Fidas® 200 S

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 ℃). 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).

优势

- Explicitly approved for outdoor installation, highly flexible application ranges
- 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
- Long service life
- Low maintenance
- External check of calibration on site possible
- Intuitive and easy to operate
- Reliable function, very high data availability (> 99 %)
- Permanent monitoring of status, among others online monitoring of calibration
- No radioactive material and no consumables
- Low energy consumption

特点

- On-site calibration and adjustment (particle size and volume flow)
- Light source: LED with high stability and a long lifetime
- Two pumps in parallel operation for additional operational safety due to redundancy

APPLICATIONS

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

测量原理	Optical light scattering at single particles	报告数据	PM_1, $PM_{2.5}$, PM_4, PM_{10}, TSP, C_N, particle size distribution, ambient pressure, ambient temperature, rel. ambient humidity
测量范围(数量浓度)	0–20.000 颗粒/cm³	测量范围(粒径)	0.18–18 μm (certified range, other measuring ranges on request)
测量范围(质量)	0–10.000 μg/m³	测量不确定性	9.7 % for $PM_{2.5}$, 7.5 % for PM_{10} (expanded measurement uncertainty according to EN 16450, TÜV Report)
体积流量	4.8 l/min $\triangleq$ 0.3 m³/h ± 3% (24h), complient with EN 16450	Size channels	64 (32/decade)
Time resolution	1 s–24 h	接口	USB, Ethernet (LAN), RS-232, Wi-Fi
User interface	Touchscreen, 800 • 480 pixel, 7″ (17.78 cm)	Protocols	UIDEP, UDP, ASCII, MODBUS, Bayern-Hessen
Data logger storage	Capacity for 2 years continuous operation at 60 s storage interval	软件	PDAnalyze
Data acquisition	Digital, 20 MHz processor, 256 raw data channels	Light source	Long term stable LED
Gehäuse	Weatherproof outdoor housing (IP 65)	Operating system	Windows 10 IoT Enterprise
电源	115 – 230 V, 50/60 Hz	Installation conditions	-20 – +50 °C (weatherproof)

additional parameter on our website . . .

标准和证书

VDI 4202-1, VDI 4203-3, EN 12341, EN 14907, EN 16450, EU-Äquivalenzleitfaden, EN 15267-1/-2, ISO 21501-1