

MSA Gas Detection System

Methane and Hydrocarbon Monitoring in a Combined Sewer Overflow (CSO)



Application

Major cities frequently operate large networks of storm water pump stations that are used to handle heavy rain runoff. These enclosed pump stations are driven by combustible natural-gas-powered engines that require methane monitoring to help ensure worker and facility safety. Storm water pump station sumps also should be monitored for potentially high LEL conditions caused by illegally dumped waste solvents and other combustible compounds that are carried by storm waters.

Product Description

The multi-point MSA Chemgard® Photoacoustic Infrared (PIR) Gas Monitoring System is designed as 4-point or 8-point sample draw system and features advanced photoacoustic infrared (PIR) sensing technology. This system detects up to 100 percent of the lower explosive limit (LEL) of combustible gases including methane within these pump stations.

The Chemgard Monitor Advantage

- › Multi-point capability— attractive on a cost-per-point basis
- › Good sensitivity to low LEL levels of methane; can detect down to 0.1% LEL for methane or other hydrocarbons
- › Centralized calibration—unit can be calibrated at 1 sample point as compared to calibration at each individual point sensor
- › Will operate in oxygen-deficient areas. Optional oxygen sensor can be added to system



To meet classified area requirements, the system includes flashback arrestors which isolate the unit from the area in which the sample is gathered. With its low-level detection capabilities, the Chemgard Monitoring System detects even minor changes in hydrocarbon levels, alerting operators of spills into the system. The Chemgard Monitor is extremely stable, highly selective, and can operate for months with virtually no zero drift. Compared to other systems, the Chemgard Monitoring System features a lower initial hardware cost, lower installation cost, and lower routine maintenance cost (with periodic calibration of a single sensor versus 8 sensors). The system is available in either a NEMA 4, explosion-proof, or rack-mount enclosure.

For more information on the standard Chemgard Gas Monitor, see bulletin 07-2033-MC.



Interior, Chemgard Gas Monitor

Specifications

Operating Temperature Range	0-50°C, 32-122°F
Power Requirements	120 VAC ± 10% at 0.56 amps or 240 VAC ± 10% at 0.3 amps
Alarm Relays	3 relays at 8 amps resistive
Enclosures	
NEMA 4:	18" H x 16" W x 7" D 40 lbs.
19" Rack Mount:	7" H x 17 7/8" W x 15 1/4" D 19 lbs.
Explosion-Proof (XP):	19 1/8" H x 19 1/8" W x 9 1/2" D 100 lbs.

Note: This is a representative description of this product and its potential applications. Contact your MSA representative for information on customizing this unit to fit a specific need.

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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