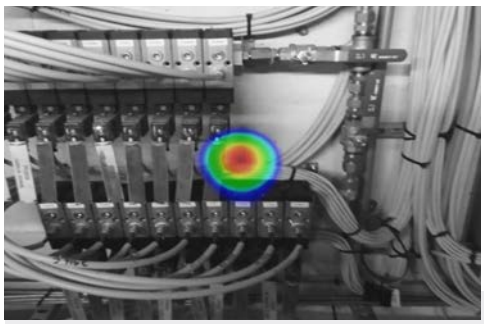
TELEDYNE FLIR

Industrial Acoustic Imaging Camera for Compressed Air Leak Detection

FLIR Si124-LD™

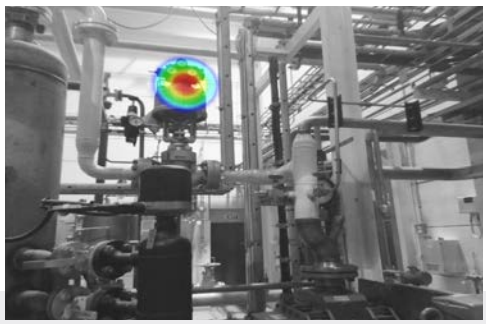
The FLIR Si124-LD is an easy-to-use, stand-alone system for locating pressurized leaks in compressed air systems. This lightweight, one-handed solution is designed to help maintenance, manufacturing, and engineering professionals identify air leaks up to 10 times faster than with traditional methods. Built with 124 microphones, the Si124-LD produces a precise acoustic image that visually displays ultrasonic information, even in loud, industrial environments. The acoustic image is overlaid in real time on a digital camera picture, allowing the user to accurately pinpoint the source of the sound. Equipped with the FLIR Acoustic Camera Viewer cloud service, this smart tool automatically saves images to the cloud after they're captured. Users can then access stored files and separate sound sources for deeper analysis and classification of problems. Through a regular maintenance routine, the FLIR Si124-LD can help facilities save money on utility bills and delay the expense of installing new compressors.



FIND LEAKS FASTER

Detect compressed air leaks up to 10 times faster with ultrasonic imaging vs. traditional methods

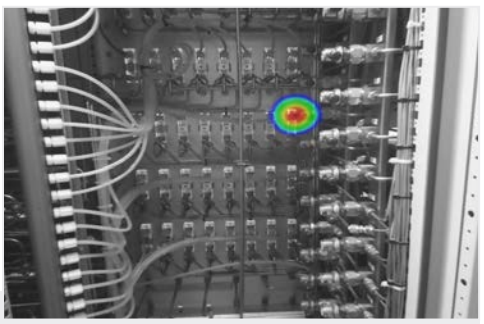
- Quickly locate leaks and automatically upload, analyze, and classify problems to improve the reliability in production lines
- Locate leaks precisely, even in loud industrial environments, thanks to high-resolution acoustic images and 124 built-in microphones
- Instantly view the leak rate onscreen in real time (l/min or CFM)



REDUCE COSTS, SAVE MONEY

Minimize excess costs resulting from compressed-air leaks

- Delay the expense of installing new or additional compressors by maintaining existing ones
- Reduce rejected product that could be caused by pressure loss in pneumatic systems
- Quantify leak size to understand how much energy was lost and the amount of money saved by discovering the problem
- Optimize staff time, as minimal training is required to use Si124-LD



INSPECT EASILY

Quantify the severity of air leaks in real time with this smart, convenient tool

- Validate problems in real time
- Upload, store, and backup data; create reports; and conduct deep analysis using FLIR Acoustic Camera Viewer cloud analytics
- Operate the lightweight camera with one hand, and easily review images on-screen even in bright, outdoor conditions

SPECIFICATIONS

Acoustic specifications	Si124-LD
Acoustic measurement	124 low-noise MEMS microphones, real-time sound visualization
Sensitivity, accuracy	<-15 dB (frequency-dependent)
Dynamic range	>120 dB (frequency-dependent)
Bandwidth	2 kHz to 35 kHz, adjustable range
Distance	From 0.3 m (1.0 ft) up to 130 m (430 ft)
Leak Rate	In typical industrial environment: • >0.032 l/min @ 3 bar from 3 m (9.8 ft) • >0.05 l/min @ 3 bar from 10 m (32.8 ft) Absolute minimum detection in quiet environment: 0.016 l/min @ 1.2 bar from 0.3 m (1.0 ft)
User interface	
Display	Size: 5 in, 800 × 480 Color: 24-bit RGB Brightness: 1000 cd/m² (adjustable)
Input device	Resistive touchscreen
Power On indicator	Red LED
Video image resolution	800 × 480
Video frame rate	25 fps
Acoustic image frame rate	30 fps
Zoom	2x digital zoom
Communication and data storage	
Wireless data transfer	Wi-Fi 2.4 GHz and 5 GHz IEEE 802.11.b/g/n/ac wireless LAN
Storage, internal	32 GB/2000 snapshots (typical) on non-removable SD card
Storage, external	8 GB/500 snapshots (typical) on USB mass storage, provided with device
Power supply	
Nominal input voltage	12 V; max input: 15 V, 2.5 A
External battery	LiFePO 12 V 7 Ah, 84 Wh Usage: up to 7 h (depends on ambient conditions) Charge time: 4 to 6 h Max output: 13.8 V, 4.0 A
Battery charger	Input: 100-240 V AC, 50/60 Hz 1.3 A Max output: 14.6 V, 4.0 A
Internal battery (only for camera backup use)	Li-Ion 6 Wh

Environmental	
Operating and storage temperature range	Recommended: -10°C to 50°C (14°F to 122°F)
Operating and storage humidity	Recommended: 0 to 90%
Physical data	
Camera size	273 × 170 × 125 mm (10.7 × 6.7 × 4.9 in)
Camera weight	Camera: 980 g (2.2 lbs)
Battery size	90 × 145 × 65 mm (3.5 × 5.7 × 2.6 in)
Battery weight	985 g (2.2 lbs)
Total weight, incl. all accessories	2.9 kg (6.4 lbs)
Battery cord length	0.75 m (2.46 ft), extended 1.5 m (4.92 ft)

Included in the Box

NASDAQ: TDY

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