



**TAIWAN
EXCELLENCE
2019**



EdiGreen Smart Wireless Air Quality Detector

With PM2.5, Temperature, and Humidity Sensors

AI-1001W V3

FEATURES

- Accurate monitoring of PM2.5, temperature and humidity, know the air you breathe.
- Discover quality by providing air quality level history and trends
- Analyze past readings, observe the present
- Alerts you when air quality is at health risk levels
- Knowledge at a glance, check your air quality immediately on EdiGreen app

OVERVIEW

Breathe Better, Live Better

Do you know what you're breathing? Air pollution has received significant national and local attention and has become one of the top concerns across the globe. The composition of PM2.5 is relatively complex, including direct emissions of fine particles of the combustion process (primary PM2.5 particles), and secondary particles generated by multiphase chemical reactions of atmospheric pollutants. Mass manufacturing, heavy industry, burning fossil fuels and the use of agricultural chemicals are contributing to rising levels of harmful PM2.5 particles in the air.

Recent WHO estimates put the annual death toll from air-pollution related conditions at around 7 million people. And the figure is forecasted to keep rising. Recommend average annual PM2.5 levels are around 10 $\mu\text{g}/\text{m}^3$, but developing countries often exceed 30 – 40 $\mu\text{g}/\text{m}^3$ and an increase of just 5 $\mu\text{g}/\text{m}^3$ can increase risk of cardiovascular disease by 55%. According to the WHO, air pollution is the world's single greatest environmental health risk.

Air Quality Detection with Real-time Data

Accurate real-time automatic monitoring of PM2.5, temperature and humidity, with intuitive displays and real-time air-quality data delivered by the free EdiGreen mobile companion app.



EdiGreen





Easy Maintenance

The AI-1001W V3 adapts a slide-in PM2.5 modular sensor design to help users check and change the sensor on their own.

Air Quality Monitoring

The AI-1001W V3 works with EdiGreen to provide an air quality monitoring solution which is comprised of emission identification and traceability, and device management support. This solution enables the decision makers to make effective and timely decisions to enforce regulations, and foster environment management operational excellence.

The key technology differentiations of this solution include:

- Leverage data assimilation to combine at best different sources including, weather data and geographical data, then get high-accuracy air quality forecasting.
- Anomaly Detection enables system to get the device anomaly status to arrange the resource to solve the problem.



GPS Locating to view nearby AirBox stations



Wind Direction Animation On/Off



PM2.5 Air Quality Index (Taiwan and UK standards for choice)

Big Data & Cloud Architecture

The air quality data is collected, processed and analyzed in Edimax's advanced cloud system. Historical data across different locations are checked to understand trends, identify pollution spots or observe improvements during a period of time, and sourcing up-to-date hyperlocal data from EdiGreen sensors deployed around your city.



* IoT Environmental Sensor availability will depend on the model of connected Edimax AirBox..

Key features

- Accurate monitoring of PM2.5, temperature and humidity, know the air you breathe.
- Discover quality by providing air quality level history and trends
- Analyze past readings, observe the present
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SPECIFICATIONS

NETWORK	
Wi-Fi	IEEE 802.11 b/g/n
Wi-Fi Security	WPA/WPA2
Antenna Type	1 x Internal Antenna
FEATURES	
Mobile App	EdiGreen
Event Notification	Push Notification
History	Yes
PM2.5 Sensor	0 ~ 500 + $\mu\text{g}/\text{m}^3$, min. 0.3 μm
Humidity Sensor	0 ~ 100%RH, \pm 5% RH
Temperature Sensor	0 ~ 60°C \pm 1 °C
OTHERS	
Power Adapter	Micro USB Power Port x 1, DC 5V 1A
Operating Temperature	-10°C ~ 60°C
Dimensions	150mm(W) x 110 mm(H) x 47mm(D)
Weight	210g

Edimax End-to-End Air Quality Monitoring Solutions



Product Design & Manufacturing

Secured Cloud Services

Intuitive Display and Management System

About Edimax EdiGreen Air Quality Monitoring Solution

Edimax is a pioneer and expert in sensor-to-the-cloud IoT solutions designed to be compatible with various IoT applications. The AI-1001W V3 with EdiGreen Cloud Services provides secure, adaptive and customizable cloud architecture that offers visualized data, device tracking/ranking, and enterprise-grade management system and wireless network infrastructure for future expansions to more Smart City applications.