**FLIR Si1-LD Acoustic Imaging Camera for Compressed Air Leak Detection Offers Higher Performance at Accessible Price Point**

*New Acoustic Imaging Camera Helps Professional Inspectors Locate Smaller Compressed Air Leaks Faster and More Accurately*

**March. 24, 2025** – [FLIR](https://www.flir.com/), a Teledyne Technologies company, today introduced the Si1-LD, an industrial acoustic imaging camera that brings faster and more accurate compressed air leak detection to those operating on a modest condition monitoring budget. The new FLIR Si1-LD offers improved detection and quantification capabilities in comparison with the existing FLIR Si124-LD Plus, along with a higher upper limit frequency range.

Compressed air systems typically lose 25–30% of their air to leaks, resulting in proportionally higher energy bills, costly unplanned production stoppages, shorter compressor operating life, the need to purchase extra compressor capacity, and increased maintenance expenses for the additional equipment.

Leveraging the advantages of ultrasonic technology, the new FLIR Si1-LD pinpoints leaks with enhanced imaging sensitivity at an affordable price. It offers a number of stand-out capabilities and features:

* An array of 96 microphones (2–100 kHz) facilitates the automatic detection, location, and measurement ofcompressed air and vacuum leaks from a safe distance of up to 130 m. Support comes from a 12 MP color camera with 8× digital zoom and LED lamp, facilitating the easy capture of visual details.
* Bandpass filtering allows inspectors to effectively tune out any confusing and/or incorrect sources of ultrasound without manual tuning. Ideal for challenging leak detection applications where user input is advantageous, the inspector simply uses the bandpass filter to undertake manual tuning of the required frequency range and clearly displays the source of interest on very rare occasions when needed.
* Single-handed operation of the lightweight, compact FLIR Si1-LD ultrasonic imager and industry-leading AI makes for an easy-to-use device with minimal training – perfect for fast-paced inspections across large facilities.
* The touch-screen interface displays high-resolution images for easy issue identification with real-time, on-device quantification in terms of leak volume flow rate and leak cost per year. Users can leverage this data to prioritize repairs. The data is also suitable for inclusion in sustainability reports as an indication of energy reduction initiatives.
* Wireless data transfer ensures seamless reporting/analytics options, using either the online FLIR Acoustic Viewer or offline FLIR Thermal Studio effortless data backup and organizational team sharing, while also providing the backbone for Over The Air (OTA) firmware updates. The software gives users the ability to create reports through pre-built or fully customizable templates.

“Many manufacturing and process plants are seeing their energy bills creep up through leaky compressed air systems, increasing OPEX [operational expenditure] and eroding margins,” said Darrell Taylor, Global Acoustic Business Development Manager at FLIR. “If you want to find leaks quickly and easily with minimal technician training, our new Si1-LD industrial acoustic imaging camera provides a fast and precise solution that supports sustainable manufacturing. As well as reduced energy consumption, the new device helps you save on maintenance, repair, operation, and capital/OPEX costs —all while enhancing worker safety. With its minimum detected leak rate [MDLR] of 0.01 L/min at 2.5 m​, our Si1-LD offers the market’s best combination of performance and ease-of-use in its price point.”

The new acoustic imaging camera comes with two batteries, additional battery cover, battery charger, camera neck strap, hard case, USB memory stick, access to free versions of online & offline acoustic analysis and reporting software, and two-year warranty. A new accessory is the data transfer cable. This handy cable allows users to connect directly from the camera to a PC/laptop, supporting easy file access at organizations that forbid the use of WiFi and USB drives. Users can upload their acoustic images into FLIR Thermal Studio software or the FLIR Acoustic Viewer

Two versions of the Si1-LD are available, with and without WiFi. All other features are the same.

To learn more about the FLIR Si1-LD, please visit: [www.flir.eu/Si1-LD](http://www.flir.eu/Si1-LD)

**ABOUT FLIR, A TELEDYNE TECHNOLOGIES COMPANY**

FLIR, a Teledyne Technologies company, is a world leader in intelligent sensing solutions for industrial applications with thousands of employees worldwide. Founded in 1978, the company creates advanced technologies to help professionals make better, faster decisions that save lives and livelihoods. For more information, please visit [www.teledyneflir.com](http://www.teledyneflir.com/) or follow @flir.