

# LAMINAR AQM11

## Indoor Air Quality Monitoring System



Smart air quality monitoring system, ideal for real time monitoring of indoor air pollutants.

### ■ DESCRIPTION

As we spend a significant portion of our lives indoors, ensuring Air we breathe and healthy has never been so crucial. Poor Indoor Air quality can have detrimental effects on our health, wellbeing and productivity.

The Laminar AQM11 is an all-encompassing air quality monitoring system that features a range of sensors allowing for accurate measurement of various gases present in the air. This device can help individuals understand the quality of air they are breathing, and

provide real-time Indoor Air Quality Index (IAQI) data to occupants.

With 7" touch display and interactive UI, the device offers easy access to data, visualization and settings. The powerful algorithm & feature rich software enables the device to calculate AQI in Indian and USEPA standards, Display real time pollutants data and multi color graph for optimum visualization & analysis.

## ■ PRODUCT FEATURES



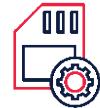
### Real time Monitoring

On-board 7" touch display allows to view the Air Quality Index and pollutants data in real-time.



### BMS Integration

Built-in RS485 Modbus RTU protocol enables easy integration with Building management Systems (BMS)



### Memory

The device has on board memory of 8 GB (Expandable upto 32 GB) for data storage.



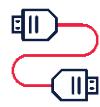
### Connectivity

The device has Ethernet and WiFi functionality for easy integration with cloud platforms for real-time data update and over-the-air firmware upgrade.



### Time Synchronization

Built-in RTC enables the device to be in sync with the current time and date.



### Easy Data access

The recorded data can be retrieved using an USB stick enabling the user to easily access and post process the data.

## ■ TECHNICAL SPECIFICATIONS

LMR-AQM11

### SENSOR SPECIFICATIONS

Target Gas	CO <sub>2</sub> , PM10, PM2.5, CH <sub>2</sub> O, CO, O <sub>3</sub> , TVOC, NO <sub>2</sub> , Ambient Temperature, Humidity
------------	---

Air Quality Index (AQI)	Indian and USEPA Standards
-------------------------	----------------------------

GAS SENSOR TYPES	RANGE	ACCURACY
PM2.5	0~1000 µg/m <sup>3</sup>	±15 ug/m <sup>3</sup> (when concentration is ≤100ug/m <sup>3</sup> ) ±15% (when concentration is >100ug/m <sup>3</sup> )
PM10	0~100 µg/m <sup>3</sup>	0-100 µg/m <sup>3</sup> : ±15µg/m <sup>3</sup> 101-1000 µg /m <sup>3</sup> : ±15%
CO <sub>2</sub>	0~5000 ppm	0~5000 ppm
CH <sub>2</sub> O	0~6.250 mg/m <sup>3</sup>	± 0.03 mg/m <sup>3</sup> (when concentration is ≤ 0.2mg/m <sup>3</sup> ) ± 20% reading value (when concentration is >0.2mg/m <sup>3</sup> )
TVOC	0~3 grades	-
O <sub>3</sub>	0~10 ppm	± 0.1ppm, when the concentration is ≤1ppm ±20% full range, when the concentration is over 1ppm
CO	0~500 ppm	± 10% reading value
NO <sub>2</sub>	0.1~10 ppm	-
Ambient Temperature	-20~65°C	±0.5°C(0-65°C)
Humidity	0~100%RH	±3%RH
Working Temperature	-10~50°C	
Working Humidity	0-80%RH	

### SERIAL INTERFACE

Interfaces	RS485 Modbus RTU for BMS integration
Ports	USB, Support 10m/100m Ethernet, 4G LTE Network, Support 802.11b/g/n Wi-Fi wireless network

### SERIAL INTERFACE

SD Card Memory	8 GB (Expandable upto 32 GB)
USB	Data retrieval on a Pen Drive

### OTHER SPECIFICATIONS

LED Indicators	Power
RTC	Onboard with 3 V coin cell

### ELECTRICAL

Voltage Input	Recommend 12V 2A
Power Consumption	<24 W

### ENVIRONMENT

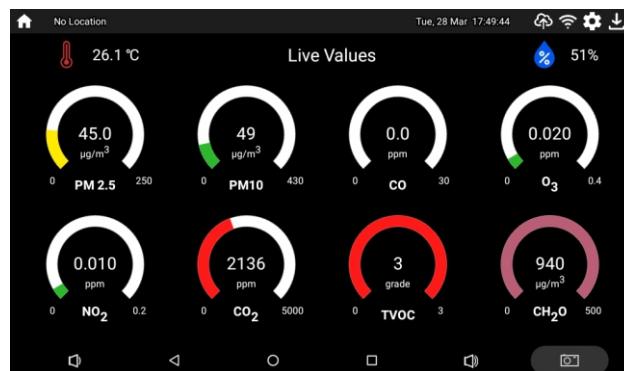
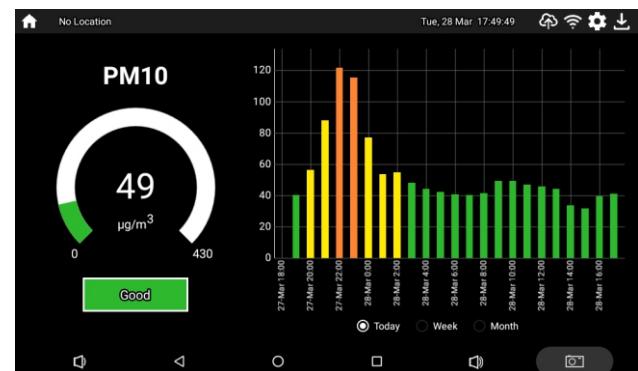
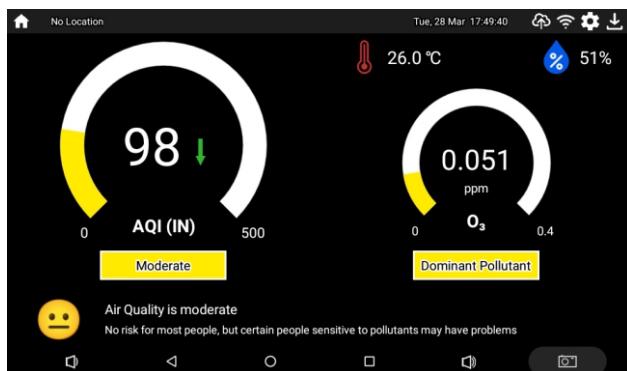
Operating Temperature	-10 °C to +50 °C
Dimensions	195 (L) x 56.50 (W) x 175 (H) mm
Weight	<1 kg
Mounting	Wall Mount

## ■ AVAILABLE COLOUR OPTIONS



## ■ LMR-AQM11 DASHBOARD INTERFACES

Interactive UI for easy access to data, visualization and settings.



## MECHANICAL DIMENSIONS

All dimensions in mm.

