

AMC 1222 DUAL CARBON MONOXIDE AND NITROGEN DIOXIDE

MULTI FUEL EXHAUST SENSING MODULE WITH COMFORT ZONE TECHNOLOGY



Sensor types: Dual electrochemical CO, NO₂ **Output signal:** Standard stepped, common for CO, NO₂ and "Comfort Zone" 0 VDC or 0 mA* Fail: Normal: 1 VDC or 4 mA* 2 VDC or 8 mA* Low: High: 3 VDC or 12 mA* **Comfort Zone**: 2 VDC or 8 mA* *Note: Max 250 Ω load on current signal LED indicators: Green: Power (steady)/fail (flashing) **Red:** CO high (steady)/low (flashing) **Red:** NO₂ high (steady)/low (flashing) Amber: Comfort Zone alarm Standard alarms/signal trip points: CO: Low 25 or 35 PPM, high 100 PPM NO₂: Low 1 PPM, high 3 PPM **Comfort Zone**: Alarm trip point is user adjustable at nuisance concentrations. Active when diesel fumes are present. Range: CO:0-100 PPM NO₂: 0-3 PPM

Time Delays: Minimum run time: five minutes, user selectable Alarm delay: five minute, user selectable Delay on power up: 30 seconds

Operating temperature range: -20°C to +40°C

Ambient humidity: 10%-95% RH non-condensing

Sensor life: > five years in air for CO (three year warranty) > three years in air for NO₂ (one year warranty)

Wiring: Three conductor, shielded cable

- **Power requirement**: 12-24 VDC 35 mA (voltage configuration) 55 mA (current configuration)
- Sensor response time: CO: 90% response in less than two minutes NO₂: 90% response in less than 30 seconds
- Central monitor requirement:
 - Designed for compatibility with existing AMC and most competitors' analog, digital or computer interfaced systems, including a majority of present installations.

Enclosure: PVC, standard venting, optional water resistant venting

The AMC 1222 combines electrochemical carbon monoxide and nitrogen dioxide sensors to provide the ultimate solution to any vehicle exhaust monitoring application.

Providing cost effective solutions for single or multi-point applications, the AMC 1222's voltage or current output can be interfaced with standard Armstrong panels, and most competitors' equipment for cost effective upgrades. **Dual sensor and multidrop-ready configuration ensure that wiring and controller requirements are substantially reduced when compared to standard systems.**

COMFORT ZONE TECHNOLOGY:

Diesel exhaust has historically been very difficult to monitor. Due to the wide variety of pollutants, including carbon monoxide, oxides of nitrogen, sulfur compounds, as well as carcinogenic particulates, it is impractical to attempt to monitor for all possible toxins. Carbon monoxide, nitrogen dioxide and carbon dioxide have been historically used as general indicators of air quality in these applications. Because of the widely varying composition of diesel exhaust, this method has resulted in inconsistent ventilation control as well as worker discomfort and complaints.

By applying a combination of carbon monoxide and nitrogen dioxide sensing, with an interactive logic function, an effective solution can be provided cost effectively for diesel as well as varied fuel facilities. Simple user adjustment allows subjective sensitivity adjustment for control of air quality issues.

In using this logic, increased sensitivity is engaged only when trace nitrogen dioxide levels are present, indicating the presence of diesel vehicles. This acts as an effective energy saving feature, active only with diesel exhaust.





AMC 1222 WIRING DIAGRAM



Up to 8 1222 Modules can be Daisy Chained Max 150ft 18AWG Between each Module

AMC 1222 Series Order Code Matrix				
Order Code	CO Low Trip Point	CO High Trip Point	NO2 Low Trip Point	NO2 High Trip Point
AMC 1222-01	35ppm	100ppm	1ppm	3ppm
AMC 1222-02	25ppm	100ppm	1ppm	3ppm

For more information:

Authorized Distributor

Warranty: All Armstrong equipment is warranted against defects in materials and workmanship for two years from date of delivery, except sensors. Please contact factory for sensor warranty. During the warranty period, we will repair or replace components that prove, in our opinion, to be defective. We are not liable for auxiliary interfaced equipment, or consequential damage. All warranty items must be returned by prepaid freight.

Note: Due to ongoing product development, the manufacturer reserves the right to change specifications without prior notice. The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data.

Rev. 290605



The Armstrong Monitoring Corporation 215 Colonnade Road South Ottawa, Ontario K2E 7K3 Tel: 613.225.9531 Fax: 613.225.6965 North America: 800.465.5777 www.armstrongmonitoring.com