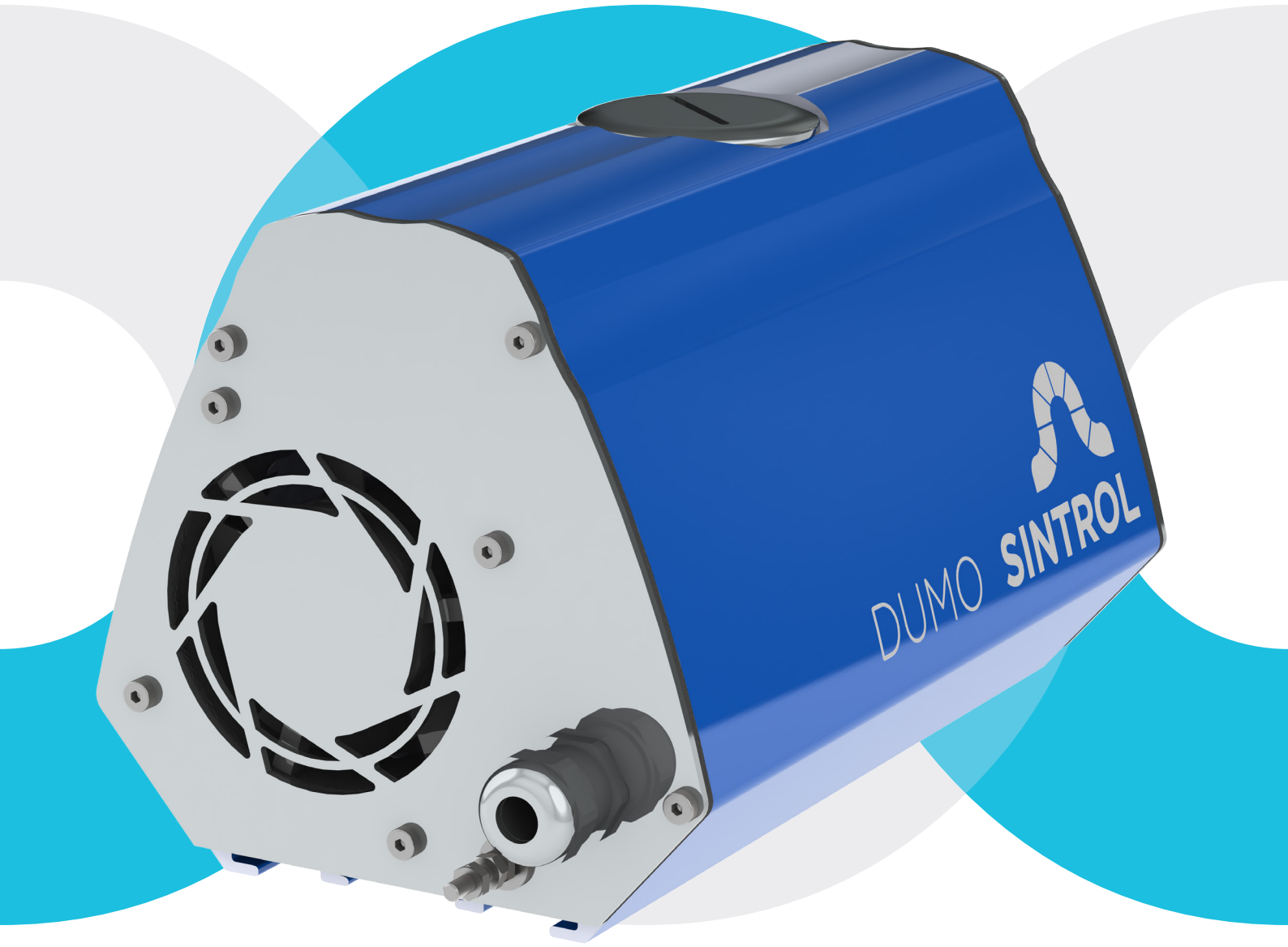


Sintrol Dumo – the ideal tool for ambient dust monitoring

www.sintrolproducts.com

SINTROL
For Good Measure

Continuous Trend Monitoring for Ambient Dust

- Compact and rugged design
- Low maintenance real time dust monitoring
- No sample handling required
- UL and CSA certification, Class II Div I, Subgroups E, F & G
- User and cost friendly
- Helps protect against potentially explosive dust concentrations
- Helps control unwanted dust accumulations
- Helps manage good housekeeping practices
- Workplace dust monitoring

The 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 the Dumo is capable of monitoring low dust concentrations and particle sizes as small as 0.3 micrometers. The Dumo is easy to install and commission and virtually maintenance free. For parameterization and set up, The Dumo can be accessed with the DustTool software available free of charge from Sintrol*s website.

The Sintrol Dumo has a built-in fan that draws ambient air through the measuring chamber, producing a steady constant flow.

Any particulate flowing through the chamber will interact with the sensor rod causing a small electrical charge to pass between the particulate and the sensor. These small electrical charges that are generated are proportionate to the ambient dust levels .

