

## Dust monitor

Scattered light dust monitor to measure small to medium dust emissions

### Features

- Easy installation on one side of the duct
- Easy installation, no alignment needed
- Long lifetime as there are no moving parts inside the duct
- Probe with corrosion resistant nano-tech coating
- Automatic zero and reference point check
- Automatic contamination control and correction

### Applications

- Power stations
- Cement plants, the metallurgy and wood industries, chemical industry etc.
- Waste incineration plants
- Monitoring of dust filter plants

### Approvals

- Suitability-tested by the TÜV Cologne, test report 936/21205307/A
- MCERTS
- Approved and certified acc. to EN 15267-3



### Measuring principle

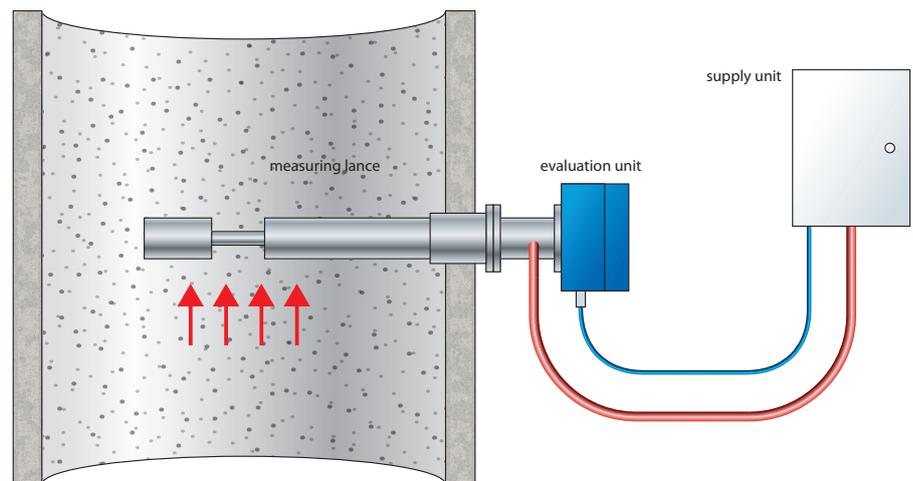
The D-R 800 works according to the principle of forward scattering. The concentrated and modulated light of a laser diode penetrates the measuring volume. The forward-scattered light largely reflected from dust particles is measured and assessed.

### System components

- Measuring lance
- Supply unit with integrated purge air supply
- Mounting flange

### Options

- Weather protection cover
- Hastelloy probe



measurements	dust concentration	digital inputs	2 potential free inputs, programmable
measuring ranges	0 ... 10 mg/m <sup>3</sup> ... 0 ... 200 mg/m <sup>3</sup> <sup>1)</sup>	detection limit	<0.5% measuring range
measuring principle	forward scattering	power supply	85 ... 264 VAC, 47 ... 63 Hz, 50 VA
flue gas temperature	above dew point up to 350 °C	dimensions (h x w x d)	measuring lance: 160 x 160 x 600/ 1000 mm supply unit: 380 x 300 x 210 mm
flue gas pressure	-50 ... +10 hPa		
duct diameter	0.4 ... 8 m		
probe length (from flange)	400/ 800 mm	weight	measuring lance: 7 kg supply unit: 13 kg
ambient temperature	-20 ... +50 °C		
protection	IP65	purge air supply	integrated into supply unit
measuring outputs	2x 0/ 4 ... 20 mA/ 500 Ohm, Modbus RTU (RS485)	remarks	<sup>1)</sup> after gravimetric calibration
digital outputs	4 relay outputs, programmable, permissible load 48 V/ 0.5 A		

EPA PS11  
Compliant  
Procedure 2

EAC

CE

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TÜV Rheinland  
CERTIFIED