

## **1. Outdoor Monitoring**

- a.Box Model
- b.Cylindrical model

## **2. Indoor Monitoring**

Using existing model outdoor model as the indoor monitoring

- \* Have to develop the design
  - a.Mechanical design
  - b.Electrical design
  - c.PCB board assembly

## **3. Noise Monitoring**

- \* Have to develop the design

## **4. Handy Instrument**

- \* Indoor Application

## **5. Personal Monitoring**

- \* Have to develop the design

## **6. Solar Pannel Based Charger Outdoor**

- \* Have to develop the design

# 1. Outdoor Monitoring Devices

a.Box Model

b.Cylindrical Model

## Box Model



## Specification:

1. Operating Voltage: 12V 2A
2. Size: 240mm (H) x 190 mm (W) x 120mm (D)
3. Weight: 2.5 kg
4. Material: ABS
5. Optimum Humidity: 0-95%
6. Operating Temperature:-20 °C to 60 °C
7. Weather Protection: IP64
8. Measurement unit: PM Sensor- $\mu\text{g}/\text{m}^3$  Gas Sensor-ppb

## Features:

1. Standby Connectivity: GSM (2G/3G/4G) GPRS/IP
2. Data transfer interval: 15-Seconds-30 minutes (configurable)
3. Wireless connectivity: GSM, LORA, Wi-Fi
4. Mounting Type: Pole Mounting Unit|Wall Mounting Unit
5. Machine Learning/A-Calibration
6. Data Interval May be Consumable

## Package Include:

1. Sensor Unit with all Sensors
2. Battery charger: 12V, 2.5A

## Installation:

1. Preferred Mounting: Pole / Wall  
(preferably 270° open surrounding)  
Height: 10-15 feet
2. Power Availability: Constant AC supply within a 5-meter range from the unit or solar pane
3. Network Availability: Uninterrupted network coverage Area  
(In case of GPRS/GSM connectivity)

## Cylindrical Model



## Device Operation

When the device is powered on, the device intakes air samples at a predefined frequency through the air sampling system. Once the air sample is stabilized, the sensory system takes multiple readings during the sampling time and performs relevant data- processing. During this cycle time, the device flushes out old air sample and pulls in a fresh one. After each sampling, the data processing system sends the processed data to the central server using a built-in communication module.

## Description:

The instrument can be customised to monitor various air pollutants like Particulate Matter (PM10, PM2.5, PM1), Carbon Monoxide (CO), Sulphur dioxide (SO<sub>2</sub>), Oxides of Nitrogen (NO<sub>x</sub>), Volatile Organic Compounds (VOC), Carbon dioxide (CO<sub>2</sub>), Ozone (O<sub>3</sub>) and meteorological parameters like Temperature, Relative Humidity. The device comes with an inbuilt battery for uninterrupted air quality monitoring, and it can also be powered using solar power, making it viable for installation even in remote areas.

PM2.5 | PM10 | PM1.0 | CO | TEMP | RH | BP (Customizable)

## Specification:

1. Operating Voltage: 12V 2A
2. Size: 240mm (H) x 190 mm (W) x 120mm (D)
3. Weight: 2.5 kg
4. Material: ABS
5. Optimum Humidity: 0-95%
6. Operating Temperature: -20 °C to 60 °C
7. Weather Protection: IP64
8. Measurement unit: PM Sensor- $\mu\text{g}/\text{m}^3$  | Gas Sensor-ppb

## Features:

1. Standby Connectivity: GSM (2G/3G/4G) GPRS/IP
2. Data transfer interval: 15-Seconds-30 minutes (configurable)
3. Wireless connectivity: GSM, LORA, Wi-Fi
4. Mounting Type: Pole Mounting Unit | Wall Mounting Unit
5. Machine Learning/A-Calibration
6. Data Interval May be Consumable

## Installation:

1. Preferred Mounting: Pole / Wall  
(preferably 270° open surrounding)  
Height: 10-15 feet
2. Power Availability: Constant AC  
supply within a 5-meter range from  
the unit or solar pane
3. Network Availability: Uninterrupted  
network coverage Area  
(In case of GPRS/GSM connectivity)

# Noise Monitoring



## Specification:

1. Operating Voltage: 12V 2A
2. Size: 210mm (H) x 150 mm (W) x 120mm (D)
3. Weight: 2.5 kg
4. Material: ABS
5. Optimum Humidity: 0-95%
6. Operating Temperature:-20 °C to 60 °C
7. Weather Protection: IP64
8. Measurement unit: PM Sensor- $\mu\text{g}/\text{m}^3$  Gas Sensor-ppb
9. Noise in DP

## Features:

1. Standby Connectivity: GSM (2G/3G/4G) GPRS/IP
2. Data transfer interval: 15-Seconds-30 minutes (configurable)
3. Wireless connectivity: GSM, LORA, Wi-Fi
4. Mounting Type: Pole Mounting Unit/Wall Mounting Unit
5. Machine Learning/A-Calibration
6. Data Interval May be Consumable

## Installation:

1. Preferred Mounting: Pole / Wall (preferably 270° open surrounding)  
Height: 10-15 feet
2. Power Availability: Constant AC supply within a 5-meter range from the unit or solar pane
3. Network Availability: Uninterrupted network coverage Area  
(In case of GPRS/GSM connectivity)

## Package Include:

1. Sensor Unit with all Sensors
2. Battery charger: 12V, 2.5A



## 4. Handy Instrument :

Have to develop the design

- 1.Mech design
- 2.Electrical design
- 3.PCB Board

## 5. Personal Monitoring

Have to develop the design

- 1.Mech design
- 2.Electrical design
- 3.PCB Board

## 6. Solar Pannel Based Charger– Outdoor

Have to develop the design

- 1.Mech design
- 2.Electrical design
- 3.PCB Board

We Provide Economical Solutions For Indor & Outdoor Air Quality Monitoring

