



## **FEATURES**

| Technical Specification | MGS Standard                            |  |  |
|-------------------------|---|--|--|
| Power Supply            | 12/24V AC/DC ± 20%(IR 24V AC/DC)        |  |  |
| Power Consumption       | EC (24V): 45.7mA SC: 91mA               |  |  |
| Power Monitoring*       | Green LED                               |  |  |
| Visual Alarm*           | Red LED                                 |  |  |
| Audible Alarm*          | Sounder, enabled/disabled               |  |  |
| Fault monitoring        | Red LED ON - Green OFF                  |  |  |
| Fault state             | 0-1V, 0-2mA                             |  |  |
| Analogue Outputs        | 0-5V, 1-5V, 0-10V, 2-10V, 4-20mA        |  |  |
| Digital Outputs*        | 1 Relay rated 1 Amp/24 V d.c /120 V a.c |  |  |
|                         | Selectable delay: 0,1,5,10min           |  |  |
| IP Rating               | IP41 OR IP66                            |  |  |
| Dimensions and Weight   | 86 x 142 x 53 mm 180 g                  |  |  |
| Standard Compliance     | CE EX WEEE ROHS CE, EXD                 |  |  |

## MGS (Gas Sensor)

The Gas Sensor (MGS) is a state-of-the-art fixed gas detector which can detect a wide range of different gases. The sensors can be used on a stand-alone basis or integrated into Controls or Building Management Systems (BMS)

## Application:

- Refrigerant gases all refrigerant gases including: Ammonia, Carbon Dioxide, Hydrocarbons, Halocarbons - HFCs, HCFCs, CFCs.
- Combustible gases such as: Methane, LPG, Propane, Butane, and Hydrogen
- Toxic gases such as: Carbon Dioxide and Ammonia in refrigeration, Hydrogen Sulphide in sewage treatment and Carbon Monoxide in underground car parks
- Volatile Organic Compounds such as: Acetone, Benzene, Carbon Tetrachloride, Chloroform, Ethanol, Toluene, Trichloroethylene.

| Sensor Information        | Electrochemical  | Semiconductor with   | Infrared       |
|---------------------------|--|----------------------|----------------|
|                           | EC   | filter (multigas) SC | IR             |
| Typical Measurement Range | 0-1,000 ppm  | 10-1,000 ppm         | ppm - %        |
| Temperature Range         | A: -20°C to +40°C  | -40°C to +50°C       | -40°C to +50°C |
|                           | B: -40°C to +40°C  |                      |                |
| Humidity Range            | 0 to 95%   | 0 to 95%             | 0 to 95%       |
| non condensing            |  |                      |                |
| Typical Sensor Life       | 3 yrs  | 5-8 yrs              | 8-10yrs        |
| Alarm threshold T50       | 19 sec   | 76 sec(filtered)     | 25 sec         |
| T90                       | 47 sec   | 215sec(filtered)     | 90sec          |
| Recovery Time             | 900 sec  | 600 sec              | 210 sec        |
| Linearity                 | Linear over calibrated range   |                      |                |
| Calibration               | Local regulations may specify the procedure and frequency required. Standards            |                      |                |
| Requirements              | generally require at least annual testing or calibration. Refer to Murco for             |                      |                |
|                           | instructions. Semiconductor sensors are non-selective, but calibrated to a specific gas. |                      |                |