

FORMALDEHYDE MONITOR DATASHEET

Introduction

Navter's Formaldehyde Monitor is a portable desktop and wall mountable instrument that measures formaldehyde concentration in air.

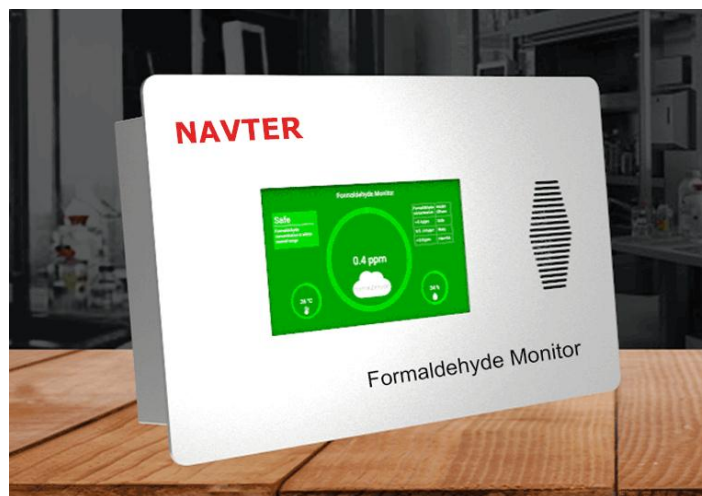
The instrument displays the real-time value of formaldehyde concentration in ppm, temperature and relative humidity. It has built-in storage for continuous data logging and Wi-Fi connectivity for easy access of data log.

Specifications

Detection gas	Formaldehyde (HCHO) in air
Formaldehyde/Resolution/Accuracy	0.00 to 5.00ppm / 0.01ppm / ±4%
Temperature/Resolution / Accuracy	0 to 50°C / (1°C) / (±1°C)
Humidity/Resolution / Accuracy	10 to 90%RH / 1%RH / ±4%RH
Dimension	14.5 x 9 x 3" (368 x 229 x 76mm)
Response Time	< 30 seconds
Weight	4 Kg
Power	230 V AC, 50/60 Hz
Display	7" HD DISPLAY
Display unit	PPM
Memory	In built storage of 1 million readings
Continuous Operation	24 hours
Warranty	One year
Technology/Sensor type	Electrochemical sensor
Sensor life	3 years
Communication Mode	WIFI
Maximum value	5 PPM
Calibration	Factory calibrated valid for 1year

Features

- Quick response time less than 30 sec
- Wall mountable and desk top device
- Electrochemical sensor measures real time formaldehyde gas concentration from 0 to 5 PPM with ±4% Accuracy and 0.01 PPM resolution.
- 7 Inch HD screen with intuitive, rich graphical display of formaldehyde concentration, temperature, humidity, safety alert message and formaldehyde concentration vs health effects table
- Real time continuous data logging of STEL (average of every 15 min.) & TWA (average of every hour).
- Automatic change of color, theme and safety alert message indicating formaldehyde concentration.
- Easy 2-step wireless connectivity
- Data log in MS Excel file format Download
- In Built storage to store more than a million readings
- Optional HDMI output
- No warm up time
- Optional actuator



Model N-FM100

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Safety Alert

The formaldehyde monitor alerts the user of real time changes in formaldehyde concentration with safety alert message and three different colour green, orange and red indicating the range, for easy visual perception

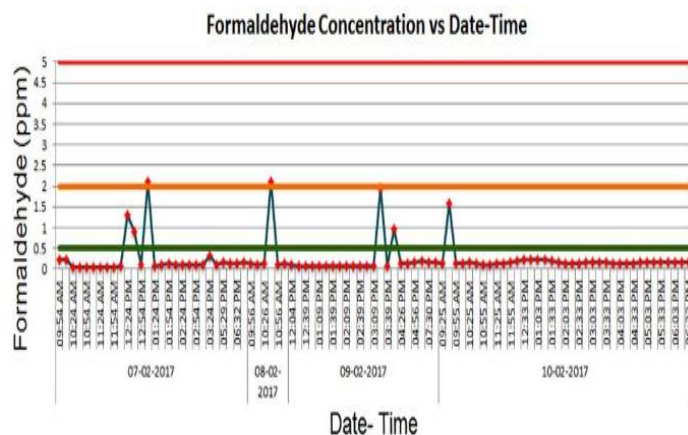
The safety alert message is displayed as 'safe' and the display colour is green when the formaldehyde concentration is in the range of 0.0 ppm to 0.75 ppm, the display color and safety alert message changes automatically with change in formaldehyde concentration.

HCHO Range	Colour	Alert message
0.0 – 0.75 ppm	Green	Safe
0.75 – 2.0 ppm	Orange	Risky
2.0 – 5.0 ppm	Red	Danger

Data Logging

The formaldehyde 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 formaldehyde concentration versus data & time.



Cross sensitivities

The cross sensitivity of various chemicals substances that affect the formaldehyde monitor readings is given below.

Substance	Cross Sensitivity (%)
CO	1
H2S	No data
H2	0.1
SO2	12
NO2	No data
NO	No data
Cl2	-3
C2H4	No data
NH3	0
CO2	0
Ethanol	45
Phenol	7
Water vapour	0*

Applications:

The formaldehyde monitor can be used in a wide variety of applications such as

- Poultry farms
- Medical Pathology lab
- Adhesives manufacturing Industry
- Paint and ink industry
- Furniture and woodworking Industry
- Textile industry
- Automobile and chemical manufacturing industries
- Construction industry
- Food preservative and cold storages