

TG5000 Monitoring System



Application

Industrial facilities possess a wide variety of gas detection needs. From boiler rooms, battery rooms, engineering and research labs, and transportation maintenance facilities, to a myriad of other industrial building and facility applications, each environment has its own monitoring needs. To enable personnel to work safely in these environments, monitoring of toxic gases, oxygen enrichment and deficiency, and combustible gases is necessary. Due to this wide variety, a flexible, versatile gas monitor is absolutely essential.

Solution

With abundant sensor offerings and a variety of configurations, the MSA TG5000 Monitoring System is an ideal, yet affordable, solution.

WE KNOW WHAT'S AT STAKE.

Additional Features

- Operates in diffusion mode, with factory-calibrated sensors ready to perform immediately after installation
- Available for remote sensing applications, where installation requires the sensor to be separated from the electronics
- Can operate on a completely stand-alone basis with its large LCD display, quick-check LEDs and four relay outputs (three alarm and one fault), or can be connected with a 4-20 mA output to a control system (PLC, DCS, etc.)
- SafeSwap enables safe and quick replacement of XCell Gas Sensors without turning off the instrument
- Pre-calibrated sensor modules are ready for installation out of the box
- Sensors can be replaced in the field without the use of tools. The unit quickly recognizes the new sensor type and reconfigures alarm and relay settings to optimize the new sensor.

Stay Connected. Work Smarter.

- Bluetooth wireless technology
- Check status and get alerts up to 75 ft. (23 m) away
- Modify settings/setpoints/alarms
- Initiate calibration and view progress



Available Options

- Strobes (one or two)
- Internal 50 W power supply

TG5000 Specifications	
GAS TYPE	Toxics, oxygen, & combustibles
GAS SAMPLING	Diffusion
OUTPUT TYPE	4-20 mA, HART
SENSOR LOCATION	Local or remote sensor up to 100 m (328 ft.)
RELAYS	6 Amp DPDT, 2 relays
HOUSING MATERIAL	General-purpose polycarbonate enclosure
TEMPERATURE RANGE	-20°C to +40°C
POWER INPUT	Internal 110VAC/24VDC power supply
ALARM TYPE	Piezo horn (95 dB) with horn silence button
WARRANTY	2 years

Sensor Specifications			
SENSOR TEMPERATURE RANGE	<i>(may differ by gas, see manual)</i>		
XCELL	-40°C to +60°C (-40°F to 140°F)		
XIR PLUS	-40°C to +60°C (-40°F to 140°F)		
SENSOR PERFORMANCE*	T90 (typical)	Repeatability	Zero Drift (per year)
XIR PLUS COMB.	< 2 sec.	< ± 1% LEL	N/A
XIR PLUS CO ₂	< 6 sec.	< ± 1% Vol	N/A
XCELL COMB.	< 22 sec.	< ± 3% LEL	< 5% LEL
XCELL CO	< 9 sec.	< ± 1%	< 1% full scale
XCELL CL ₂	< 12 sec.	± 1%	≤ 1% FS per mo.
H ₂	< 185 sec.	< ± 10%	< 1% FS per mo.
XCELL H ₂ S	< 23 sec.	< ± 1%	< 1% full scale
XCELL NH ₃	< 280 sec.	± 1%	≤ 1% FS per mo.
NO ₂	< 60 sec.	< ± 10%	< 1% FS per mo.
XCELL O ₂	< 11 sec.	< ± 1% Vol	< 0.2% Vol
XCELL SO ₂	< 6 sec.	± 1%	≤ 1% FS per mo.
SENSOR RELAYS	5 Amp SPDT; 4 relays (2 alarm, 1 fault) @220 VAC or 30 VDC		

* Typical response at standard temperature and pressure test conditions

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice.

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