

Fidas® mobile

Portable real-time dust monitor with battery operation



The Fidas® system is offered in different versions in order to be able to use, depending upon application, a low cost solution for the reliable indoor/outdoor quality measurement (IDQ/ODQ). Each Fidas® system is equipped with one LED light source with high light stability and long lifetime.

The Fidas® mobile was developed as portable hand-held unit with battery or mains operation.

It measures reliably the dust values PM₁, PM_{2.5}, A-dust, alveolar fraction (PM₄), thoracic fraction (PM₁₀), E-dust, respirable fraction (TSP) as well as the particle size distribution.

For the emission measurement in exhaust air ducts the Fidas® mobile can be connected with an isokinetic sampling probe. Additionally, the system can seize time-resolved the particle concentration and the particle size distribution within the particle size range from 0.2 - 100 µm in several measuring ranges.

The Fidas® mobile can be equipped with additional sensors for the collection of the ambient conditions temperature, air pressure and relative humidity.

The suction volume flow amounts to 0.2 m³/h.

For this device, Palas® offers remote maintenance and data access via www.palas.de/user.

Particular advantages:

- counting measuring method, highest resolution
- online display of dust values and particle size distribution
- Fidas® firmware with fast, continuous data evaluation within a 1s cycle, 60s mean value for PM₁/ PM_{2.5}/ PM₄/ PM₁₀/ total mass/ number concentration C_N/ mean number diameter x_{50,0}
- measurement and display of particle size distribution
- real-time measurement
- light source: LED
- measuring time during battery operation: up to 3 hours
- long lifetime
- Fidas® data analyser software for the individual evaluation of your measuring data at an external PC; the saved data can be transferred to Excel
- low maintenance
- easy handling
- reliable operation
- reduces operational costs

Application examples:

- working place measurements
- exhaust air monitoring
- emission measurement

Technical parameters:

- measuring range: 0.2 – 100 µm
- size categories from 0.2 -18 µm: 32 per decade
- max. number concentration C_{Nmax}: approx. 20,000 P/cm³
- max. mass concentration C_{Mmax}: approx. 50 mg/m³ (ISO A2 Fine)
- volume flow: 0.2 m³/h
- electric connection: 115/230 V; 50/60 Hz
- network: LAN, WiFi

Accessories:

- isokinetic sampling probe

Contact

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The technical data on this sheet are for information only.
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