

# IoT based Air Pollution Monitoring System

## INTRODUCTION

IoT based Air Quality Monitoring System is a continuous ambient air quality monitoring systems (CAAQMS). It is an affordable compact size system having ability to support a range of connectivity options like Wifi, GSM, NB-IoT, etc.

It is a fully integrated system capable of measure different gaseous pollutants and meteorological parameters.



## SPECIFICATIONS

## KEY FEATURES

### Pollutants:

- O<sub>3</sub>
- CO<sub>2</sub>
- CO
- PM<sub>2.5</sub>
- PM<sub>10</sub>
- SO<sub>2</sub>
- NO<sub>2</sub>

### Meteorological Parameters:

- Temp
- Humidity
- Pressure

### Other:

- GPS location

- Real time continuous measurement of gaseous and particulate matters including temp, humidity, pressure as per Indian standards
- Compact size
- Power backup option
- Data logging over cloud
- Weather proof
- LED display for every sensor board
- Future prediction
- Mobile Application



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## CONNECTIVITY



## DATA VISUALIZATION

Real Time Updates



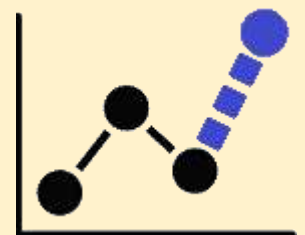
Mobile APP



## OTHER FEATURES

Data Rate : 375 Kbps (Max UL/DL)  
MQTT Protocol supported  
Public/private/hybrid cloud support  
NB-IoT  
LTE FDD:  
B1/B2/B3/B4/B5/B8/B12/B13/B18/  
B19/B20/B28  
EGPRS: 850/900/1800/1900 MHz

Prediction using AI/ML



Live values  
Predicted values

## APPLICATIONS

Smart City Development  
National Air Monitoring Networks  
Urban Air Monitoring Networks  
Environmental Impact Assessment



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