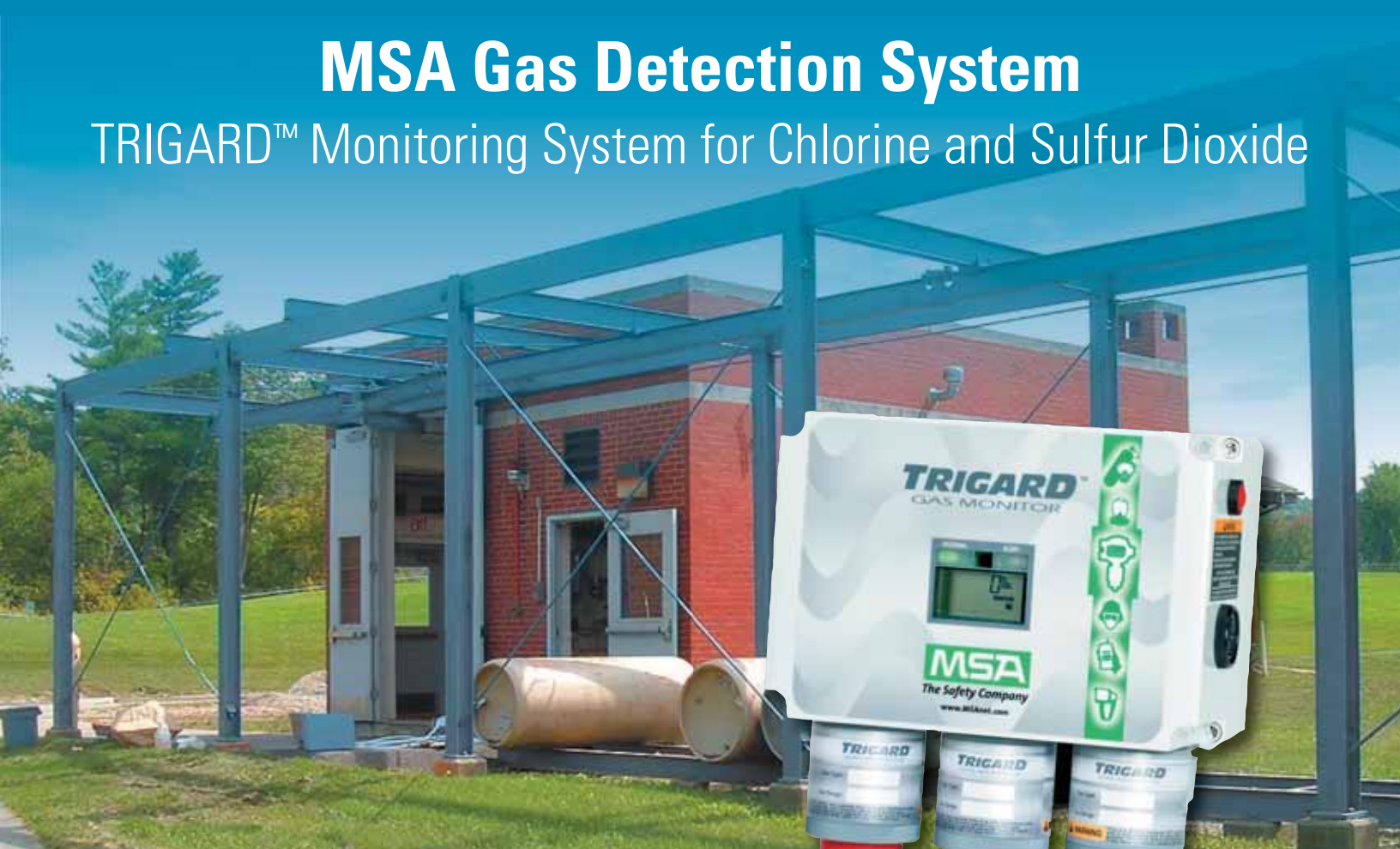# MSA Gas Detection System
TRIGARD™ Monitoring System for Chlorine and Sulfur Dioxide

- ➲ 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

Application

The MSA TRIGARD Monitoring System is designed for monitoring chlorine, sulfur dioxide and other toxic gases, combustible gases, as well as for oxygen deficiency or enrichment. These new monitors were designed specifically for water and wastewater facilities which are typically large producers of these gases. The MSA TRIGARD Monitor offers an affordable monitoring solution for a variety of needs.

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.

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- **World-Class Design**
  Engineering efforts feature a single-board design for ultimate reliability and serviceability. The mounting enclosure has been designed to be separate from the electronics and sensor, allowing for 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-programmable 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 foot lengths (oxygen & toxic)

TRIGARD Gas Monitor showing single local sensor with two remote sensors attached.

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

Specifications

Gas Type	Toxics, oxygen and combustible
Gas Sampling	Diffusion
Output Type	4-20mA, 3-wire (non-loop power) (single-point only) ModBus RTU (3-points)
Sensor Location	Local or remote sensor (up to 100 ft.)
Enclosure	General-purpose plastic enclosure
Sensor Temperature Range	14ºF to 104ºF
Accuracy	Repeatability +1% FS
Sensor Life	18 months to 2 years
Relays	LEDs and relays — 5 Amp SPDT @220 VAC or 30 VDC
Power Input	Internal 120VAC/24VDC power supply
Alarm Type	Peizo horn (75 dB) with horn silence button
Battery Backup	Optional (up to 24 hours)
Environmental Protection	Designed to meet NEMA 4X

Offices and representatives worldwide
For further information:

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