

Industrial Dust Monitor

Introduction

Navter's Industrial Dust Monitor is a portable instrument that monitors the air quality in industrial environment and provide real time visual alert for changes in air quality.

It has inbuilt storage for continuous data logging and relay control for actuating the ventilation system based on the air quality.

The main application areas are production halls, workstations, warehouses, logistics hall and other industrial areas to be monitored for dust control.

Features

- Real time monitoring of air quality
- Quick response time of less than 6 seconds
- 7 Inch HD screen with intuitive, rich graphical display of particles count, temperature, humidity, safety alert message and particles count vs health effects table
- Real time display in smartphone, laptops and any Wi-Fi connected device
- Accurate Optical laser Particle
- Real time continuous data logging of STEL (average of every 15 min.) & TWA (average of every hour).
- Visual alert of Automatic color change and safety alert message indicating air quality.
 - Green: 0 – 5 mg/m³ – Safe
 - Orange: 5 - 10 mg/m³ – Risky
 - Red: 10 – 15 mg/m³ – Danger
- Easy 2-step wireless connectivity
- Data log with graph in Excel file format Download
- In Built storage to store more than a million data records
- Optional HDMI output
- No warm up time
- Wall mountable and as desk top device

Specifications

Minimum Particle size	0.1 µm
Particle Concentration Range	1 µm/m ³ to 15 mg/m ³
Accuracy	±15 µg/m ³
Sensor Type	Optical sensor
Operating Temperature	0° C – 50° C
Operating Humidity	10 to 90%RH
Dimension	14.5 x 9 x 3" (368 x 229 x 76mm)
Response Time	< 6 seconds
Weight	4.12Kg
Power	230 V AC, 50/60 Hz
Display	7" HD DISPLAY
Display unit	mg/m ³
Memory	In built storage of 1 million readings
Continuous Operation	24 hours
Warranty	One year
Operating principle	Laser scattering
Communication Mode	WIFI
Maximum overload	15 mg/m ³
Calibration	factory calibrated valid for 1 year

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Model N-ID100

Safety Alert

The Industrial dust monitor alerts the user of real time changes in air quality with safety alert message and three different display colors green, orange and red indicating the range, for easy visual perception

The safety alert message is displayed as 'safe' and the display color is green when the particle concentration is in the range of 0 - 5 mg/m³, the display color and safety alert message changes automatically with change in particle concentration.

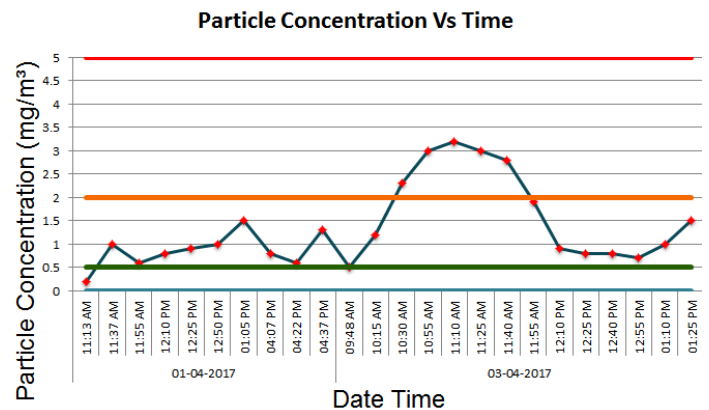
HCHO Range	Color	Alert message
0 - 5 mg/m ³	Green	Safe
5 - 10 mg/m ³	Orange	Risky
10 - 15 mg/m ³	Red	Danger

Data Logging

The Industrial dust monitor has automatic data logging of STEL (short term exposure limit) values every 15 minutes throughout the operation of the monitor. It has inbuilt storage of 16GB that can store more than a million data records.

The data log stored in the device can be easily accessed from any Wi-Fi enabled device, smartphone, pc laptop etc. The data log has auto generated graph of particle concentration versus data & time.

Maximum, Minimum Value of **PM2.5** concentration with auto generated graph



Applications:

- Monitoring dust levels within the Workstations, production halls, logistic halls and warehouses
- Aluminum Industry
- Bag Filter management
- Carbon Black Industry
- Cement Industry
- Vehicle emission migration
- Incineration Processes
- Steel Manufacturing Process