



# PM 2.5/PM 10 Ambient Air Quality Monitor

Ambient Air Quality Monitoring System (AAQMS) is designed for measuring and monitoring environmental particulate matter in real time. PM 2.5 is considered the most dangerous to human health. This is due to its very fine nature, and its ability to penetrate directly into the bloodstream. PM 10 is also harmful because it contains benzopyrenes, furans, dioxins and in short, carcinogenic heavy metals. According to the WHO the limit value of the average daily concentration of this particulate matter is 50 micrograms per cubic meter, and the annual limit value is 20 micrograms per cubic meter.

AAQMS measures the concentration of PM 2.5 and PM 10 in real time and lets you take proactive actions to safeguard against these harmful pollutants.

## APPLICATION

### SMART CITY

AAQMS finds great utility in smart city development. AAQMS can be integrated with wider smart network infrastructure for continuous and remote monitoring of pollution level.

### ROAD SIDES & CITY CENTRES

Pollution measurement on road sides and city centres can help authorities take preventive measures to curb pollutants. During traffic hours, the concentration of PM 2.5 and PM 10 increases significantly to create hot spots in some areas.

### CAMPUSES & TRAVEL PORTS

AAQMS finds utility in areas where there are large gathering of people especially in educational campuses and travel hubs. AAQMS is also used at travel ports to analyse the impact of pollution on travellers and tourists.

## SALIENT FEATURES

PM 2.5/PM 10 Ambient Air Quality Monitor is highly accurate and reliable. Particulate Monitoring in  $\mu\text{g}/\text{m}^3$  is measured through laser scattering.

- Accurate & Reliable Readings
- Graphical LCD for easy monitoring & navigation
- Rugged & Robust design suitable for industrial environment

## LASER SCATTERING PRINCIPLE

During laser light scattering, a laser beam passes through a dispersed particulate sample, large particles scatter light at small angles relative to the laser beam and small particles scatter light at large angles.



## Particulate Matter Monitoring

Principle	Laser Scattering
Parameters	PM 2.5 & PM 10
Resolution	0.1 ug/m3
Range	0-1000 ug/m3
Range	0-1000 ug/m3
Input Voltage	220V AC 50Hz
Sampling	Real Time

## Data Logger Specifications

Display	Graphical LCD
Data Logging	SD Card
Output	RS 485
Outer Box	Mild Steel
Inner Box	ABS/Polycarbonate
Temperature	0-55 deg C



*Ideal for Smart City Infrastructure*

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