

VIBAN - Outdoor Air Pollution Controller



Problem Statement:

- 4.2 million deaths every year as a result of exposure to ambient (outdoor) air pollution. · In children and adults, both short- and long-term exposure to outdoor air pollution can lead to reduced lung function, respiratory infections and aggravated asthma. Maternal exposure to ambient air pollution is associated with adverse birth outcomes, such as low birth weight, preterm birth and small gestational age births.
- Emerging evidence also suggests ambient air pollution may affect diabetes and neurological development in children.
- Considering the precise death and disability toll from many of the conditions mentioned are not currently quantified in current estimates, with growing evidence, the burden of disease from ambient air pollution is expected to greatly increase.
- Cancer -The World Health Organization (WHO) has declared outdoor air pollution, including Particulate Matter (PM), and also diesel exhaust, carcinogenic to humans, in the strongest class (Group 1). This is the same class as tobacco.
- Asthma- Two thirds of people with asthma say that poor air quality makes their asthma worse. This puts them at higher risk of an asthma attack.

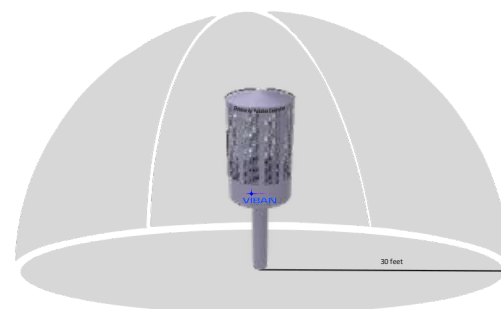


- They also state that being exposed long-term to high concentrations of air pollution may cause adult-onset asthma.
- Stroke & Heart Failure- Short-term exposure to air pollution can increase the risk of hospitalisation or death from stroke.
- Diabetes- The development of Type 2 diabetes is not only due to lifestyle or genetic factors, but also traffic-related air pollution.



Solution with Uniqueness:

- The System design on most unique and Patented technology
- The System is equipped with specially designed multi-layer surface membrane Filters
- The filters are Durable and Long-lasting.
 - o No Cleaning requires for Filters
 - o No monthly / bimonthly / quarterly / half yearly maintenance
 - o A Unique Design for Easy Cleaning with Bin Type System
 - o Particulate Matter Collected are nontoxic can be used as a manure
- The system Filtration Efficiency is of 80%.
- The system has IOT integration for online monitoring of air pollution level.
 - o Sensors with Microprocessor provides real time online data
 - o Sensors Monitor Ambient Air's PM2.5, PM10, Temperature, Humidity
- The system has 2000 CFM (Cubic Feet per Minute) Suction range up to 30 feet cascading radius
- Very Compact and a Rave Design
 - o The system occupies very less space.
 - o The system is All Weather Proof.
 - o Quality material used for long durability – and for corrosion resistance, considering use at OPEN AREA and OUTSIDE



Process of Air Filtration:

- Surface Membrane Filtration
- Motorised Electrical Fan Pulls in polluted Air from the Surrounding Environment
- The Polluted Air is Passed through various stages of Filtration
- Purified Air is then Released from the Machines.

Application:

- Traffic Signals
- Hospitals
- Airports
- Corporate or Govt. Office Complexes
- Hotels
- Police Stations
- High Traffic Congestion Zones
- Toll Booths
- Residence Area
- Petrol Pump
- Resorts
- Factory Building & Premises, etc
- Education Institutions
- Railway - Metro Station
- R & D Centres
- CNG Stations
- Court Building

VIBAN - Outdoor Air Pollution Controller

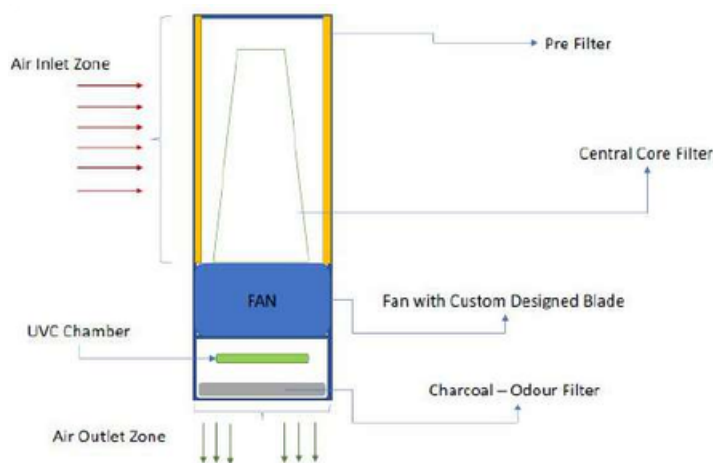


VIBAN – Outdoor Air Pollution Controllers Specifications:

