

Air Quality Monitor

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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, NO₂, SO₂, O₃, VOC, H₂S, NH₃ 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 ₂
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 ₂ , SO ₂ , O ₃ , VOC, H ₂ S, NH ₃ and more

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

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

Air Quality Monitor LD-LAQM-A12 is a portable, multifunctional monitoring system designed for real-time measurement of gases, particulate matter and environmental parameters. It supports simultaneous monitoring of temperature, humidity, PM, pressure, wind, noise, rainfall and radiation, with IP68 protection with multi-level calibration and compliance with ISO, CE, FCC, RoHS, ATEX, CNEX and SIL3 requirements. Its modular sensor design provides flexible configuration for diverse field applications.

Features:

- Supports measurement of up to 30 gas pollutants with ppb-level measurement capability
- Smart modular plug-in sensor design allows flexible gas sensor replacement and configuration
- Supports multiple selectable measurement units, including $\mu\text{mol/mol}$, ppm, mg/m^3 , ppb, $\mu\text{g/m}^3$, %Vol and %LEL
- Built-in sampling pump with 10-level adjustable flow control
- Equipped with a 5-inch colour touchscreen display
- Android operating system with support for remote maintenance and OTA wireless upgrades
- Standard positioning and field-safety functions include GPS/Beidou positioning, LED illumination, SOS one-key calling, fall-down alarm and one-key location/data upload
- Map-based display of user information, real-time location, gas concentration, coordinates, customized address information and movement trajectory
- Optional high-resolution photography (≥ 8 MP), video recording and local video playback
- Integrated data statistical analysis and stored-data management functions
- Supports factory-parameter and stored-data restoration
- Automatic miss operation identification helps reduce incorrect operation
- Automatic zero-point tracking for improved measurement stability

Applications:

Suitable for environmental monitoring, emergency response, firefighting, confined-space monitoring, petroleum and chemical industries, metallurgy, refining, warehousing, healthcare and air-pollution monitoring.

Specifications:

Model no.	LD-LAQM-A12
CO	0-25 ppm; Resolution: 0.01 ppm
O ₃	0-1 ppm; Resolution: 0.001 ppm
PM10	0-1000 $\mu\text{g/m}^3$; Resolution: 1 $\mu\text{g/m}^3$
Alarm	Audible, visual and vibration alarms and Supports LOW, HIGH, TWA and STEL alarm modes
NO ₂	0-1 ppm; Resolution: 0.001 ppm

PM2.5	0–1000 µg/m ³ ; Resolution: 1 µg/m ³
SO₂	0–10 ppm; Resolution: 0.01 ppm
Weight	Approx. 4.5 kg, depending on configuration
Battery	25,000 mAh rechargeable lithium battery
Display	5-inch colour touchscreen
Accuracy	≤ ±2% F.S.
Humidity	0–100% RH
Dimensions	340 × 330 × 150 mm
Interphase	Type-C, Wi-Fi and Bluetooth (Optional wireless communication through LoRa, MESH, 4G and NB-IoT)
Wind Speed	0–40 m/s
Temperature	-40 to 120 °C
Data Storage	16 GB(higher-capacity options available; supports multiple data-storage methods)
Flow Control	Adjustable
Response Time	T90 ≤ 20 s
Wind Direction	0–360°
Sampling Method	Pumped sampling
Protection Rating	IP68
Detection Parameters	CO, SO ₂ , NO ₂ , O ₃ , PM2.5, PM10, Humidity, Temperature, Wind Speed, Wind Direction
Explosion Protection	Exia II CT4 Ga / Ex ib I Mb
Operating Environment	-40 to +70 °C; ≤95% RH, non-condensing