

TRIGARD® Monitoring System

for Oxygen, Toxics and Combustible Gases



The MSA TRIGARD Monitoring System is designed for monitoring toxic gases; combustible gases; and oxygen deficiency or enrichment. It is an affordable monitoring solution for a variety of applications, including water and wastewater plants, lab space, boiler rooms, commercial and general industry.



TRIGARD® Monitoring System for Oxygen, Toxics and Combustible Gases Features

- Stand-alone gas monitor for up to three MSA sensors
- Adjustable range
- Multiple sensor mounting options
- AC- or DC-powered
- On-board relays
- NEMA 4X design
- LCD display with highly visible LED indicators
- Piezo horn with horn silence button
- Long-life, MSA-designed sensors
- Simple push-button calibration
- Available as single-point or 3-point unit
- Optional battery backup

*Because every life has a **purpose...***

Advanced Features

- **Sensor Disconnect Under Power**
 - MSA's patented feature allows for sensor change-out without declassifying a hazardous area.
- **Interchangeable Smart Sensors**
 - 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.
- **State-of-the-Art Display**
 - Liquid crystal display conveniently alternates between sensor reading and gas type, and features scrolling messaging, indicating ongoing diagnostic checks such as sensor "end-of-life" condition.
- **World-Class Design**
 - Features a single-board design for high reliability and easier serviceability.
 - Mounting enclosure is separate from the electronics and sensor, enabling problem-free installation and servicing.
- **Onboard LEDs and Relays**
 - "Quick-check" LEDs and four relay outputs allow for increased indication of alarm and fault conditions.
 - "Quick-check" LEDs, viewable from up to 50 feet, indicate NORMAL (green) and ALERT (red) status conditions.
 - Field-program-mable alarm levels and normally energized/de-energized, normally opened/closed and latching/non-latching relay functions offer three levels of alarm and a fault.
- **Options**
 - One or two strobes
 - Back-up battery
 - Internal power supply
- **Sensor Options**
 - Oxygen, toxic and combustible sensors
 - Integral mounting
 - Remote General Purpose
 - Remote Explosion Proof
 - Pre-wired shielded cable for sensors in 25, 50 and 100 ft. lengths (oxygen & toxic only)



Factory-assembled remote sensors are available in 25-, 50- and 100-foot lengths.

Specifications	
GAS TYPE	Toxic, oxygen and combustible (catalytic bead or infrared)
GAS SAMPLING	Diffusion
OUTPUT TYPE	1 sensor: 4-20 mA, 3-wire or ModBus RTU; 2 or 3 sensors: ModBus RTU only
SENSOR LOCATION	Local or remote sensor (up to 100 ft.)
ENCLOSURE	General-purpose polycarbonate enclosure
SENSOR TEMPERATURE RANGE	14°F to 104°F (typical)
ACCURACY	Repeatability +1% FS (typical)
SENSOR LIFE	18 months to 2 years
RELAYS	5 Amp SPDT; 4 relays (3 alarm, 1 fault) @220 VAC or 30 VDC
POWER INPUT	12-30 VDC (standard), 100-256 VAC (optional)
ALARM TYPE	Piezo horn (95 dB) with horn silence button
BATTERY BACKUP	Optional (1,200 mAh)
ENVIRONMENTAL PROTECTION	Designed to meet NEMA 4X

Note: This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



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