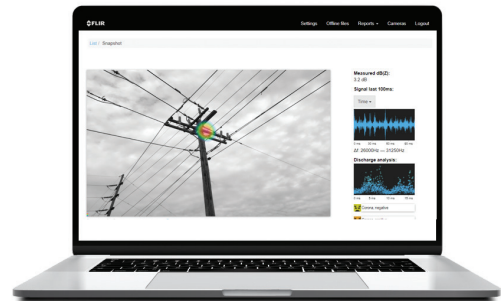
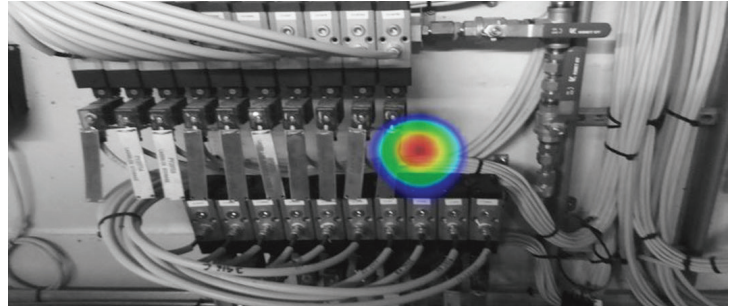


FLIR Si124™

Industrial Acoustic Imaging Camera



www.flir.com/Si124

FIND LEAKS 10x FASTER

Reduce electricity waste and optimize equipment performance

- Pinpoint costly compressed air leaks in noisy industrial environments
- Instantly view the leak rate (l/min or CFM) and estimate yearly energy cost
- Extend compressor life by eliminating wasted output
- Combine leak reporting with thermography inspection in FLIR Thermal Studio software

SEE PD AND CORONA

Minimize equipment failures and downtime that result from PD/corona issues

- Classify partial discharge type including negative corona, positive and negative corona, floating discharge, and surface or internal discharge
- Identify corona discharge day or night, allowing quick replacement of defective components before a catastrophic failure
- Operate the lightweight camera with one hand for safety and reduced strain

VISUALIZE, CLASSIFY, QUANTIFY

Conduct offline and online analysis and reporting with FLIR Thermal Studio desktop suite or FLIR Acoustic Camera Viewer cloud software

- Automatically upload, store, and back up images and data to the cloud and conduct deep analysis
- Quickly calculate estimated yearly energy expense caused by a compressed air/vacuum leak
- Assess whether service or replacement are needed by classifying PD/corona types instantly
- Determine the level of threat from partial discharge with AI powered automatic discharge classification, severity assessment, and recommended action for partial discharge inspections

SPECIFICATIONS

FLIR Si124	
Acoustic measurement	124 low-noise MEMS microphones, real-time sound visualization
Dynamic range, low limit	<15 dB (frequency-dependent)
Dynamic range, high limit	>120 dB (frequency-dependent)
Bandwidth	2 kHz to 65 kHz, adjustable range
Distance	From 0.3 m (1 ft) up to 130 m (430 ft)
Discharge detection	Automatic detection 50 / 60 Hz
Discharge classification	- Negative corona - Positive and negative corona - Floating discharge - Surface or internal discharge PRPD pattern provided in FLIR Acoustic Camera Viewer or FLIR Thermal Studio.
Severity assessment	Automatic AI-based severity assessment including recommended actions in FLIR Acoustic Camera Viewer or FLIR Thermal Studio
Leak detection and quantification	Automatic leak recognition including estimated leak size and annual cost
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 ft)

User interface	
Display	Size: 5 in, 800 × 480 pixels Color: 24 bit RGB Brightness: 1000 cd/m² (adjustable)
Input device	Resistive touchscreen
Power On indicator	LED (red)
Video image resolution	800 × 480
Camera FOV	62° × 49°
Video frame rate	25 fps
Acoustic image frame rate	30 fps
Zoom	2x digital zoom

Specifications are subject to change without notice.
For the most up-to-date specs, go to www.flir.com/Si124

Analysis parameters

Distance: 25 m

Voltage: 69 kV

Location: ~ cable joint

Severity

very high
high
medium
low

Description:

This is likely to be a very strong surface or internal discharge. Surface or internal discharges on cables, terminations, and joints will progress over time and might rapidly escalate to insulation breakdown.

Recommendation:

Immediate action. Visual inspection. Cleaning of polluted surfaces. Repair or replacement of the components.

For more information contact: Sales@TeledyneFLIR.com
or to find your local support number, visit: flir.com/contactsupport



Analysis and reporting	
Online	FLIR Acoustic Camera Viewer (cloud service)
Offline	FLIR Thermal Studio (desktop software)
Communication and data storage	
Data transfer	- Wi-Fi 2.4 GHz and 5 GHz IEEE 802.11.b/g/n/ac wireless LAN - USB memory stick
Camera software update	- Automatic over Wi-Fi - USB via computer
Still images	Yes
Video recording	Yes, up to 5 minutes
Storage, internal	32 GB / 2000 snapshots (typical) SD card, non-removable
Storage, external	8 GB / 500 snapshots (typical) USB mass storage, provided with device
Power supply	
Camera power input	Nominal input voltage 12 V Max input: 15 V, 2.5 A
Replaceable battery	Li-ion rechargeable battery pack (RRC 2040): 10.8 V, 3.35 Ah, 36.2 Wh Usage: more than 2 h (depends on ambient conditions) Charge time: 4 to 6 h Max output: 12.6 V, 4 A
Battery charger	Input: 19 to 26 VDC, 2.8 A Max output: 17.4 VDC, 4.8 A
Internal battery (only for camera backup use)	Li-ion 6 Wh
Environmental data	
Operating temperature range	-10°C to 50°C (14°F to 122°F)
Storage temperature range	-20°C to 70°C (-4°F to 158°F)
Relative humidity	Recommended 0 to 90%
Physical data	
Camera size	315 mm × 169 mm × 160 mm (12.4 in × 6.6 in × 6.3 in)
Camera weight	1.08 kg (2.38 lb)
Battery size	85 mm × 59 mm × 22 mm (3.34 in × 2.31 in × 0.86 in)
Battery weight	0.17 kg (0.37 lb)
Total weight (camera and battery)	1.25 kg (2.76 lb)

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited.

For assistance with confirming the Jurisdiction & Classification of Teledyne FLIR, LLC products, please contact exportquestions@flir.com.

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