16450 approved fine dust aerosol spectrometer for simultaneous measurement of PM2.5 and PM10, featuring a separate sensor for existing ceiling glands

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



Fine dust measurement device Fidas® 200 S

EN 16450 approved fine dust aerosol spectrometer for simultaneous measurement of PM2.5 and PM10, in weatherproof cabinet for outdoor installation

<https://www.palas.de/product/fidas200s>



<https://www.palas.de/product/fidas200>

Fine dust measurement device Fidas® 2

Datasheet

<i>Parameter</i>	<i>Description</i>
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
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"
Housing	Table housing, optionally with mounting brackets for rack-mounting
Dimensions	450 • 320 • 180.5 mm (H • W • D), 19"
Weight	9.3 kg (control unit only)
Operating system	Windows
Data logger storage	4 GB
Software	PDAnalyze Fidas®
Aerosol conditioning	Thermal with IADS
Measurement range (mass)	0 - 10.000 µg/m ³
Reported data	PM1, PM2,5, PM4, PM10, TSP, C _N , particle size distribution, pressure, temperature, relative humidity
Installation conditions	+5 - +40 °C
Sampling head	Sigma-2
response time (sensor)	< 2s
linearity	1.06 für PM2.5, 1.03 für PM10 (gegen Gravimetrie nach EN16450, TÜV Report)
accuracy	9.7% für PM2.5 7.5% für PM10 (erweiterte Messunsicherheit nach EN16450, TÜV Report)

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