

A photograph of an industrial facility. In the foreground, a large, silver, spherical gas detector is mounted on a metal structure. The detector has a circular top with a lens and is secured with a metal cable. The background shows a complex network of white pipes and metal beams. A blue banner is overlaid on the top left of the image.

**Long range line-of-sight
detection to improve site safety.**

Rosemount™ 935 & 936 Open Path Gas Detectors
Continuous monitoring for toxic and combustible gases, even in
harsh environments.



Receive Accurate, High-Speed Response to Hazardous Gases

The Rosemount Series of Open Path Gas Detectors provide continuous monitoring for toxic and combustible gases, even in extreme environments where dust, fog, rain, snow or vibration can cause a high reduction of signal. The device features real time diagnostics with response times less than three seconds.

The fatality rate from exposure to harmful environments/ substances was 8.7 percent in the oil & gas industry from 2003-2013.
- The Centers for Disease Control (CDC)



Hydrogen sulfide exposure greater than or equal to 100 ppm is immediately dangerous to life and health.
- The National Institute for Occupational Safety and Health (NIOSH)



Ammonia exposure greater than or equal to 300 ppm is immediately dangerous to life and health.
- The National Institute for Occupational Safety and Health (NIOSH)



“Fires and explosions were the fourth most common cause for severe injuries, after falls and being struck by objects [in the upstream oil and gas industry].”
- Environment & Energy NEWS



* “Oil and Gas Industry Leads in Severe Injuries” Environment & Energy NEWS



The Rosemount Open Path Gas Detector effectively detects gases in tank farms, refineries, oil rigs, pumping stations, compressor stations, LNG / LPG facilities, and other extreme environments.

Rosemount Open Path Gas Detector



Simple Setup

- Straightforward one person installation
- Easy alignment and calibration

High False Alarm Immunity

- Heated optics eliminate condensation and icing
- Solar blind - highly immune to interference from sunlight or any other sources of radiation

Withstands Harsh Conditions

- Full performance in difficult weather conditions
- Resistant to extreme vibrations

Product Overview

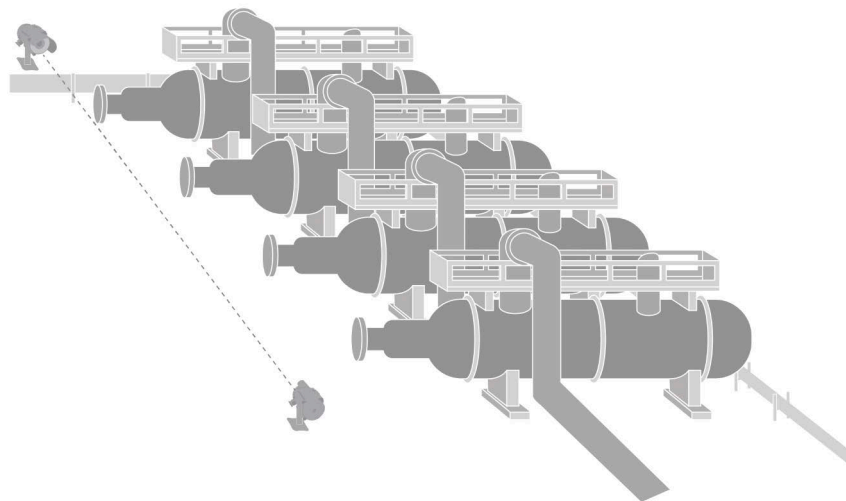
The Rosemount 935 Open Path Combustible Gas Detector utilizes infrared technology to detect hydrocarbon gases. The Rosemount 936 Open Path Toxic Gas Detector uses ultraviolet technology to detect hazardous hydrogen sulfide (H₂S) or ammonia (NH₃) gas. Rosemount open path gas

detectors provide efficient perimeter monitoring with reduced devices required for commissioning. Worldwide approvals for these devices include ATEX, IECEx, FM/CSA, INMETRO, TR CU, and SIL 2 (TÜV).

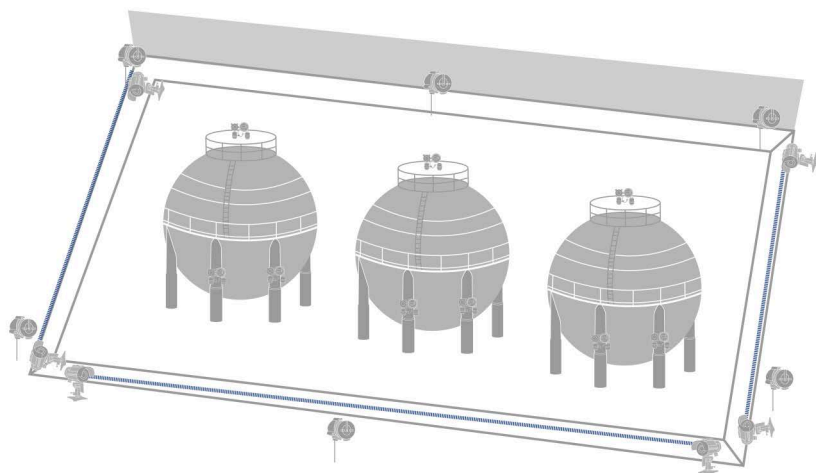
[Emerson.com/FlameGasDetection](https://www.emerson.com/FlameGasDetection)

LNG Terminal Tank Storage

At these facilities there are often multiple bullet tanks arranged in a row with uniform valve and fitting placement – all of which are potential leak points. Open path gas detectors are used for terminal site tank farm storage and for fence line, perimeter, or area protection. These devices provide high-speed and accurate response for large scale combustible gas leaks which might occur along a clear line-of-sight up to 660 feet in distance.



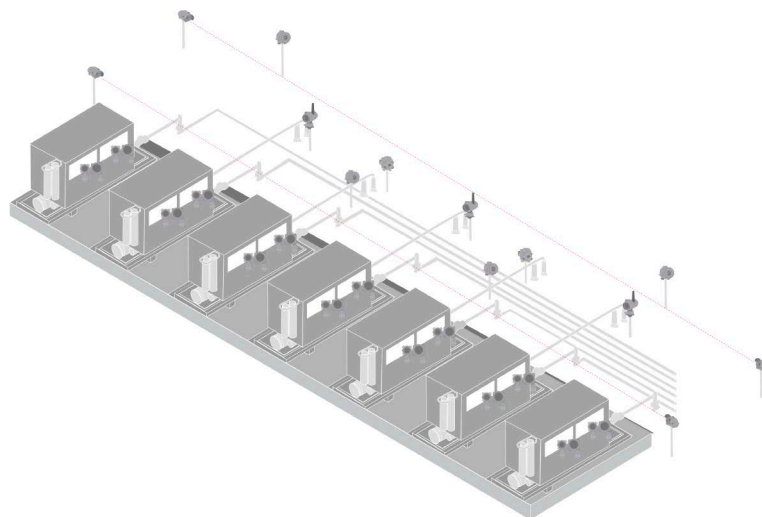
LPG Spherical Tank Farm



LPG spherical tanks are typically grouped in small clusters, often in rows. Since there are many possible sources of leaks, there is a likelihood that some sources of such releases are outside the coverage area of local detectors or close to the limits of local detection coverage. Open path gas detectors can be used to monitor the perimeter of the tank farm or clusters providing high speed and accurate response to large combustible gas leaks. For perimeter monitoring, these detectors are placed along the bund walls rather than the property line. This should allow for the detection of smaller gas releases and provide more time to respond to such releases.

Well Pad Production Site

Releases of heavier-than-air gases and vapors from underground and aboveground wellheads are difficult to detect in open spaces. Gas may be dispersed by air currents and migrate far from the area coverage of point gas detectors. Open path detectors installed upstream and downstream from potential leak sources provide wide area coverage which increases the likelihood of detecting low and high pressure gas leaks. This technology is an economical choice in open space installations.



Specifications

	Rosemount 935 (Hydrocarbon Gases)	Rosemount 936 (H ₂ S or NH ₃)
Spectral Response	2.0–3.0 μm	200–300 nm
Sensitivity Range	0–5 LEL.m methane and propane 0–8 LEL.m ethylene	0–500 ppm.m
Time Constant / Response T90	< 3 seconds	< 10 seconds
Displacement / Misalignment Tolerance	±0.5°	±1°
Drift	±7.5% of the reading or ±4% of the full scale (whichever is greater)	Long term ±5% of full scale
Relative Humidity Range	Up to 95% non-condensing (withstands up to 100% RH for short periods)	
Operating Temperature	-67 °F to +149 °F (-55 °C to +65 °C)	
Operating Voltage	24 VDC nominal (18–32 VDC)	
Electrical Connection (Specify)	2 x 3/4" – 14NPT conduits or 2 x M25 x 1.5 mm ISO	
Detector / Source Weight	11 lb (5 kg)	
Detector / Source Power Consumption	250 mA (300 mA peak)	
Detector / Source Dimensions	10.5" x 5.1" x 5.1" (267 x 130 x 130 mm)	



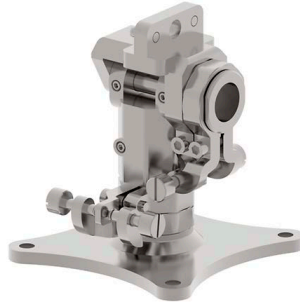
Optional Accessories

Commissioning Kit



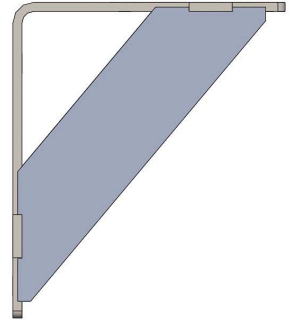
- (H₂S) Part No. 888847-1
- (NH₃) Part No. 888847-2
- Required for commissioning and future maintenance checks; only one kit is required per site

Tilt Mount



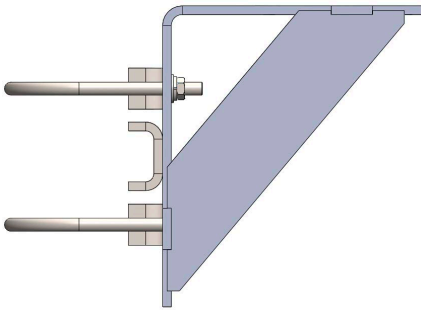
- Part No. 888270
- Necessary to accurately align transmitter and receiver

Wall Mount Adapter



- Part No. 799255
- L-bracket adapter for mounting a detector to a vertical surface

Pole Mount Adapter



- Part No. 888140 (2–3 in. / 5.08–7.62 cm)
- Part No. 799225 (4–5 in. / 10.16–12.7 cm)
- Mount is available to facilitate pipe mounting for various pipe sizes

USB RS-485 Harness Kit



- Part No. 794079
- Enables user to connect to any PC or laptop to re-configure settings or perform diagnostics

Sunshade



- Part No. 888263
- Protective weather cover for the receiver or transmitter

**Quickly and reliably detect toxic gases
with open path detectors to provide
optimal safety in extreme environments.**



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