



Gas & Flame Detection

3M™ Oldham™ AirAware™

Environmental air monitoring



Presentation

Industry proven performance combined with a low-profile design make a logical choice for those areas that require continuous monitoring but not the environmental protection of an explosion-proof enclosure. Providing discrete monitoring and enhanced aesthetics for more commercial or institutional settings, the AirAware Series is the ideal solution for reliable, low-cost fixed-point monitoring.

The AirAware can be configured to operate as a monitor with local LED display, a controller with onboard relay switching capability, a transmitter with 4-20 mA or ModBus RTU outputs, or as a transmitter with on-board relays. Each configuration is designed to meet your specific indoor monitoring needs.

Every AirAware is equipped with electrochemical sensing technology, dual alarm LEDs and push-button operation.

Configure your AirAware to match your needs, adding options such as a vanity plate to hide the display. The AirAware is covered by a one-year warranty and carries CSA approval for non-hazardous locations.

Features

- Institutional, commercial and light industrial monitoring
- Monitor any one of nine gases
- Simple installation using 12-24 VDC operation, or an optional AC power adapter that plugs into any standard 120 VAC wall outlet (North American plug).
- Bright display constantly shows gas concentrations
- Single button calibration, alarm muting and zero functions
- Visual alarm to alert of potential gas hazards (audio optional)
- ModBus digital output (4-20 mA output optional) for interfacing with control devices
- Optional dual-alarm relays can turn on fans and warning sirens, or shut-down a process.



3M™ Oldham™ AirAware

Ordering information

AirAware™ has numerous sensor and equipment configurations that allow you to customize the monitor to meet your specific needs. The following matrix will help you to select the options with a single part number. For example, a part number of 68100056-11211 would be an AirAware carbon monoxide monitor with an on-board audible alarm, a 4-20mA output with no on-board relay contacts, an AC power adapter installed and a vanity/faceplate cover.

Base part number : 68100056-ABCDE

A-Gas type	1 - Carbon Monoxide (CO) 2 - Nitric Oxide (NO) 3 - Ammonia (NH ₃) 4 - Hydrogen Sulfide (H ₂ S) 5 - Sulfur Dioxide (SO ₂) 6 - Nitrogen Dioxide (NO ₂) 7 - Chlorine (Cl ₂) A - Oxygen (O ₂) F - Hydrogen Chloride (HCl)
B-On-board alarm	0 - No audio alarm 1 - On-board audio alarm
C-Output option	0 - None 1 - On-board relays (Control) 2 - 4-20mA output (Transmit) 3 - 4-20mA output and relays (Control/Transmit)
D-Power option	0 - No adapter 1 - AC Power Adapter (Installed)
E-Vanity plate (faceplate cover) option	0 - None 1 - Vanity Plate

*Note: AC Adapter is 110 VAC to 24 VDC, N. American plug.

Specifications

Case	NEMA 2 (IP42) type General purpose indoor use only Electroplated for RFI protection.
Dimensions	18.29 cm x 14.22 cm x 4.06 cm (7.2 x 5.6 x 1.6)
Weight	482 g (17 oz)
Sensor Type	Electrochemical
Measuring Ranges	Carbon Monoxide, Hydrogen Sulfide – 0 to 999 ppm in 1 ppm increments Nitric Oxide – 0 to 999 ppm in 1 ppm increments Ammonia – 0 to 100 ppm in 1 ppm increments Oxygen – 0 to 30% by volume in 0.1% increments Sulfur Dioxide, Nitrogen Dioxide – 0.2 to 99.9 ppm in 0.1 ppm increments Chlorine – 0.2 to 99.9 ppm in 0.1 ppm increments Hydrogen Chloride – 0.2 to 30 ppm in 0.1 ppm increments
Power source	12-24 VDC (110 AC adapter optional with North American plug)
Temperature Ranges	-20°C to 50°C (-4°F to 122°F) sensor dependent
Humidity Range	Oxygen – 0-99% Ammonia, Carbon Monoxide, Hydrogen Sulfide, Nitrogen Dioxide, Sulfur Dioxide – 15-90%
Approvals	CSA – C22.2 No. 205-M1983 (non-hazardous locations)
Warranty	One year, including sensor

Part Number	Description
Common configurations	
68100056-11010	CO Monitor w/Power Supply, Audio Alarm
68100056-11100	CO Control w/Audio Alarm
68100056-11300	CO Control/Transmit w/Audio Alarm
68100056-31010	NH ₃ Monitor w/Power Supply, Audio Alarm
68100056-31100	NH ₃ Control w/Audio Alarm
68100056-31300	NH ₃ Control/Transmit w/Audio Alarm
68100056-71010	Cl ₂ Monitor w/Power Supply, Audio Alarm
68100056-71100	Cl ₂ Control w/Audio Alarm
68100056-71300	Cl ₂ Control/Transmit w/Audio Alarm
68100056-A1010	O ₂ Monitor w/Power Supply, Audio Alarm
68100056-A1100	O ₂ Control w/Audio Alarm
68100056-A1300	O ₂ Control/Transmit w/Audio Alarm
Replacement Sensors	
77040009	Ammonia Sensor (NH ₃)
17051638	Carbon Monoxide Sensor (CO)
17077330	Chlorine Sensor (Cl ₂)
17066374	Hydrogen Chloride Sensor (HCl)
17033960	Hydrogen Sulfide Sensor (H ₂ S)
17071242	Nitric Oxide Sensor (NO)
17060591	Nitrogen Dioxide Sensor (NO ₂)
17050129	Oxygen Sensor (O ₂)
17060575	Sulfur Dioxide Sensor (SO ₂)
Accessories	
67001198	Optional Vanity Cover
67000604	Calibration Adaptor Assembly (includes cal adaptor, tubing and reducer)
67000596	Calibration Adaptor for AirAware (adaptor only)
67000265	120 VAC/24 VDC, Power Adapter
17099391	Nylon Strain Relief for 67000265 Power Supply

3M Gas & Flame Detection quality assurance programmes demand the continuous assessment and improvement of all our products. Information in this leaflet could thus change without notification and does not constitute a product specification.



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