

NEW
COMPACT
EFFICIENT & RELIABLE
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GRIMM EDM164 Industrial Enviro Check



The Model 164 combines the world's most efficient and reliable EN & US-EPA approved GRIMM light scattering technology for dust monitoring with the rugged dehumidity system of heating.

The monitor is designed for maintenance-free long-term monitoring without any operator interaction. The combination with optional sensors for meteorology (wind speed, wind direction, humidity, temperature and rain) and the GRIMM datalogger 1142.M5 is setting new steps in hot spot monitoring.

Data are available in real time, stored in the internal memory and can be read out using the included PC software or optionally be shown directly real-time in the WWW using the 1142.M5.



Advantages

- ✓ Fully automatic
- ✓ Portable
- ✓ 3 different PM's
- ✓ No radioactive source
- ✓ Not critical to vibration
- ✓ Low maintenance
- ✓ Extended memory
- ✓ DC power supply for solar panel or truck (optional)
- ✓ Particle size (optional)
- ✓ Meteorological sensors (optional)
- ✓ Data logger (optional)
- ✓ RS-232

Applications

- ✓ Mobile monitoring
- ✓ Hot spot monitoring
- ✓ Public site monitor
- ✓ Source identification

Specifications EDM164:

Equivalent to:

EN12341 & EN14907
 US-EPA

Measuring principle:

multi channel light scattering optics

Measurement results:

PM₁₀, PM_{2.5}, PM₁, and TC

optional:

0.25 to >32 µm in 31 channels

Particle concentration:

1 to 2,000,000 particles/liter

Data presentation:

from 6 sec. up to 1h average

Data storage:

internal storage

Dust mass:

0.1 to >6,000 µg/m³

Sample flow:

1.2l/min, volume controlled

Reproducibility:

5 % in max. Range

Software:

GRIMM #177

TSP

PM₁₀

PM_{2.5}

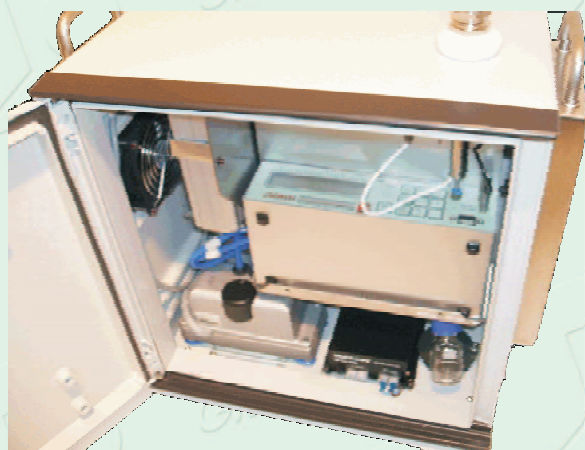
PM₁

TC

COUNTS

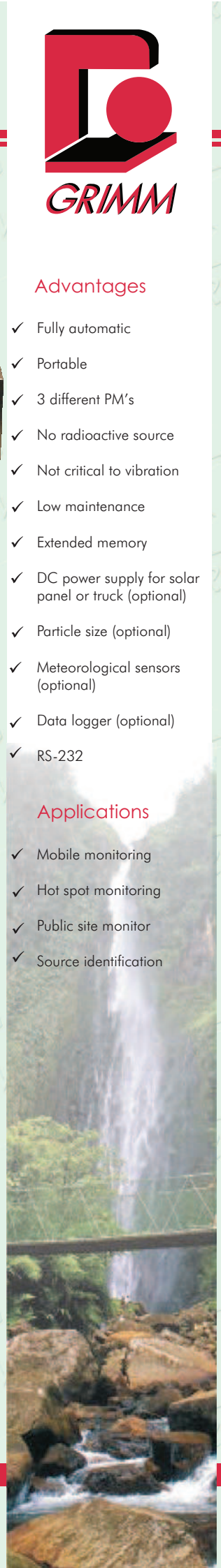
Specifications Housing:

Housing:	Glass fiber, grey
Sampling system:	0.5m pipe with TSP head
Winter protection:	Heating inside
Dehumidifaction:	Heated sampling pipe
Ventilation:	Automatic, proportional
Meteorology:	Optional
Data logger:	Optional
Security:	Double lock system
Fixation:	Wall support hook
Power supply:	110V/230V AC, 50-60Hz
optional:	12V - 32V DC
Temperature range:	- 25°C to +50°C
Size:	40 x 40 x 20 cm
System weight:	12 kg



www.GRIMM-aerosol.com

**EXPERIENCE AND EXPERTISE
 SINCE 1981**



2010

TSP

PM₁₀

PM_{2.5}

PM₁

TC

COUNTS

NANO



Mobile Enviro Check GRIMM EDM107 + 165

The EDM107 (shown on the left) is a small, portable unit with a size of only 24 x 12 x 6 cm and a weight of approx. 1.7 kg + battery (0.7 kg). Battery operated it is possible to measure up to 8 hours PM₁₀, PM_{2.5}, PM₁ (or Total Suspended Particles, TSP), and TC (Total Counts) simultaneously with a time resolution of 6 seconds upwards.

On the right side is shown the EDM165 which has an integrated humidity compensation system and permits a separate use of the integrated EDM107 monitor.



Professional Enviro Check GRIMM EDM365

The EDM365 (on the right side) has been designed to set new standards in environmental monitoring! Compared to the EDM107 this stand alone mini shelter system is designed for continuous use and can give additional values to the different dust fractions, which include the semi-volatile compounds, GPS position, wind speed, wind direction, rain, temperature, and humidity. Even nano particle information (mean diameter and total counts) can be added. All these values are automatically reported to the data logger or onto the www.



Stationary Dust Monitor GRIMM EDM180

The Environmental Dust Monitor EDM180 (on the left) has been designed as 19" rack mount instrument and constructed especially for the usage inside measurement shelters in concordance with the existing world wide regulations for dust monitoring. Optionally this system can provide you with up to 31 size channels and a time resolution of 6 seconds. There is no loss of semi-volatile compounds. It is approved and certified even for governmental usage in PM monitoring.



Wide Range System GRIMM EDM565

The flagship of the Enviro-line is the Wide Range Aerosol Sizer system EDM565 (shown on the right side).

It is the ideal combination of optical and mobility particle sizing technologies for research. This system fully automatically determines the size distribution over a wide range of aerosols, namely from 5nm to 30,000nm in over 70 different size ranges. In addition to that it is a stand alone system with an automatic sample air dehumidification and air moisture extraction in the CPC, while maintained under constant condition by an integrated air-condition. Optional meteorological sensors as well as GPS and wireless transfer are available.

