DURAG GROUP

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

GRIMM AEROSOL TECHNIK

Features

- **Unique measurement range in one device**
  TSP, PM_{10}, PM_4, $PM_{2.5}$, PM_1, PM_{Coarse} and Total Counts
  Inhalable, thoracic, respirable, pm_{10}, $pm_{2.5}$ and pm_1
- **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	• TSP, PM_{10}, PM_4, $PM_{2.5}$, PM_1, PM_{Coarse} and Total Counts • Inhalable, thoracic, respirable, pm_{10}, $pm_{2.5}$ and pm_1 • 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/l
Dust mass	0 µg/m³ … 100 mg/m³
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} = 200 W

Data interfaces	• Pro version: Data logger, Wi-Fi, LTE ; USB (type B), Ethernet (TCP/IP), Modbus, USB flash drive with GRIMM software • Eco version: USB (type B), Ethernet (TCP/IP), Modbus, USB flash drive with GRIMM software
Dimensions (l x w x h)	• Housing: 44 x 45 x 21 cm (17.3 x 17.7 x 8.3 inch) • With meteo sensor and sampling probe: 73 x 51 x 23 cm (28.7 x 20.0 x 9.1 inch)
Weight	• Housing: 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	• 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

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