

# MODEL MGT4



**Neutronics**  
Gas Analysis Solutions

## Safe area fixed gas detector - loop powered

For continuous monitoring of oxygen deficiency, toxic gases, or carbon dioxide



### Loop-powered. Lightweight. Reliable.

- Temperature compensated IR sensors for detecting carbon dioxide
- Electrochemical sensors for detecting oxygen or toxic gases
- Optional weather guard for sensor
- Industry standard 4-20mA output
- Plug-in handheld configuration unit

### Description

The Model MGT4 fixed gas detectors provide reliable performance for workplace safety applications in non-hazardous areas where there is no risk of potentially explosive gases being present. The detectors use the industry standard 4-20mA current loop to power the detector and to convey the gas levels detected to a controller. This means that under zero gas conditions 4mA is drawn from the supply, and under full scale gas conditions 20mA is drawn from the supply. The current varies linearly for gas levels between zero and full scale. The detector head uses a two-wire current loop for the electrochemical sensors. The carbon dioxide detectors require a third connection to power the infrared sensor.

Calibration of the MGT4 can be performed by using the zero and span buttons located inside the instrument housing. The concentration of the calibration gases must match the ones used for factory calibration of the detector (refer to the instrument calibration certificate for details). The optional plug-in hand held configuration unit may be used with any appropriate test gas concentration.



### Partial list of gases:

- oxygen carbon
- dioxide
- hydrogen
- sulfide carbon
- monoxide
- ethylene oxide
- chlorine
- nitrogen dioxide
- ammonia
- sulfur dioxide
- hydrogen chloride

Note: The MGT4 gas detector must only be used in applications where there is no risk of potentially explosive gases being present or of them being created through industrial processes or other activities within the area.

# MODEL MGT4

## Safe Area fixed gas detector

### Specifications

Material	Composite (ABS and polycarbonate)
Cable entry	1 x 20mm or ½" NPT or ¾" NPT
Dimensions	122 x 122 x 75 mm (4.8 x 4.8 x 3.0 in)
Weights	Standard housing (excluding weather guard) – 500 grams (1.1 lbs.) Weather guard – 225 grams (0.5 lbs.)
Display	None
Gas types	Oxygen or toxic gases
Input voltage	8 to 24VDC (for 4 to 20mA signal) 5.8 to 7.5VDC (for IR sensor supply)
Input power	5 watts maximum
Internal fuse	1 amp anti-surge Nanofuse
Analog output	4-20mA (10 bit resolution)
Sensor type	NDIR infrared or electrochemical
Measurement range	Dependent upon sensor type
Response time	Sensor response times vary according to the actual sensor
Measurement resolution	Oxygen: 0.1% volume Toxic gases: 0.1 ppm for FSD < 40ppm; 1 ppm for FSD > 50 ppm
IP rating	Enclosure: IP66 Sensor: IP65
Operating temperature	-20°C to +60°C (-4°F to 140°F)
Humidity range	0 to 95% RH non-condensing
Operating pressure	Atmospheric (± 10%)

Specifications are subject to change without notice.

### Order Information

Part No.	Range	Sensor type	Stock No.
Oxygen detector, 4-20mA output	0-25%	electrochemical	SS771
Hydrogen sulfide, 4-20mA output	0-50ppm	electrochemical	SS772-50
Hydrogen sulfide, 4-20mA output	0-100ppm	electrochemical	SS772-100
Hydrogen sulfide, 4-20mA output	0-200ppm	electrochemical	SS772-200
Carbon monoxide, 4-20mA output	0-50ppm	electrochemical	SS773-50
Carbon monoxide, 4-20mA output	0-100ppm	electrochemical	SS773-100
Carbon monoxide, 4-20mA output	0-1000ppm	electrochemical	SS773-1000
Chlorine	0-20ppm	electrochemical	SS774
Nitrogen dioxide	0-20ppm	electrochemical	SS775
Ammonia	0-100ppm	electrochemical	SS776-100
Ammonia	0-1000ppm	electrochemical	SS776-1000
Sulfur dioxide	0-20ppm	electrochemical	SS778
Ethylene oxide	0-100ppm	electrochemical	SS779
Hydrogen chloride	0-30ppm	electrochemical	SS780
Carbon dioxide	0-100% volume	infrared	SS782-100%
Configuration unit with cable (P/N 2-0602004-74-0)			SS748
Protective weather guard (P/N 2-06-2002-46-1)			SS475



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