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







FEATURES

- Unique measurement range in one device
 - TSP, PM₁₀, PM₄, PM_{2.5}, PM₁, PM_{coarse} and total counts
 - Inhalable, thoracic, respirable, pm10, pm2.5 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

Data transmission, remote access and real-time data analysis via mobile radio (LTE)

Configurable meteorological sensor

For temperature, relative humidity, barometric pressure, 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, PM10, PM4, PM2.5, PM1, PMcoarse and Total Counts Inhalable, thoracic, respirable, pm10, pm2.5 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 concentration	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

OPTIONAL 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 for mobile radio transmission (LTE)
- Interchangeable sampling probe with catalytic stripper for SVC removal

Volume flow rate	1.2 l/min \pm 3% due to self regulation according to ISO 21501-1, automatic altitude correction up to 5,000 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 consumption	EDM 264 Eco: 42 W EDM 264 Pro: 97 W
Data interfaces	Eco version: USB (type B), Ethernet (TCP/IP), Modbus, USB flash drive with GRIMM software Pro version: Same as Eco version plus data logger for mobile radio transmission (LTE)
Dimensions (I 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 1,133 mbar
Transport and storage	−20 +50 °C (−4 122 °F) RH < 95 %

