**Emission monitors dust**

**Dusthunter SB100**

***Description***

The DUSTHUNTER SB100 is a type-approved measuring device for dust at very low to medium concentrations in challenging applications, e. g., in hot or corrosive gases. The measurement is based on the backward scattering of light. Installation is from one side only. Two different penetration depths are possible. Automated compensation of background radiation, therefore no light absorber required. An automated check of the zero and reference point as well as a contamination check are on board in the device.

***Specification***

Measured values: Scattered light intensity, dust concentration (after gravimetric comparison measurement)

Performance-tested measurement: Scattered light intensity

Measurement principle: Scattered light backward

Spectral range: 640 nm ... 660 nm

Laser, protection class 2, power < 1 mW

Measuring ranges: Dust concentration 0 ... 10 mg/m³ / 0 ... 200 mg/m³

Certified measuring ranges: Scattered light intensity 0 ... 100 SI / 0 ... 15 SI / 0 ... 50 SI / 0 ... 200 SI

Response time (t90): 1 s ... 600 s Freely adjustable

Accuracy: ≤ 2 % Of measuring range full scale

Process temperature: –40 °C ... +600 °C

Process pressure

With MCU-P control unit –50 hPa ... 2 hPa

With external purge air unit –50 hPa ... 30 hPa

Process gas humidity: Non-condensing

Duct diameter: ≥ 500 mm

Conformities - Approved for plants requiring approval:  
2001/80/EC (13. BImSchV)  
2000/76/EC (17. BImSchV)  
27.BImSchV  
TA-Luft (Prevention of Air Pollution)  
EN 15267  
EN 14181  
MCERTS  
2010/75/EU

Electrical safety: CE

Test functions: Automatic self-test (linearity, contamination, drift, aging)  
Contamination limit values: warning at 20%, fault at 30%  
Manual linearity test with reference filter