

Choosing the right detection technology for hazardous locations is critical to maintaining safety and efficiency. In areas where flammable gases, vapors, or combustible dust are present, it's essential to employ tools that not only meet stringent safety standards but also deliver precise and reliable results. FLIR Si2x-Series Acoustic Imagers and Gx-Series Optical Gas Imaging (OGI) cameras are two advanced solutions that excel in these conditions, each offering unique advantages. Learn more about the benefits of both tools and determine which one is best suited for your specific needs in hazardous environments.

How to choose between the FLIR Si2x-Series and the FLIR Gx-Series for Explosive **Atmosphere Leak Detection?**



- Use FLIR Si2x-Series Acoustic Imager when rapid, easy-to-use leak detection is a priority, especially in windy environments, and when cost is a major concern.
- Use FLIR Gx-Series OGI Camera for more sensitive and regulated LDAR inspections, particularly when detecting low-pressure or specific gas leaks is critical.

FLIR Si2x-Series Acoustic Cameras for Hazardous Locations

FLIR Si2x-LD

 Industrial Acoustic Imaging Camera for Pressurized Gas Leak and Mechanical Fault Detection

FLIR Si2x-Pro

 Industrial Acoustic Imaging Camera for Partial Discharge, Pressurized Gas Leak, and Mechanical Fault Detection





FLIR Gx-Series for Explosive Atmosphere Leak Detection?

Feature	FLIR Si2x-Series	FLIR Gx-Series	
Regulatory Compliance	Not suitable for regulated LDAR inspections.	Mandated by USA EPA, Environment Canada, and other jurisdictions for LDAR.	
Pressure Requirements	Requires a minimum of 5 psi pressure for detection.	Can detect low and zero-pressure leaks from vents.	
Sensitivity	Detects leaks as low as 0.0032 L/min (1.3 g/ hr methane) at 2.5 meters.	Higher sensitivity, detecting as low as <1 g/ hr methane/propane mixture.	
Ease of Use	Easy to use; suitable for first responders with minimal training.	Requires specialized training; used in LDAR programs.	
GasType Identification	Cannot distinguish between different gas types.	Tuned to specific gases (e.g., methane), allowing gas type identification.	
Quantification Accuracy	Not calibrated for industrial gas mixtures.	Developed for precise quantification to meet LDAR requirements.	
Wind Performance	Performs better in windy or turbulent air conditions.	Gas plume visualization can be challenging in windy conditions.	
Best Use Cases	 Quick leak detection by non-experts Cost-sensitive scenarios. Non-LDAR required inspections. Scheduled maintenance to ensure operational continuity. 	 Comprehensive leak detection. LDAR-mandated inspections. Detecting leaks from low-pressure sources. When specific gas identification is necessary. 	



