



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

www.flir.com/Si2-LD



#### **SPECIFICATIONS**

124 low-noise MEMS microphones, real-time sound visualization
20 kHz: -15 dB SPL 35 kHz: 4 dB SPL 50 kHz: 10 dB SPL 80 kHz: 36 dB SPL 100 kHz: 51 dB SPL
2 kHz to 130 kHz
From 1° up to 0.125°
From 0.3 m (1.0 ft) up to 200 m (656 ft)
Automatic leak recognition including estimated leak size and annual cost
0.0032 l/min from 2.5 m, 0.0044 l/min from 6 m
Detects all gases provided they are under sufficient pressure. Quantifies leak rate costs for compressed air, ammonia, argon, carbon dioxide, helium, hydrogen, methane, natural gas, and nitrogen.
Mechanical fault detection
12 MP color
75° diagonal
Camera: 60 fps; Acoustic image: 30 fps; Screen: 70 fps
8x Digital zoom
1280 × 720

 $Specifications \, subject \, to \, change. \, For \, the \, most \, up-to-date \, specifications, \, please \, visit \, flir.com, \, constant \, constant$ 

#### **Key Features**

- Detects, locates, and measures compressed air and gas leaks; including bearing fault detection, from up to 200 m (656 ft) away
- Built-in measurement and cost analysis for industrial gases including ammonia, hydrogen, CO<sub>2</sub>, methane, helium, and argon
- One-handed operation with automatic tuning, 8x zoom, and a 12 MP digital camera
- Mechanical fault mode, automatic selection, and optimization of filters simplifies finding critical mechanical issues, such as bearing faults
- Fleet management functionality for efficient tool usage and maintenance across large-scale operations

#### Main Applications

- Detecting and quantifying leaks in manufacturing, production, and assembly applications; in all applications using compressed air
- Early leak detection for enhancing safety and compliance while minimizing costly repairs
- Rapid, accurate leak detection, boosting efficiency and client satisfaction in compressed air and gas system maintenance
- Mechanical fault mode to detect faulty bearings to help plan repairs and avoid downtime

User Interface		
User interface		
Display	Size: 5 in. 1280 × 720	
	Resistive touch screen, TFT LCD, MIPI DSI	
Integrated flashlight	LEDs, two modes: ON / OFF	
Analysis and Reporting		
Online	FLIR Acoustic Camera Viewer (cloud service) https://acousticviewer.flir.com	
Offline	1,	
- Crimic	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, Acoustic USB Adapter Cable	
Camera software update	Automatic Over The Air (OTA) wireless update or via USB connection	
Still image format	.nlz and .jpg	
Video recording & format	Up to 5 minutes (.nlz format)	
Storage, internal	128 GB (SD card)	
Storage, external	USB 8 GB, Cloud storage capacity is unlimited	
Image annotations	Image tags, comments, and GPS coordinates	
Power Supply		
Camera power input	Nominal input voltage: 12 V DC Max input: 17 V DC , 3.3 A (limited)	
Battery	Li-lon rechargeable battery pack (RRC 2054):14.4 V DC, 3.45 Ah, 49.68 Wh Usage: Up to 2.5 h Charge time: approx. 2 h Max output: 16.8 V DC, 5 A	



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#### SPECIFICATIONS, CONT.

Battery charger	Input: 19–26 V DC, 2.8 A	
	Max output: 17.4 V DC, 4.8 A	
Environmental Data		
Operating temperature range	-10°C to 50°C (14°F to 122°F)	
Storage temperature range	-20°C to 50°C max -20°C to 25°C recommended (determined by the battery)	
Relative humidity	0–90% recommended	
EMC	CFR47 FCC Part 15 Subpart B	
Radio	CFR47 FCC Part 15 Subpart C/E, ETSI EN 301 489-1/- 17, ETSI EN 300 328, ETSI EN 301 893	
Ingress protection	IP54	
Safety	IEC 62368-1	
Declaration of conformity	See: https://support.flir.com/resources/DoC	
Physical Data		
Camera size	184 x 276 x 167 mm (7.2. x 10.8 x 6.5 in)	
Camera weight	~ 1.2 kg	
Battery size	85 × 77 mm (RRC2504)	
Battery weight	~ 0.25 kg	
Total weight	~ 1.45 kg (camera + battery)	

Warranty and Service		
Warranty	http://www.flir.com/warranty/	
Shipping Information		
Packaging, type	Cardboard box	
Packaging, contents	Camera Battery (2 ea) Battery charger Power cable (4 ea) Neck strap Hard transport case License card: FLIR Si-series Plugin for FLIR Thermal Studio, Perpetual license Printed documentation USB memory stick	
Packaging, weight	6 kg (13 lb)	
Packaging, size	365 x 190 x 490 mm (14.4 x 7.5 x 19.3 in)	
EAN-13	7332558035719	
UPC-12	845188033651	
P/N	T912604	

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For more information about FLIR Si2-LD™ please scan or visit:

