

# MSA Gas Detection System

## [ Combustible Gas Monitoring for Water and Wastewater Treatment Applications ]

### Application

This system addresses gas detection concerns issuing from NFPA 820. The unit monitors the presence of combustible gases (methane and petroleum vapors) in combined sewage overflow (CSO) equalization tanks for the water and wastewater treatment industry. During periods of high rainfall, the wastewater treatment plant receives excess water. (When combined with the normal sewage, this overloads the treatment plant.) CSO equalization tanks prevent sudden intake of this excess water into the treatment plant. With two levels of monitoring, this system is designed to continue monitoring after level one has gone underwater. Since surface water coming into such facilities may contain petroleum-based products, a potentially explosive condition also exists. The system's combustible gas sampling equipment is specifically designed for performance in high-moisture environments.

### Product Description

System Contents:

- MSA Ultima® Combustible Gas Monitor specially modified to function as a 4-point sample draw unit.
- Separate ADI pumps for sample draw, bypass and blow back.
- PLC-controlled solenoids, which pull samples from two elevations inside 5-million gallon storage tanks.
- Standard remote sensors, for use in each pump room.

Refer to drawings DSK 3011-1214 and DSK 3011-1216 for additional details.



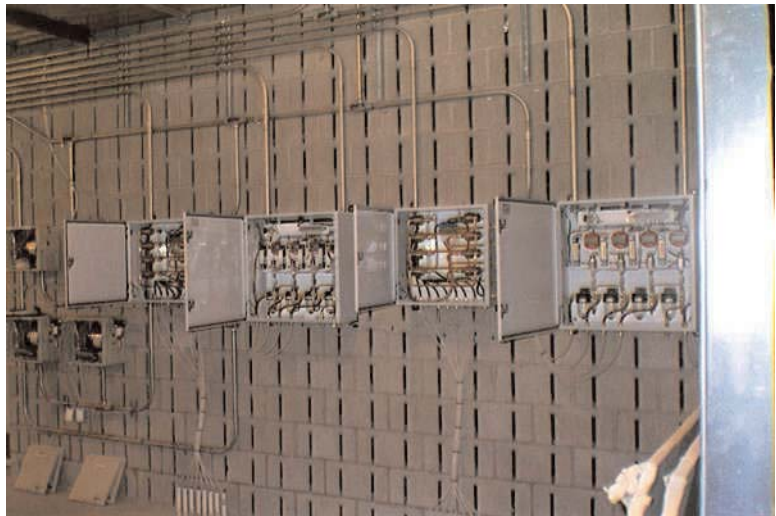
Note: *This is a representative description of this product and its possible applications.*  
 Contact MSA Custom Products at [customproducts@MSAnet.com](mailto:customproducts@MSAnet.com) for information on customizing this unit to fit a specific need.

### Specifications

Operating Temperature Range:	-40° to +90°C, -40° to +194°F
Power Supply:	Powered from PLC
Signal Output:	4-20mA direct to PLC
Relay Contacts:	Not required
Enclosure:	NEMA 4 enclosure
Hazardous Area Rating:	General Purpose
Dimensions:	
Sensor Enclosure:	20" W x 21.5" H x 8" D
Pump Enclosure:	12" W x 12" H x 8" D

### Meets:

NFPA 820 Fire Protection in Waste Water Treatment Plants  
 OSHA 29 CFR Part 1910.146 Confined Space  
 ANSI 2117.1-1989 Safety Requirements



**Note:** This Data Sheet contains only a general description of the product shown. While uses and performance capabilities are described, under no circumstances should the product be used except by qualified, trained personnel, and not until the instructions, labels or other literature accompanying the product have been carefully read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning this product.

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