



Sintrol Dumo – the perfect tool for ambient dust monitoring

Sintrol

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Continuous Trend Monitoring For Ambient Dust

- Improve Employee Health Conditions
- Protect Your Equipment
- Cost friendly
- Easy to use
- Low maintenance



Dustlog screen



Datalogging chart

Sintrol Dumo monitors Total Suspended Particles (TSP) in ambient air based on the signal generated from moving particles. Test measurements in the laboratory and in the field proved that Dumo is capable of monitoring low dust concentrations and particle sizes as small as 0.3 micrometers. Dumo is easy to install and commission and virtually maintenance free.

Sintrol Dumo has a standard 4-20 mA output, which can be easily integrated into existing systems such as a PLC in the control room. Dumo has “Alert” and “Alarm” functions corresponding to certain dust concentration levels above the normal levels identified using Dumo’s easy auto setup feature. The normal level is determined and fixed at the beginning of monitoring and the two alarm levels can be set during the commissioning.

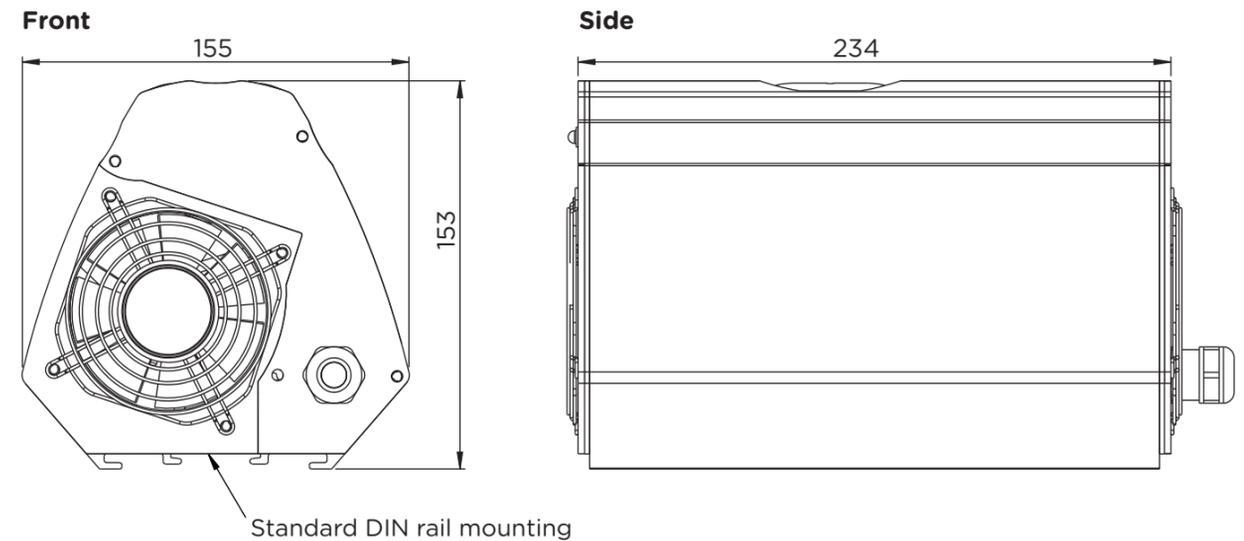
Ease of use makes this device ideal for applications where any disruption in the normal operation may result in an increase of particle concentration in the workplace causing nuisance and harm to people or machinery in an enclosed environment. In areas requiring dust extraction systems to lower particulate levels in the environment, **Sintrol Dumo** is the perfect complement to monitor the efficiency of dust removal.

Rising environmental regulations in ambient environments for worker health have increased the demand for particulate monitoring around the world in these applications. The **Sintrol Dumo** is the premier trend monitor to improve worker health and protect industrial equipment.

Combining the **Sintrol Dumo** with our latest **Dustlog 8** data logging software gives users full remote access and reporting information to store and track historical data. This enables plant operators to identify key trends and pinpoint abnormalities in dust levels over a period of time. This will also give the plants full diagnostic capability to improve on-site maintenance and notify the user of any software or mechanical problems with the device.

Sintrol Dumo is a useful tool in all work environments where harmful dust concentrations are encountered:

- Mines
- Foundries
- Wood
- Cotton processing
- Textile mills
- Food
- Chemical
- Paper mills
- Agricultural



Technical Specifications

Measurement Objects	Solid particles in ambient air
Particle Size	0.3 µm or larger
Measurement Principle	Inductive Electrification
Protection Category	IP20
Damping Time	1 s - 1 h 30 min
Power Supply	24 VDC
Power Consumption	5 W
Cable Connection	10 meter cable, 4 pair shielded
Output Signals	- Isolated 4-20 mA - 2 solid state relays, (max current feed 170 mA at 24 VDC) - Serial communication, (RS-485)
Relay Alarm Settings	- Automatic, set at factory: Based on average measured dust flow - User selectable ranges

Ambient Conditions

Temperature	-20 to +60 °C
Humidity	95 % RH (non-condensing)

Materials and Weight

Probe Material	Stainless steel (AISI 316L)
Body	Aluminum, stainless steel (AISI 316L)
Weight	4 kg

Principle of Operation

Sintrol dust monitors are based on a unique Inductive Electrification technology. The measurement is based on particles interacting with an isolated probe mounted into the duct or stack. When moving particles pass nearby or hit the probe a signal is induced. This signal is then processed through a series of Sintrol’s advanced algorithms to filter out the noise and provide the most accurate dust measurement output.