

Backscatter Light Dust Monitor D10.13





Your Automation Partner

Overview

D10.13 is an on-line dust monitoring device using the mainstream technology of laser back-scattered light principle with imported core components. D10.13 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 background.

It is available for the monitoring and control of soot emission, flue gas DeSOx and removal of dust for power generation boilers, industrial furnaces, industrial boilers in the thermal power, iron and steel metallurgy, petrochemical, chemical, cement production, ceramics, waste incineration, etc.

Measuring Principle

Series of D10.13 dust monitors consits of optical section, circuit and control section, calibrator and purge system.

The laser beam (650 nm) comes across the detection 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 proportional to the dust cencentration, and obtains dust particles emission concentration of pollution.





Specifications

Principle	Backward Scattering
Range	0-200mg/m ³ , 0-10g/m ³ (Option)
Accuracy	±2% F.S
Repeatability	±1% F.S
Response Time	1s
Laser Transmitter	650nm
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 800 Ω
Digital Interface	RS485, 2 relay Output
НМІ	OLED
Weight	4Kg
Power	<3W
Dimensions	Refer to the figure below
Supply	24VDC±10%

Features

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

External Dimension

- 1. Installation on standard flange to the stack
- 2. Installing rainproof on backend of monitor
- 3. Power and gas source connecting at backend of monitor



