



### Explosion Proof Fixed Gas Detector with Display

For continuous monitoring of flammables, toxics, and O2 deficiency

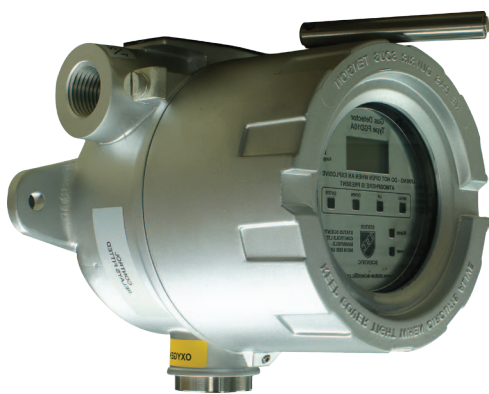


#### Small. Robust. Reliable.

- ATEX and IECEx certified for use in hazardous areas
- Pressure die cast aluminum or 316 Stainless Steel enclosure
- 4 to 20mA and RS232 outputs
- Non-intrusive calibration and configuration via a magnetic pen
- Local LCD display with three control relays

#### Description

The Model MGT10A explosion proof (flameproof) gas detectors are designed for use in hazardous areas and the detection of flammable, toxic, and asphyxiant gas hazards using temperature compensated infrared, electrochemical, and pellistor sensor technologies. The instrument enclosure, available in aluminum or 316 Stainless Steel, includes two gland entries and contains the connection terminals, electronics, and a 4-digit LCD display. Four magnetically operated switches allow the unit to be calibrated through the display window using the magnetic pen. Three control relays are fitted to provide Alarm Level 1, Alarm Level 2, and Fault outputs. In addition to the 4-20mA output, a RS-232 communications interface is also included.



#### Hazardous Area Certification

Certificate number:	IECEx SIR 08.0009X   Code Ex d IIC SIRA 08ATEX1031X   Code Ex d IIC Zones 1, 2
Standard:	EN 60079-0: 2004 (Edition 4) EN 60079-0: 2006 EN 60079-1: 2007-04 (Edition 6) EN 60079-11: 2007
Temperature Codes:	T4 (Ta -20°C to +60°C) T5 (Ta -20°C to +50°C) T6 (Ta -20°C to +35°C)
Zones:	0, 1, & 2

The gas sensor located in the base of the enclosure. A Stainless Steel weather guard can be fitted over the sensor head to protect it from ingress of water or contaminants. The weather guard includes an integral sampling adaptor that enables the head to be tested and calibrated in situ.

# MODEL MGT10A

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### Specifications

Material	Enclosure: aluminum pressure die casting or 316 Stainless Steel
	Sensor insert: 316 Stainless Steel
	IR sensor housing: 303 Stainless Steel (316 SS available upon request)
	Magnetic pen: 316 Stainless Steel
	Optional weather guard: 304 Stainless Steel and Nylon 66
Cable entries	2 x 20mm or ½" NPT or ¾" NPT
Weights	MGT10A oxygen, toxic, pellistor (excluding weather guard) – 660 grams (1.5 lbs.)
	MGT10A infrared – 2 kg (4.4 lbs.)
	Magnetic pen – 60 grams (0.13 lbs.)
	Weather guard – 225 grams (0.5 lbs.)
Gas types	Flammable, oxygen, or toxic
Input voltage	8 to 24VDC
Input power	5 watts maximum
Internal fuse	1 amp anti-surge Nonofuse
Relay contact rating	3 amps, 300VAC
Analog output	4 to 20mA (10 bit resolution)
RS232 output	Communications with PC at 19200 baud
Sensor types	NDIR infrared, electrochemical, or pellistor
Measurement range	Dependent upon sensor type
Response time	Flammable gases – typically T90 < 15 seconds (Methane)
	Toxic and oxygen sensor response times vary according to the sensor type
Measurement resolution	Flammable gases – 1% LEL or 1% volume
	Toxic gases – 0.1ppm for FSD < 50ppm; 1ppm for FSD > 50ppm
	Oxygen – 0.1% volume
IP rating	Enclosure: IP68
	Sensor: IP65
Display	4-digit, 7-segment LCD
Keypad	4-button magnetically operated
Software	Software configuration via LCD display and multi-function keypad
Operating temperature	-20°C to +60°C (-4°F to +140°F)
Humidity range	0 to 95% RH non-condensing
Operating pressure	Atmospheric (± 10%)
Performance standard	EN 60079-29-1: 2007

Specifications are subject to change without notice.

