

OVERVIEW



AirGuard is the Modular Air Monitoring System, a flexible and scalable solution for comprehensive air quality monitoring. It supports multiple sensor modules deployed across various locations, connected via RS485 communication. Each module integrates multiple specialized detectors for detecting various substances (CO, CO₂, SO₂, NO₂, VOCs, PM2.5, etc.).

Each module integrates advanced gas detection detectors capable of identifying a wide range of hazardous substances including CO, CO₂, SO₂, NO₂, VOCs, PM2.5, and more. Optional active sampling technology - featuring exhaust fan or suction pump configurations - allows air samples to be drawn from remote or confined areas, ensuring reliable readings even in environments where direct equipment placement is not feasible

KEY ADVANTAGES

- Multi-point connectivity for centralized monitoring and control.
- High sensitivity for detecting trace concentrations of hazardous gases.
- Modular design allows easy cleaning and detector replacement without replacing the entire unit.
- Active sampling ensures accurate measurements and operational safety.
- Centralized management with support for multiple sensor modules.

APPLICATIONS

Designed for air quality monitoring in specialized environments such as:

- Correctional facilities and detention centers
- Hazardous waste treatment plants
- Chemical storage areas
- Locations where direct equipment installation is impractical

SYSTEM COMPONENTS

The system consists of:

- Master Monitoring Device: Connects and manages multiple sensor modules in different installation locations.
- Sensor Modules: Each module analyzes multiple gases, including CO₂, CO, VOCs, CH₄, H₂S, and more.

TECHNICAL SPECIFICATIONS

MASTER MONITORING DEVICE

Model	AG370
Detector Connectivity	Up to 32 detectors
Analytics	Real-time
Alarm Threshold	Automatic thresholds alerts
Connection interface	Modbus RTU, RS485, RJ45 100Mbps, USB 2.0 x 4
Report	Support to export to Excel, built in chart generation
Display	4x20 LCD with touch interface
Operating Temperature	0°C – 40°C

SENSOR MODULE

Carbon dioxide (CO2)	Measuring range: 0 – 5000ppm
Carbon monoxide (CO)	Measuring Range: 0-1000ppm
Oxygen (O2)	Measuring range: 0 – 25% vol
Ozone (O3)	Measuring Range: 0 – 10 ppm
VOC	Measuring Range: 0 – 25ppm
Hydrogen Sulfide (H2S)	Measuring Range: 0 – 10 ppm
Ammonia (NH3)	Measuring Range: 0 – 100ppm
Chlorine (Cl2)	Measuring Range: 0 – 10ppm
Formaldehyde (CH2O)	Measuring Range: 0 – 10 ppm
Hydrogen (H2)	Measuring range: 0 – 5000ppm
Methane (CH4)	Measuring Range: 0 – 10000ppm
Nitrogen dioxide (NO2)	Measuring Range: 0 – 1ppm
Operating Temperature	0°C – 40°C

*Modules can be configured to measure 3 or 7 substances. For additional configurations, please contact us

OPTIONAL

Centralized Management Device	
Model	CMD AG370
Feature	Capable of connecting multi-sensor modules for centralized management and monitoring Connect and manage alerts from AirGuard devices Support alerts via email, SMS
Connectivity	Up to 30 AirGuard devices
Connection Interface	RS485, RJ45

ORDERING INFORMATION

Model	Description
AG370	Master monitoring device
SD-03	3 detector modules
SD-07	7 detector modules
AG370	Centralized Management Device