

# **Environmental Dust Monitors**



# ENVIRO - EDM365

2011

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## **GRIMM EDM 365**

#### **Advantages**

🗸 Fully automatic

- ✓ Outdoor stainless steel housing
- Housing with auto ventilation and heating
- ✓ 3 different PM's
- ✓ Auto dehumidification
- ✓ Particle size (opt.)
- ✓ Relative humidity
- ✓ Air temperature
- ✓ Air pressure
- ✓ GESYTEC protocol
- ✓ Data logger card
- ✓ RS-232 port
- ✓ Meteorology (opt.)
- ✓ TC values

#### **Applications**

- ✓ Enviro station
- ✓ Mobile PM monitoring
- ✓ Aerosol sizer
- ✓ Hot spot monitoring
- ✓ Source identification

#### **Construction Benefits**

- ✓ Mobile housing
- ✓ No need for shelter
- ✓ All-in-one system
- ✓ Space for nano sensor
- ✓ Space for met. sensors
- ✓ Space for PAH sensor
- $\checkmark$  Not critical to vibration
- ✓ No radioactive source
- ✓ No loss of SVC
- ✓ Low maintenance
- ✓ Chemical analysis (opt.)
- ✓ Gravimetric analysis (opt.)

### Mobile Stand-Alone Environmental Monitoring Station

For a simultaneous measuring of PM<sub>10</sub>, PM<sub>2.5</sub> and Pm<sub>1</sub> (or TSP) in real-time plus - optionally rel. humidity, temperature, wind speed, wind direction, precipitation and atm. pressure All data are transferred online to the world wide web.

#### GRIMM sets a new trend: instead of big measurement containers with cost-intensive maintenance requirements, our units are small and compact while making no compromises regarding dust and meterological demands.

Our EDM 365 meets all demands and today, many of these stations are successfully operating in places all over the world and under the most adverse atmospheric conditions.

Starting in 2011 we will offer devices of the next generation with **additional gas sensors** to permit the measurements of airborne gaseous pollutants (such as VOC, NOx, ozone, and CO), for better chemical differentiation.



Correlation of two different GRIMM instruments





#### **Specifications EDM 365:**

Equivalent to our certified EDM 180 complying	
with:	EN12341 & EN14907
	US-EPA
	GOST R
Measuring principle:	
/	Laser light scattering
Measurement i	reporting modes:
EDM 365-C:	PM <sub>10</sub> and PM <sub>2.5</sub>
EDM 365-CE:	TSP and PM <sub>10</sub>
EDM 365-D:	$PM_{10}$ , $PM_{2.5}$ , $PM_1$ and TC
EDM 365-E:	31 size channels from
	0.25 to >32 $\mu$ m or
	PM <sub>10</sub> , PM <sub>2.5</sub> , PM <sub>1</sub> and TC
Particle concentration:	
	1 to 2,000,000 particles/liter
Dust mass:	0.1 to >6,000 $\mu$ g/m <sup>3</sup>
Sample flow:	72 l/h, flow-controlled
Dehumidification:	
	Automatic nafion dryer system
Reproducibility	:3 % in max. range
Power supply:	230 VAC, 50 Hz
	(Optional: 110 VAC, 60 Hz)
Dimensions:	80 x 60 x 40 cm
Weight:	25 kg
Temp. range:	- 25°C to + 50°C