

EDM 264

Stand-alone environmental dust monitor

For continuous outdoor measurements

- Reliable particle sizing and counting
- Easy installation
- Eco and Pro version to meet all requirements



Features

- **Unique measurement range in one device**
TSP, PM₁₀, PM₄, PM_{2.5}, PM₁, PM_{Coarse} and Total Counts
Inhalable, thoracic, respirable, pm₁₀, pm_{2.5} and pm₁
- **31 equidistant size channels**
PSL traceable particle size distribution
- **Long term stability and very low zero drift**
Due to rinsing air for protecting laser and detector
- **High-class data logger**
Wi-Fi, LTE, remote access and real-time data analysis
- **Meteorological sensor**
For P, T, RH, wind speed + direction and precipitation
- **GPS position**
For high spatial and temporal resolution

Benefits

- **Suitable for various applications**
 - Mobile PM monitoring
 - Construction site monitoring, fugitive emissions
 - Fenceline monitoring
 - Source apportionment, forest fire detection
- **All in one solution**
Ready to use, rugged design
- **Aerodynamic aerosol focusing**
Total inlet flow (1.2 l/min) analyzed in the optical cell, no border zone error
- **Cost saving**
Low maintenance
- **Optional accessory**
Interchangeable sampling probe (SVC) with switchable catalytic stripper for SVC removal

Technical data

Sampling probe (standard)	μ-Sigma-2 inlet and heated sampling pipe
Detection principle	Light scattering at single particles with diode laser
Output	<ul style="list-style-type: none"> • TSP, PM₁₀, PM₄, PM_{2.5}, PM₁, PM_{Coarse} and Total Counts • Inhalable, thoracic, respirable, pm₁₀, pm_{2.5} and pm₁ • Number concentration and size distribution • GPS position, meteorological data
Particle size range	0.253 ... 35.15 μm
Size channels	31, equidistant
Particle number	0 ... 5 300 000 particles/liter
Dust mass	0 μg/m ³ ... 100 mg/m ³
Reproducibility	98.2% for 0.3 μm, 99.5% for 0.5 μm, 91.8% for 1.0 μm, 91.0% for 5 μm, meets ISO 21501-1
Time resolution	6 s, selectable storage intervals 6 s, 1, 5, 10, 15, 30 min, 1 h
Volume flow rate	1.2 l/min ± 3% due to self regulation according to ISO 21501-1, automatic altitude correction up to 5000 m
Rinsing air	0.4 l/min, protects laser optics, reference air for self-test
Power supply	100 ... 240 VAC, 50 ... 60 Hz, 2.6 A or: 12 VDC, 12.5 A e.g. via solar panel
Power input	P _{max} = 150 W

Data interfaces	<ul style="list-style-type: none"> • Pro version: Data logger, Wi-Fi, LTE ; USB (type B), Ethernet (TCP/IP), USB flash drive with GRIMM software • Eco version: USB (type B), Ethernet (TCP/IP), USB flash drive with GRIMM software
Dimensions (l x w x h)	<ul style="list-style-type: none"> • Housing only: 44 x 45 x 21 cm (17.3 x 17.7 x 8.3 in) • With meteo sensor and sampling probe: 73 x 51 x 23 cm (28.7 x 20.0 x 9.1 in)
Weight	<ul style="list-style-type: none"> • Housing only: 10 kg (22.0 lbs) • With meteo sensor and sampling probe: 15 kg (33.1 lbs)
Operating conditions	-20 ... +40 °C (-4 ... 104 °F), RH < 99%, non condensing, 533 ... 1133 mbar
Transport and storage	-20 ... +50 °C (-4 ... 122 °F) RH < 95 %
Accessories	<ul style="list-style-type: none"> • Configurable meteorological sensor: 157L for temperature, relative humidity, barometric pressure 158L plus wind speed and wind direction 159L plus precipitation • High-class data logger to upgrade Eco version • Interchangeable sampling probe with catalytic stripper for SVC removal

