Flir Si2a-LD



CONTINUOUS PRESSURIZED GAS LEAK DETECTION

The Flir Si2a-LD is a fixed mount acoustic imaging camera engineered for continuous detection and quantification of pressurized gas leaks across industrial, manufacturing, and utility environments.

Built for teams overseeing compressed-air networks, gas-driven machinery, production assets, and plant-wide utilities, the Si2a-LD pinpoints and quantifies pressurized gas leaks from up to 200 m to cut energy waste, reduce operational costs, strengthen safety, and minimize unplanned downtime.

Because many leaks surface only under changing loads or at irregular intervals, the Si2a-LD provides nonstop monitoring and raises alerts early using configurable zones and alarm thresholds. Advanced analytics, secure connectivity, and seamless integration with modern asset management systems make it suitable for scaled, enterprise wide deployment.

With a low maintenance design, broad accessory support, and flexible installation options, it helps organizations unify their leak monitoring approach across multiple facilities while reducing the effort required to maintain efficiency.



Rugged and industrial ready with IP66 protection and VESA mounting, the Si2a-LD installs securely in demanding environments while staying clear of hazardous zones. It integrates smoothly into existing workflows with AI driven leak analysis and broad enterprise connectivity options, including PoE or Wi-Fi, TCP/IP enabled and RSTP capable networking, plus MQTT, SMTP, or FTP for automated event actions.

FLIR®

Key values

Always on pressurized gas protection

- Fixed mount acoustic imaging for continuous leak detection and quantification
- Captures small, intermittent leaks that periodic inspections often miss
- Set monitoring zones and alarm thresholds for unattended operation
- Helps reduce energy waste, cut operational costs, and unplanned downtime by flagging issues early

Built for harsh environments

- IP66 rated for demanding industrial and manufacturing sites
- Install and leave with remote monitoring that reduces unnecessary site visits
- Designed to protect technicians by identifying issues before entering noisy or high risk production areas

Integrates into how you work

- AI enhanced leak recognition, sizing, and cost estimation for confident decision making
- Fits existing workflows with TCP/IP enabled and RSTP capable connectivity, plus MQTT, SMTP, or FTP event actions
- Supports SCADA and alarm systems with 4–20 mA current loop and digital I/O
- Run as a standalone monitoring point or connect into wider condition monitoring platforms

Primary market

Industrial facilities using compressed air and pressurized gases across manufacturing, food & beverage, automotive, electronics, pharmaceuticals, and general production environments.

Secondary market

Utilities, energy producers, chemical plants, and large scale facilities where pressurized gas distribution supports operations, including HVAC, power generation, and process industry sites.

Additional features

- Detects, locates, and quantifies pressurized gas leaks at distance for safer and more efficient diagnosis
- Power over Ethernet and Wi-Fi connectivity for flexible installation
- Alarm driven workflows that notify teams instantly when thresholds or leak size limits are exceeded
- Designed for permanent condition monitoring where leaks are intermittent, load dependent, or difficult to inspect manually
- Accessories available including dust cover, Ethernet cables, and PoE injector

Quick Specs
Leak rate detection threshold: Down to 0.0032 l/min
Operating distance: Up to 200 m (656 ft)
Bandwidth: 2–130 kHz
Gases detected: All pressurized gases; cost estimation for compressed air, ammonia, argon, carbon dioxide, helium, hydrogen, methane, natural gas, nitrogen
IP66 protection
PoE and Wi-Fi connectivity
TCP/IP and RSTP capable

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