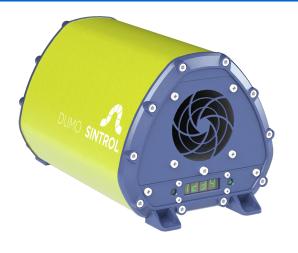


## DUMO Continuous Ambient Air Dust Monitor

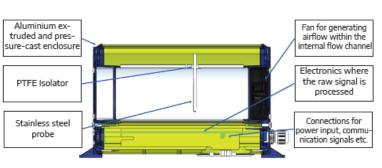


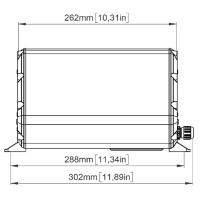
### **Benefits:**

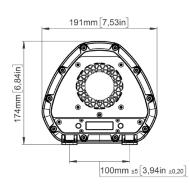
- Low maintenance and robust
- Easy start-up and commissioning
- Wide measurement range
- Internal self-monitoring for failsafe 
   operation
- Fast response time
- · No sample handling required
- · Product loss prevention

# **Applications:**

- · Early detection of dust leaks
- Workplace dust monitoring
- Equipment and worker protection
- Supports good housekeeping practice
- Hazardous location supervision
- Helps mitigate the risk of dust explosion

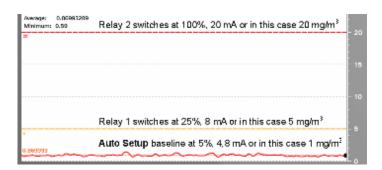






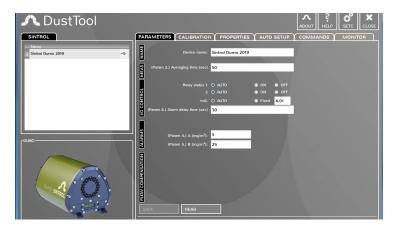
#### **Unique Auto Setup Function**

The Auto Setup function is a unique Dust Monitor feature which allows for a simple, user friendly setup. During the auto setup procedure, which is done in normal process conditions, the dust monitor will automatically adapt to the present conditions and set the measuring range and alarms accordingly.



#### **Dust Tool**

Dumo can be managed and parameterized with the DustTool PC Software. This offers a convenient platform to view the measurement results, to initiate the Auto Setup and adjust the parameters of the monitor.



Low maintenance real-time monitoring of total suspended particles in industrial environments

Designed to industrial standards with built in failsafe features to increase reliability



## Reliable and user friendly

In reference to multiple international safety codes, Dumo is equipped with the below safety features:

- All instruments are 100% tested, normalized and linearized during production.
- Malfunctions are indicated in the way that relays will relax, the mA output will show 22 mA and LEDs will blink.
- The fan speed is monitored and will trigger an error if the fan is blocked or slowed down.
- A periodic Zero and Span check correction is a standard function of Dumo.
- The solid state relays are normally energized to enable the detection of interruptions in the power supply.
- Voltage supply tolerant to +/- 20% voltage changes.
- During Auto setup the LED will blink green and a countdown is shown on the display.
- In hazardous locations Auto Setup can be triggered without opening the instrument.
- It is possible to perform some very easy bump check after installation:
- A properly grounded Dumo will show no re-action on the measurement by touching it with your hand.
- Dumo will react by tearing a piece of paper apart in front of the inlet.
- Dirty or wet sensors may become grounded which distorts the signal. These incidents are detected and an error signal is prompted.
- On board display for direct verification of dust levels or mA output.

The DUMO can be installed anywhere in the production process where the determination of the dust levels is critical or informative. The DUMO makes the task of dust monitoring easier, faster and more reliable than ever before.

Product Name	DUMO
Measurement objects	Total Suspended Particles (TSP)
Measurement range	Detection Limit 0,01 mg/m³, Maximum Range up to several g/m³
Measurement principle	Inductive Electrification
Protection code	IP65
Power supply	24 VDC + - 20%
Power consumption	Up to 10 W
Output signals	<ul> <li>Two configurable alarm outputs (100 mA @24 VDC)</li> <li>Isolated 4 - 20 mA output loop, up to 250 Ω loop resistance, Namur NE43 compliant alarms</li> </ul>
Communication interface	Serial communication RS485, USB, Wireless Radio Frequency (RF) (Option)
Communication protocol	<ul><li>Modbus RTU (RS-485)</li><li>Sintrol network (USB, RF and RS-485)</li></ul>
Alarm settings	Set by auto setup based on average measured dust level: 5 times and 20 times of reference dust level. User adjustable
Signal averaging time	Default at factory: 100 s, Adjustable from 0-6000 s.
Alarm delay time	Default at factory: 30 s, Adjustable from 0-60 000 s.
Alarm hysteresis time	Default at factory: 0 s, Adjustable from 0-25 s.
Ambient Conditions	
Running temperature	-40°C to +60 °C (-40 °F to 140 °F)
Humidity	Max 95 % RH (non-condensing)
Materials and Dimensions	
Weight	4,2 kg (9,3 lbs)
Enclosure / housing	Aluminum enclosure, stainless steel cover plates and probe (AISI 316L).
Dimensions (mm):	288 (L) x 191 (W) x 174 (H)