



Measuring device for monitoring indoor air quality. Measurement of dust concentrations starting at $0.15 \mu\text{m}$ (*1) incl. CO_2 and TVOC for calculation of air quality and infection risk index

BENEFITS

- Technology based on the type approved Fidas® 200 series (EN16450 and MCERTS); simultaneous measurement of C_N , PM_1 , $\text{PM}_{2.5}$, PM_4 , PM_{10}
- With "Indoor Air Hygiene Professional" extension: increased counting efficiency for nano-scaled particles from $0.15 \mu\text{m}$
- Computation of air quality index based on measurements of particulates, CO_2 , and VOC
- Estimation of infection risk based on measurements of CO_2 and particulate matter
- High accuracy due to advanced algorithms
- Long term stable due to self calibration for measurement of flow rate, particulates, and gaseous pollutants
- 2 years operation without calibration
- Operates on AC, DC, or power-over-Ethernet

APPLICATIONS

- Industry:
 - Production processes
 - Bulk material handling (mixing, discharge, storage, packaging etc.)
 - Fenceline Monitoring
- Construction sites: Roads, railroads, demolition sites
- Buildings: Schools, kindergartens, hospitals, hotels, offices, public service buildings
- Residential buildings near construction sites or other polluted areas
- Public transportation: Airports, train stations, tramway underground stations, cruise ships, passenger cabin, e.g. in tram, train

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, CO ₂ , TVOC, Infection Risk Index, Air Quality Index (depending on configuration)
Measurement range (number C _N)	0 – 20,000 particles/cm ³
Measurement range (size)	0.175 – 20 μm (with IAHP-Package installed, starting from 0.150 μm)
Measurement range (mass)	0 – 20,000 μg/m ³
Measurement uncertainty	R2 > 0.98 for PM _{2,5} and R2 > 0.94 for PM ₁₀ versus EN 16450-certified Fidas [®] 200 (15 min average, each)
Size channels	64 (32/decade)
Volume flow	1.0 l/min $\hat{=}$ 0.06 m ³ /h
Data acquisition	Digital, 22 MHz processor, 256 raw data channels
Light source	Long term stable LED
Power consumption	< 20 W
User interface	Touchscreen 800 • 480 pixel, 5" (12.7 cm)
Weight	2.4 kg
Operating system	Windows 10 IoT Enterprise
Data logger storage	10 GB

weitere Parameter auf der Webseite ...



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<https://www.palas.de/product/aq-guard>