### Versions available for the detection of:

Hydrocarbon gases using temperature compensated infrared
Carbon dioxide using temperature compensated infrared sensors
Oxygen deficiency or toxic gases using electrochemical sensors
Flammable gases using Pellistor sensors



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### Order Information

Description	Range	Sensor Type	Stock No.
Methane detector with display, 4-20mA, relays, RS-232	0-100% volume	infrared	SS710-1
Methane detector with display, 4-20mA, relays, RS-232	0-100% LEL	infrared	SS711-1
Ethane detector with display, 4-20mA, relays, RS-232	0-3% volume	infrared	SS711-2
Propane detector with display, 4-20mA, relays, RS-232	0-2% volume	infrared	SS711-3
Butane detector with display, 4-20mA, relays, RS-232	0-2% volume	infrared	SS711-4
Pentane detector with display, 4-20mA, relays, RS-232	0-2% volume	infrared	SS711-5
Carbon dioxide detector with display, 4-20mA, relays, RS-232	0-500ppm	infrared	SS712-500
Carbon dioxide detector with display, 4-20mA, relays, RS-232	0-1000ppm	infrared	SS712-1000
Carbon dioxide detector with display, 4-20mA, relays, RS-232	0-2000ppm	infrared	SS712-2000
Carbon dioxide detector with display, 4-20mA, relays, RS-232	0-5000ppm	infrared	SS712-5000
Carbon dioxide detector with display, 4-20mA, relays, RS-232	0-10,000ppm	infrared	SS712-10000
Carbon dioxide detector with display, 4-20mA, relays, RS-232	0-2% volume	infrared	SS712-2%
Carbon dioxide detector with display, 4-20mA, relays, RS-232	0-5% volume	infrared	SS712-5%
Carbon dioxide detector with display, 4-20mA, relays, RS-232	0-100% volume	infrared	SS712-100%
Hydrogen detector with display, 4-20mA, relays, RS-232	0-100% LEL	pellistor	SS709-0
Methane detector with display, 4-20mA, relays, RS-232	0-100% LEL	pellistor	SS709-1
Ethane detector with display, 4-20mA, relays, RS-232	0-100% LEL	pellistor	SS709-2
Propane detector with display, 4-20mA, relays, RS-232	0-100% LEL	pellistor	SS709-3
Butane detector with display, 4-20mA, relays, RS-232	0-100% LEL	pellistor	SS709-4
Pentane detector with display, 4-20mA, relays, RS-232	0-100% LEL	pellistor	SS709-5
Carbon monoxide detector with display, 4-20mA, relays, RS-232	0-50ppm	electrochemical	SS716-50
Carbon monoxide detector with display, 4-20mA, relays, RS-232	0-100ppm	electrochemical	SS716-100
Carbon monoxide detector with display, 4-20mA, relays, RS-232	0-1000ppm	electrochemical	SS716-1000
Hydrogen sulfide detector with display, 4-20mA, relays, RS-232	0-50ppm	electrochemical	SS715-50
Hydrogen sulfide detector with display, 4-20mA, relays, RS-232	0-100ppm	electrochemical	SS715-100
Hydrogen sulfide detector with display, 4-20mA, relays, RS-232	0-200ppm	electrochemical	SS715-200
Ammonia detector with display, 4-20mA, relays, RS-232	0-1000ppm	electrochemical	SS717-1000
Oxygen deficiency detector with display, 4-20mA, relays, RS-232	0-25% O <sub>2</sub>	electrochemical	SS714
Flow-through sampling adaptor	—	—	SS746
Calibration adaptor with 1m tubing	—	—	SS747
Protective weather guard	—	—	SS749
Magnetic pen for Model MGT10A	—	—	SS840



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