

enviDUST

PARTICULATE MATTER MONITOR



BASIC FEATURES

- continuous monitoring of particulate matter in ambient air;
- real-time simultaneous measurement of PM10, PM2.5 and PM1, including measurement of particle number concentration;
- based on light scattering measurement method;
- indicative measurement fully in compliance with EN regulation requirements;
- high modularity and flexibility;
- much lower initial investment in comparison with reference and equivalent analyzers;
- maintenance free;
- no consumables and/or accessories, extremely low power consumption – low operation costs;
- solar power and battery operation available;
- various mounting possibilities (incl. wall, pole, mast, stand alone ...);
- ideal solution for city infrastructure and establishment of PM monitoring networks;
- various communication tools available (i.e. GPRS, LoRa, SigFox and others)
- automatic data acquisition, storage and communication with central server, online CLOUD included

Technical characteristics:

- Measurement principle: light scattering
- Measurement (simultaneous): PM₁, PM_{2,5} a PM₁₀, and particle number concentration (by size channels)
- Number of size channels: 16
- Particle size range: 0.38 – 17 µm
- Time resolution: 10 s
- Data output (avg): flexible, 1min AVG in default
- Sample flow rate: 220 ml/min
- Operation temperature: -10 - +50°C
- Power: 230 V; 50/60 Hz; or 12 / 24 V alternatives
- Dimension: 280 x 210 x 130 cm (H x W x D)
- Enclosure: IP64
- Control unit: micro-computer Raspberry
- Communication: built-in GPSR modem (or other types as for example LoRa or SigFox networks)



Application areas:



- Particulate matter monitoring networks
- SmartCities
- Industrial hotspot applications
- Clean areas monitoring
- Occupational health
- Research applications