## FIDAS<sup>®</sup> FROG





Battery powered, portable fine dust measurement device with detachable control panel, for outdoor, indoor and workplace measurements based on EN 481

## **BENEFITS**

- Continuous and simultaneous real-time measurement of PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and TSP-values
- Additional particle number concentration and particle size distribution
- Wide measuring range:  $0.18 93 \ \mu m$
- Adjustable time resolution from 1 s
- Direct comparison of different measurements
- Configuration of limit values possible
- High quality of measuring data through implementation of the sensor / evaluation algorithm of ENcertified Fidas  $^{\textcircled{R}}$  200
- Additonal expanded range of applications by possible separation of the measuring device and the Tablet-PC for control (communication via WLAN)
- Up to eight hours of measurement time in battery mode
- · Ergonomic design and low weight
- · Intuitive and simple operation
- Integrated camera for documentation of the measurement
- Export function for measured data
- Possibility to generate a measurement report as pdf in  $\mathsf{Fidas}^{\texttt{R}}$  Frog
- Remote monitoring and control via network integration easily possible

## **APPLICATIONS**

- Fine dust monitoring at alternating locations or in movement
- Air quality monitoring indoors, at the workplace, or inside vehicles
- Use as an aerosol spectrometer in setups where space is limited



## 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
Measurement range (number $C_N$ )	0 – 20,000 particles/cm <sup>3</sup>
Size channels	32/decade, 256 raw data channels
Measurement range (size)	0.18 – 93 $\mu$ m (2 measurement ranges)
Measurement range (mass)	$0-100\ \text{mg}/\text{m}^3$ (depending on the composition of the aerosol)
Volume flow	1.4 l/min
Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Light source	LED
Power consumption	13 W
User interface	Touchscreen, 1,280 • 800 pixel, 8" (20.32 cm)
Housing	Synthetic housing
Weight	Approx. 2.1 kg (0.4 kg operating panel, 1.7 kg measuring unit)
Operating system	Windows 10
Data logger storage	Approx. 16 GB, extendable by micro-SD
	weitere Parameter auf der Webseite

weitere Parameter auf der Webseite ...



Mehr Informationen: https://www.palas.de/product/fidasfrog

Version: December 20, 2022 Page 2 of 2