FIDAS® SENSE SENSORS

The Fidas® Sense system are high-resolution aerosol sensors for indoor use. The Fidas® Sense 2900 sensor measures particle number concentrations in single count mode up to 200 particles/cm³. This makes it suitable for use in environments where particle contamination is critical to the product or process.

Fidas® Sense 2300 can analyze up to 20,000 particles/cm³ in single count mode with size resolution. Thus, it is designed for general indoor and hall air monitoring, but also in driver's cabs or similar areas to ensure occupational health and safety.

The sensor system calculates and transmits the specified parameters at 10-second intervals via the integrated USB interface directly to the connected computer system using suitable software for further processing.

优势

- Direct evaluation of data and provision for further processing
- Mechanically robust, durable and free of maintainance
- No consumables and therefore low maintenance
- Optics can be cleaned by trained personnel - high availability
- Closed housing (protection class IP67) and therefore easy to clean

特点

- Unambiguous and specific calibration and correction of particle size determination via NIST-retraceable monodisperse aerosol
- Long-term stable light source with long service life
- Closed housing made of stainless steel (IP67)

应用领域

- Various quality-determining monitoring & control parameters such as:
  - Number concentration C_N
  - Aerosol size distribution PSD
  - Detection of specific concentrations of a particle size or area
  - On-line calculation of mass concentrations in aerosols
- Control, monitoring or regulation of, for example:
  - Particle analysis for quality monitoring of particle-generating production processes (e.g., Pharma)
  - Large-scale ventilation and air-conditioning systems
  - Process and contamination monitoring
  - and many more

技术数据

报告数据	C_N (Fidas® Sense 2900), PM_1, $PM_{2.5}$, PM_4, PM_{10}, TSP, C_N, particle size distribution (Fidas® Sense 2300)
测量范围(数量浓度)	
	0 – 200 particles/cm^3 (Fidas® Sense 2900), 0 – 20,000 particles/cm^3 (Fidas® Sense 2300)
测量范围(粒径)	0.3–20 μm (Fidas® Sense 2900),0.18–18 μm (Fidas® Sense 2300)
测量范围(质量)	< 10,000 $\mu g/m^3$ (Fidas® Sense 2300)
体积流量	2.8 l/min
Size channels	max. 235
Time resolution	10 s
接口	USB
Protocols	ASCII
Light source	Long term stable LED
电源	24 V
Power consumption	24 W
Installation conditions	+5 – +40 °C (non condensing)
Dimensions	312 • 176 • 105 mm (H • W • D)
重量	3.8 kg

标准和证书

ISO 21501-1