fogwing eco

Hospital Air Quality Monitoring Solution

eco.fogwing.net

Importance of IAQ at Healthcare Facilities

Indoor air quality (IAQ) has recently gained substantial traction in recent years, the spread of the influenza A (H1N1) flu and severe acute respiratory syndrome (SARS-CoV) as well as the newly emerged severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has been associated with airborne transmission. The airborne transmission of infectious respiratory disease has become an increasing public health concern.

Indoor Air pollution significantly impacts human health and is regarded as the world's largest single environmental health risk by the World Health Organization (WHO).

Consequently, a study by the National Institute of Health (NIH), United States, shows that 76% of patients' recovery is slowing down due to air quality at healthcare facilities. It is important to recognize the primary sources of indoor pollutants in hospitals to develop solutions for improving hospital IAQ. Besides the design of the ventilation system itself, its outdoor air intake can also influence hospital IAQ, as previous studies had indicated that the total bacterial load detected in heating, ventilation, and air-conditioning (HVAC) system filters were higher in urban health facilities compared to rural ones, which was suggested to be due to the proximity to adjacent buildings and roadways.

Hospital hygiene maintenance influences IAQ by influencing indoor pollutant levels. Irregular cleaning leads to the continuous deposition of particulate matter (PM) and Total Volatile Organic Compounds (TVOC), and as its level increases, it becomes re-suspended due to the movement of building occupants. In healthcare facilities, cleaning and disinfectant activities of equipment, furniture, floors, and walls are vital, even if dilution ventilation, source management, and design intervention have all been utilized optimally to control infectious aerosols.

A statistically significant increase in respiratory disease hospitalizations has been detected after peaks of particulate matter concentrations (particularly PM2.5, between 0.9 and 4.5% increase per 10 units of pollutant increase, and PM10, between 0.9 and 3.5% per 10 units of pollutant increase), with a typical time lag between the pollutant peak and the event of 2 to 6 days.

It is important to deploy an Indoor Air Quality Monitoring System at healthcare facilities to track, detect air quality issues, and mitigate the risks associated with patients' health and disease control.

90% of Airborne infections spreads within Hospital environment due to poor air quality.

Fogwing Eco - IAQ Solution for Hospitals

The Fogwing eco represents a state of the art air quality and pollution monitoring solution meticulously crafted to deliver a comprehensive and dependable assessment of both indoor and outdoor air quality.

Fogwing Eco devices equipped with sensors to measure key air components, including Oxygen (O_2), Carbon dioxide (CO_2), Volatile Organic Compounds (TVOC), Formaldehyde (CH_2O), and Particulate Matter (PM2.5, PM10). These sensor data captured through innovative IoT-based device caters to authority seeking real-time monitoring of air pollution parameters within their hospital environment, preventing airborne diseases and promoting better health.

Our all-encompassing IAQ monitoring system empowers you to stay vigilant over the factors that impact the environmental conditions. The monitoring results are thoroughly reviewed, analyzed statistically, and securely stored for future reference. By tracking the occurrences of harmful substances, we can identify patterns and analyze the contributing factors through our remote cloud platform. This enables us to gain valuable insights into the factors influencing these changes.

ADVANCED KIT
Available as 8-in-1 Sensor for both Indoor Air Quality / Pollution Monitoring (APM) to detect the air pollutants and infectious matters in indoors and corridors.

INDUSTRIAL COMPLIANCES
According to CAA (Clean Air Act), Fogwing Eco kit monitors various particles from air such as O_2, CO_2, temperature, humidity, airborne chemicals (TVOC, CH_2O), dust pollutions (PM1.0, PM2.5) and more.
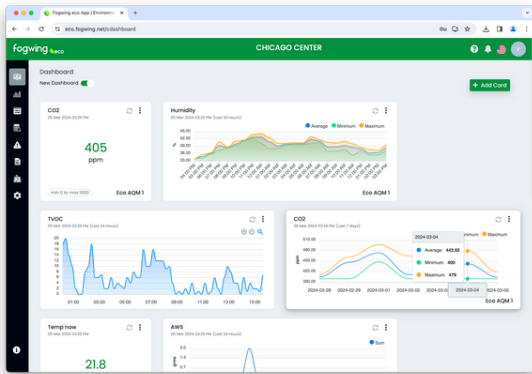
INBUILT WIRELESS NETWORK
Fogwing Eco kit connects with both Wifi and Cellular network automatically, depending on the network availability. The inbuilt WIFI and 4G network to support both indoor and outdoor.
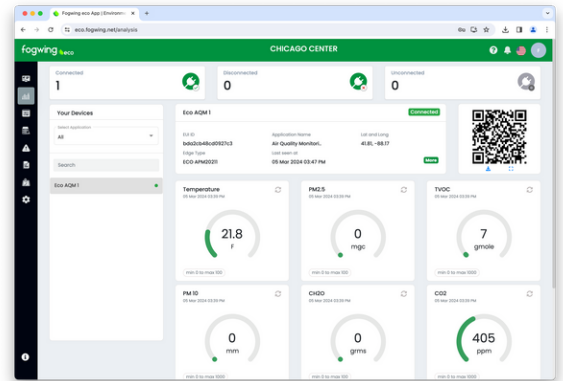
Fogwing Eco Software Features
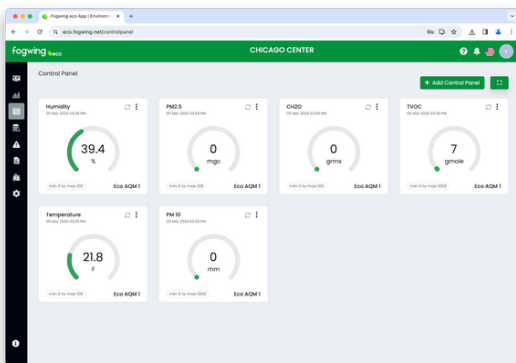
Unlimited

