

# Air Quality Monitor

## Air Quality Monitor



Air Quality Monitor LD-LAQM-A10 offers fast and efficient detection of multiple gases, temperature, humidity, and more. Our monitor can measure gases like PM2.5. PM10, CO, NO<sub>2</sub>, SO<sub>2</sub>, O<sub>3</sub>, VOC, H<sub>2</sub>S, NH<sub>3</sub> and more. It measures within a temperature range of -40 to 80°C with 0 to 100% humidity. Utilizes electrochemical, IR, and laser sensors for the detection of gases. Incorporated with built-in pump-suction for detection with a flow rate of 800 ml/min.

Features:

- Offers a rich human-machine interface
- Easy to operate and portable for on-site analysis
- Precise measurements and reliable performance
- Data can be downloaded to pc
- Extensive storage capacity for multiple datasets
- Includes various optional functions for personalized needs

Applications:

Air Quality Monitor is used for air quality measurement of up to 30 pollutants. Ideal for use in homes, offices, cars, and various natural environments. Suitable for use on a range of projects, including urban and national air monitoring networks, community exposure studies, and environmental impact assessments.

Specifications:

|                |                                                                                                                       |
|----------------|-----------------------------------------------------------------------------------------------------------------------|
| Model no.      | LD-LAQM-A10                                                                                                           |
| Weight         | 2.5Kg                                                                                                                 |
| Accuracy       | ≤ ±2% F. S                                                                                                            |
| Flow Rate      | 800 ml/min                                                                                                            |
| IR Sensor      | CO <sub>2</sub>                                                                                                       |
| Alarm Mode     | Sound & light alarm, vibration alarm, turning off the alarm.                                                          |
| PID Sensor     | TVOC                                                                                                                  |
| Data Storage   | 100000 pieces                                                                                                         |
| Display Mode   | high-definition 3.5-inch color screen                                                                                 |
| Laser Sensor   | PM2.5 & PM10                                                                                                          |
| Power Supply   | 3.6VDC 10000mA high-capacity rechargeable polymer battery                                                             |
| Detection Mode | Built-in pump-suction type                                                                                            |
| Gases Detected | PM2.5. PM10, CO, NO <sub>2</sub> , SO <sub>2</sub> , O <sub>3</sub> , VOC, H <sub>2</sub> S, NH <sub>3</sub> and more |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Humidity Range</b>                  | 0 to 100%                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Pressure Range</b>                  | 300 to 1100hPa                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Rainfall Range</b>                  | 0 to 8mm/min, ±10%                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Protection Level</b>                | IP66                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Wind Speed Range</b>                | 0 to 40s/m                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Temperature Range</b>               | -40 to 80°C                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Explosion-Proof Mark</b>            | Exia II CT6                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Explosion-Proof Type</b>            | Intrinsically safe type                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Wind Direction Range</b>            | 0 to 360                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Electrochemical Sensor</b>          | O <sub>2</sub> , CO, SO <sub>2</sub> , NO <sub>2</sub> , H <sub>2</sub> S, NH <sub>3</sub> , O <sub>3</sub> , HCHO                                                                                                                                                                                                                                                                                                        |
| <b>Metrological Detection</b>          | Wind speed & direction, Pressure, Noise, Temperature & Humidity, Rainfall                                                                                                                                                                                                                                                                                                                                                 |
| <b>Dimensions (L × H × W)</b>          | 230 × 210 × 120 mm                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Working Environment Humidity</b>    | ≤10 to 95% RH                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Detection Range and Resolution</b>  | O <sub>2</sub> : 0 to 25%VOL, 0.01% VOL CO <sub>2</sub> : 0 to 5%VOL, 0.01% VOL CO: 0 to 500ppm, 0.1ppm SO <sub>2</sub> : 0 to 100ppm, 0.01ppm NO <sub>2</sub> : 0 to 20ppm, 0.01ppm H <sub>2</sub> S: 0 to 10ppm, 0.01ppm NH <sub>3</sub> : 0 to 100ppm, 0.01ppm O <sub>3</sub> : 0 to 10ppm, 0.01ppm HCHO: 0 to 10ppm, 0.01ppm PM2.5 & PM10: 0 to 1000ug/m <sup>3</sup> , 1ug/m <sup>3</sup> TVOC: 0 to 1000ppm, 0.1ppm |
| <b>Working Environment Temperature</b> | -40°C to +70°C                                                                                                                                                                                                                                                                                                                                                                                                            |

The Air Quality Monitor LD-LAQM-A11 is an advanced environmental monitoring system designed for continuous real-time measurement of particulate matter, gaseous pollutants, and meteorological parameters. Equipped with high-precision sensing technologies, cloud-based data management, and a rugged IP65-rated enclosure, it provides accurate and reliable air quality monitoring for industrial, environmental, and smart city applications. Its modular design, remote connectivity, and optional solar power capability make it an ideal solution for long-term outdoor air quality surveillance.

Features:

- Supports optional meteorological monitoring including wind speed, wind direction, rainfall, and solar radiation
- High-precision electrochemical, NDIR, PID, and light scattering sensor technologies
- Automatic heating and dehumidification system minimizes moisture interference during particle measurement
- Modular design enables customized sensor combinations
- Automatic calibration for accurate and reliable measurements
- Industrial-grade embedded processor for continuous outdoor operation
- Real-time cloud data transmission via 4G communication
- Stores data on a removable 32 GB SD card in CSV format
- Touchscreen interface for easy operation and live data viewing
- Historical data download by minute, hour, or day through the cloud platform
- Solar power compatible for remote installations
- Weather-resistant enclosure with IP65 protection
- Calibration Automatic

Applications:

Designed for continuous monitoring of ambient air quality by measuring particulate matter, gaseous pollutants, and environmental parameters. Ideal for environmental monitoring stations, industrial facilities, smart cities, construction sites, research institutions, and public health surveillance.

Specifications:

|              |                           |
|--------------|---------------------------|
| Model no.    | LD-LAQM-A11               |
| Weight       | 31 kg                     |
| Display      | Touchscreen               |
| Dimensions   | 440 × 200 × 670 mm        |
| PM Accuracy  | ±25% (>100 µg/m³)         |
| Solar Power  | Optional                  |
| Data Storage | 32 GB Removable SD Card   |
| Power Supply | 220 V AC, 50 Hz / 12 V DC |

|                             |                                                                                                                            |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Communication</b>        | 4G Cloud Connectivity                                                                                                      |
| <b>PM Resolution</b>        | 1 µg/m³                                                                                                                    |
| <b>Humidity Range</b>       | 0-95% RH                                                                                                                   |
| <b>Pressure Range</b>       | 600-1100 hPa                                                                                                               |
| <b>Particle Sensor</b>      | Light Scattering Sensor                                                                                                    |
| <b>Sampling Method</b>      | Pumped Sampling                                                                                                            |
| <b>Power Consumption</b>    | 80 W (Max)                                                                                                                 |
| <b>Protection Rating</b>    | IP65                                                                                                                       |
| <b>Temperature Range</b>    | -30 to 50°C                                                                                                                |
| <b>Working Environment</b>  | -20°C to +50°C, 10-95% RH (Non-condensing)                                                                                 |
| <b>Detection Parameters</b> | PM2.5, PM10, SO <sub>2</sub> , NO <sub>2</sub> , H <sub>2</sub> S, CO <sub>2</sub> , TVOC, Temperature, Humidity, Pressure |
| <b>PM Measurement Range</b> | 0-1000 µg/m³                                                                                                               |