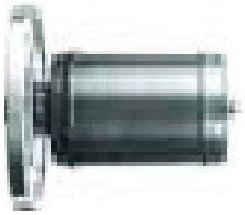
Backscatter Light Dust Monitor D10.8

Measuring Principle



D10.8 is an on-line dust monitoring device using the mainstream technology of laser back-scattered light principle with imported core components. D10.8 is mainly used for continuous monitoring of various sources emissions of particulate matter concentrations. It can be either equipped with CEMS, or connected with dust monitoring network by a shared set of data acquisition and processing backgraound.

Dust Monitors consists of Optical section, circuit and control section, calibrator and purge system.

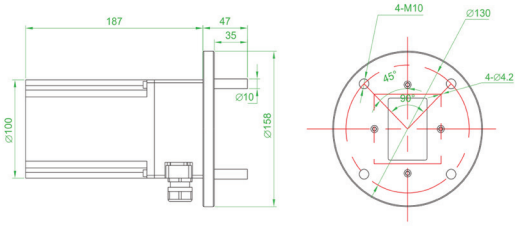
The laser beam (650nm) comes across the selection area and produces scattered light after effect with dust particles. The back scattered light crosses the lens converges into photosensitive detector. Analyzer circuit and control section converts light signal into signal output which is propotional to the dust concentration, and obtains dust particles emission concentration of pollution.

Features

- In-situ zeroing and span calibration
- Automatic gain control function and temperature compensation
- Smart appearance, easy installation, convinient disassembly
- Without background light influence

Application

- Palm Oil Mill
- Paper Mill
- Gas Fuel Boiler
- Aluminium Plant
- Steel Plant
- Cement Plant
- Steel & Iron Plant



Dimension

- Installation on standard flange to the stack
- Installation rainproof on backend of monitor
- Power and gas source connecting at backend of monitor

Specification

Principle	Backscatter Light
Range	0-200mg/m3, 0-10mg/m3 (Option)
Accuracy	±2% F.S
Repeatability	±1% F.S
Response Time	1s
Laser Transmitter	650 nm
Flue Gas Temperature	<500°C (higher temperature need to be customized)
Ambient Temperature	-400~_50°C
Duct Diameter	>0.7m
Analog Output	4-20mA, maximum load 800Ω
Communication	RS485, 2 relay Output
Weight	4Kg
Supply	24VDC±10%