Web Dashboard

Application dashboard with customization for user personalized data visualization.
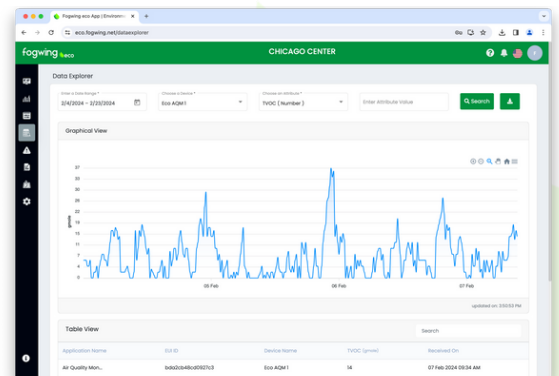
Air Parameters View

Review every sensor parameters in a single window to understand the data patterns
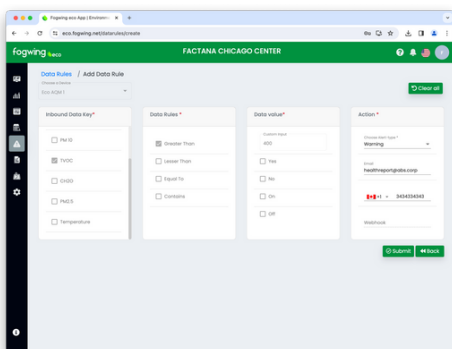
Command Center View

Host it in the larger display to provide view to all publics and authority to monitor it.
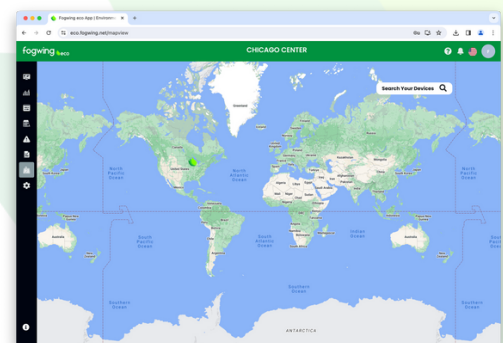
Query and Report

The data explorer helps users explore relevant data and export meaningful metrics in one click.

Rules and Alerts

Users can easily set rules and trigger alerts when the temperature, humidity and CO2 varies.

Map Accessibility

Access the real-time location based data through map view of the application.

Why choose
Fogwing Eco?

Available in Cloud and Private Servers

Fogwing Eco software offered as cloud solution available in Fogwing Cloud as well as customer's private cloud or government cloud. All data capture from the devices are stored in the customer's preferred cloud secure for data ownership.

Warranty and AMC

Fogwing Eco provides customers with added assurance through a 1-year replacement warranty and Annual Maintenance Contract. In the unlikely event of any hardware or software issues within the warranty period, or during the AMC period, it will be repaired or replaced.

Pre-calibrated

Fogwing eco's devices comes with pre-calibration process which involves rigorous testing and calibration of the sensors used in the kit to ensure optimal performance and accuracy in real-world conditions. This means that users can immediately start monitoring air quality without having to go through the time- consuming and complex calibration process themselves.

Data security

Data security is a top priority for Fogwing Eco. The software employs robust security measures to protect the valuable data collected during industrial air pollution monitoring. By implementing industry-standard encryption protocols, access controls, and secure data storage practices.

We Are The Next-Gen Software Provider

ABOUT FACTANA.

Factana, your trusted Industry Solution Provider, catering to customers worldwide. We take pride in offering a range of powerful products designed specifically for small and medium enterprises: Fogwing Industrial IoT, Analytics Studio, Asset+ CMMS, and Fogwing Eco are well known.

Our mission at Factana is to make the adoption of the digital solution for industrial revolution both accessible and affordable for businesses of all sizes. With our cutting-edge solutions, we empower organizations to embrace transformative technologies and unlock their true potential.

Factana is proud to be an ISO 27001 and SOC2 certified practitioner.

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