

FIDAS® 200



EN 16450 approved fine dust measurement device for simultaneous measurement of PM_{2.5} 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 online monitoring of calibration
- Remote monitoring, maintenance and control easily possible
- Cloud zone via Palas server for worldwide data retrieval
- No radioactive material

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



Fidas® 200 E

EN 16450 approved fine dust aerosol spectrometer for simultaneous measurement of PM_{2.5} and PM₁₀, featuring a separate sensor for existing roof glands
<https://www.palas.de/product/fidas200e>



Fidas® 200 S

EN 16450 approved fine dust aerosol spectrometer for simultaneous measurement of PM_{2.5} and PM₁₀ in weather-proof cabinet for outdoor installation
<https://www.palas.de/product/fidas200s>

DATASHEET

Measuring principle	Optical light scattering of single particles
Reported data	PM ₁ , PM _{2,5} , PM ₄ , PM ₁₀ , TSP, C _N , particle size distribution, ambient pressure, ambient temperature, rel. ambient humidity
Measurement range (number C _N)	0 – 20,000 particles/cm ³
Size channels	64 (32/decade)
Measurement range (size)	0.18 – 18 μm (certified range, other measuring ranges on request)
Measurement range (mass)	0 – 10,000 μg/m ³
Measurement uncertainty	9.7 % for PM _{2,5} , 7.5 % for PM ₁₀ (expanded measurement uncertainty according to EN 16450, TÜV Report)
Volume flow	4.8 l/min $\hat{=}$ 0.3 m ³ /h ± 3% (24h), compliant with EN 16450
Time resolution	1 s – 24 h
Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Light source	LED
User interface	Touchscreen, 800 • 480 pixel, 7" (17.78 cm)
Housing	Table housing, optional: with mounting brackets for rack-mounting
Weight	Control unit: 9.3 kg, sample head: 2.25 kg, sample tube: 4.5 kg
Operating system	Windows

additional parameter on our website ...



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