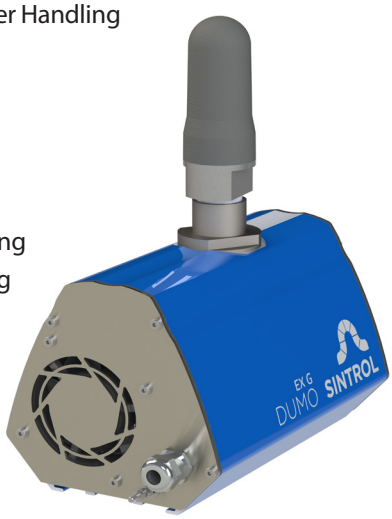
The Sintrol Dumo has a standard 4–20 mA output, which can easily be integrated into existing systems such as a PLC in the control room. Dumo has “Alert” and “Alarm” signals corresponding to certain above average dust concentration levels, which can be identified using the Dumo’s easy auto setup feature. The normal level is determined and fixed at the beginning of monitoring and the two alarm levels can be set during the commissioning. The instrument can also be calibrated to show units of mg/m^3 by performing a reference measurement.

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 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.

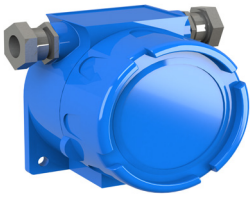
Rising environmental regulations in ambient environments for worker health have increased the demand for particulate monitoring around the world. The Sintrol Dumo is the premier trend monitor to improve worker health and protect industrial equipment.

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

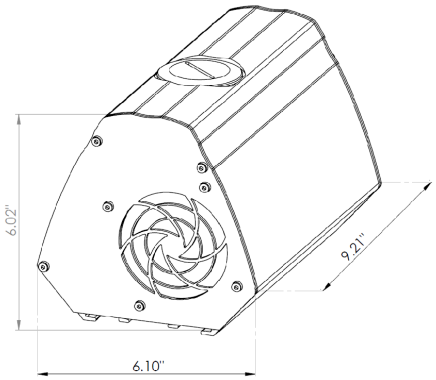
- Bulk and Powder Handling
- Grain Mills
- Sugar Mills
- Flour Mills
- Foundries
- Mines
- Textile Processing
- Food Processing
- Chemical
- Paper Mills



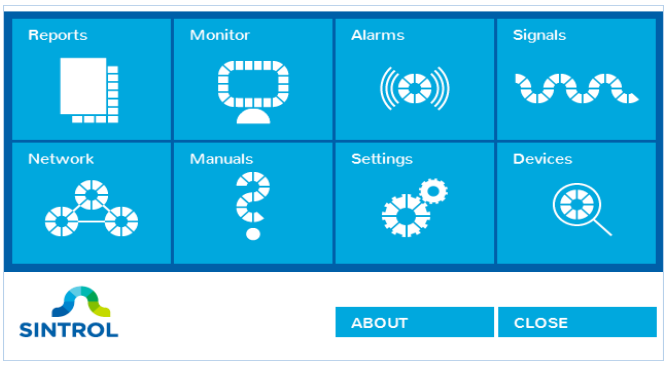
Wireless model, DUMO EXG RF A, 915Mhz communicates with DustLog8 reporting software for accessing a network of Sintrol devices. 868 MHz ISM model available.



The connection box CB3 EXG A is a recommended option to assure correct installation as well as to provide an easy way to interface with the DUMO.



	Dumo	Dumo EX	Dumo EX G	Dumo A	Dumo EXG A
Protection Category	IP20	IP54	IP65	IP65	IP65
EX Zone		22	21&1		
UL and CSA Certificates				UL	Class II Div I
DustLog8	x	x	x	x	x
Connection Box	x	x	x	x	x
Wireless Interface	x	x	x	x	x
x) optional feature					



DustLog Software

DustLog gives the plant operator complete control over the network of dust monitors. It provides a thorough and user-friendly interface for setting parameters of the network and dust monitors, as well as reporting. DustLog can be connected to a dust monitor network via network router. DustLog supports USB, RS485 and wireless RF.

- Comprehensive data storage and processing
- Remote access to dust monitors
- Remote access allows user to calibrate units, change alarm limits, conduct auto setup functions, configure mA outputs
- Data export to third party software such as excel
- Real time monitor views of various measuring points
- Database: Microsoft SQL, Postgre SQL, SQLite

Documentation subject to change without notice

Technical Specificatons

Measurement Objects	Total suspended Particles
Measuring Range	From 0.1 mg/m ^{3} up to 6 g/m ^{3}
Measurement Principle	Inductive Electrification
Power Supply	24 VDC
Power Consumption	5W, Dumo EX 8W
Cable Connection	- 5 m cable 12 wires ı 16.4 ft cable 12 wires - Custom lengths available upon request.
Output Signals	- Two output signals (100-280mA) - Isolated 4 - 20 mA output
Communication Interface	- Serial communication RS485 - USB communication - Wireless communication (optional)
Communication Protocol	- Modbus RTU, (RS485) - SNT network, (USB, wireless, RS485)
Alarm Settings	- Automatic. Based on average measured dust flow - User selectable limits
Ambient Temperature	- Starting -20 to +40°C ı -4 to 104 °F - Running -20 to +60°C ı -4 to 140 °F
Humidity	Max 95% RH (non-condensing)
Probe Material	Stainless steel (AISI 316L)
Body	Aluminium, stainless steel (AISI 316L)
Weight	Standard model 4 kg ı 8.8 lbs
Approvals Available	UL and CSA, - Class II Div I, subgroups E, F and G ATEX - II 2 G Ex mb [ib] IIC T6 Gb, II 2 D Ex mb [ib] IIIC T80 °C Db IECEx - Ex mb [ib] IIC T6 Gb, Ex mb [ib] IIIC T80 °C Db

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.

Sintrol

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