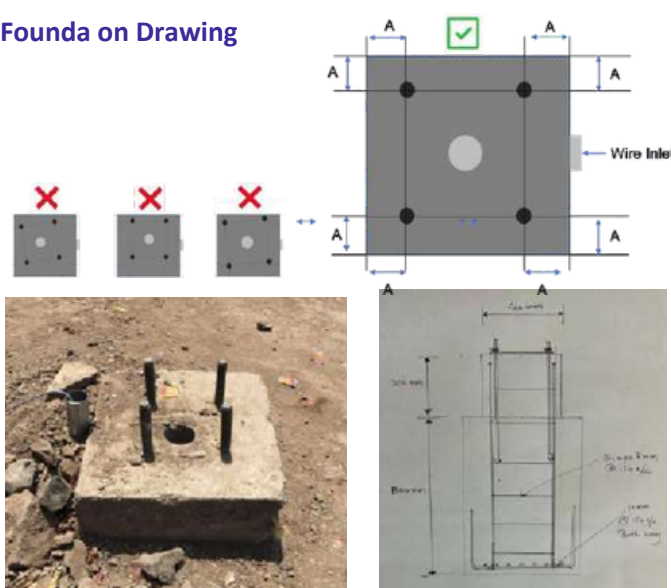
Model Name	VIBAN –Outdoor Air Pollution Controller
Model No	CUA8
Electrical Power Source	AC Power Supply
Voltage	230 Volts
Phase	Single Phase
Power	0.5 HP
Weight	0.37 Kw
Suction Capacity	2000 CFM
Range	30 Ft Cascading Radius
Multiple Filters	PM 2.5, PM 10, Activated Carbon, Odour
Monitoring Sensors	PM 2.5, PM10, Temperature, Humidity
Monitoring System [ambient air]	Online – Remote Monitoring
Cylindrical Unit Size [Diameter]	750 mm
Floor – Foot Print	750 x 750 mm (Ground Space) 400 x 400 x
Foundation	1000 mm [m20 x 600mm Bolt] 2890 mm
Height	from Ground Level 4 Core Armored Cable
Electrical Cable	Water Proof Cylindrical Unit with Base Pipe
Connection Box	Galvanized Steel with Silver Powder Coating

Type of Cleaning Bin Type Collection Tray
Type of Filtration Surface filtration system

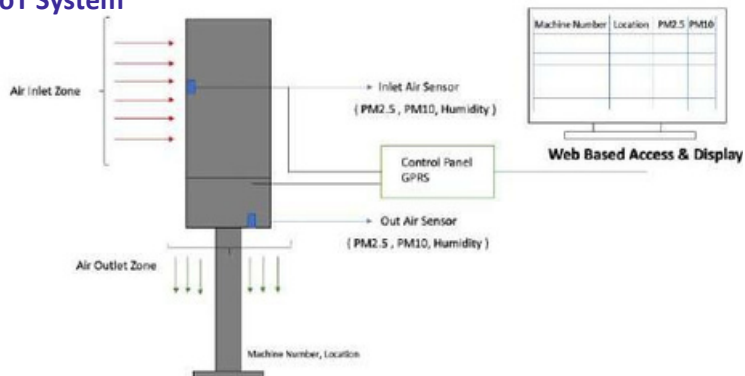
Air Flow Filtration



Foundation Drawing



IoT System



Motivation Engineers and Infrastructure Pvt. Ltd.



Regd.Off: GF, Nandanvan, Opp.TownHall, Ellisbridge,Ahmedabad380006.
Corp.Off: 605, Abhijeet-1, Nr. Mithakhali Six Road, Ahmedabad 380006.
Ph: 079-26576577 | **M:**+91 98242 86439, +91 98242 24203
E: response@motivationeng.com,

