



The Fidas® 200 S version is a 19" plug-in unit mounted in a splash-proof stainless steel control cabinet for outdoor use (temperature range -20 - 50 °C). A larger, air-conditioned control cabinet is available on request, allowing the installation of additional devices. Variants of the Fidas® 200 S are the basic Fidas® 200 and the Fidas® 200 E with a remote sensor (for easier integration into stations with existing roof feed-through).

## BENEFITS

- Type-approved and certified according to latest EN requirements (EN 15267)
- Explicitly approved for outdoor installation, highly flexible application ranges
- Continuous and simultaneous real-time measurement of multiple PM values
- Additional information on the basis of particle number concentration
- 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

## APPLICATIONS

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

Measurement range (number $C_N$ )	0 – 20,000 particles/cm <sup>3</sup>
Size channels	64 (32/decade)
Measurement range (size)	0.18 – 18 $\mu\text{m}$ (certified range, other measuring ranges on request)
Measuring principle	Optical light scattering at single particles
Reported data	PM <sub>1</sub> , PM <sub>2,5</sub> , PM <sub>4</sub> , PM <sub>10</sub> , TSP, $C_N$ , particle size distribution, ambient pressure, ambient temperature, rel. ambient humidity
Measurement range (mass)	0 – 10,000 $\mu\text{g}/\text{m}^3$
Measurement uncertainty	9.7 % for PM <sub>2,5</sub> , 7.5 % for PM <sub>10</sub> (expanded measurement uncertainty according to EN 16450, TÜV Report)
Volume flow	4.8 l/min $\hat{=}$ 0.3 m <sup>3</sup> /h $\pm$ 3% (24h), compliant with EN 16450
Time resolution	1 s – 24 h
Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Light source	Long term stable LED
User interface	Touchscreen, 800 • 480 pixel, 7" (17.78 cm)
Housing	Weatherproof outdoor housing (IP 65)
Weight	Control unit: 9.3 kg, sample head: 2.25 kg, sample tube: 4.5 kg
Operating system	Windows 10 IoT Enterprise



Further information:  
<https://www.palاس.de/product/fidas200s>