Key Features

- Automatically detects compressed air and vacuum leaks from up to 130 meters (427 feet) away.
- Noise suppression technology ensures uninterrupted use in noisy industrial environments, improving accuracy and usability.
- Band-pass filter enables manual tuning of the frequency range for precise inspections.
- Lightweight design enables intuitive, single-handed operation, ideal for fast-paced inspections across large facilities.
- Touch-screen interface captures high-resolution images with real-time quantifiable leak-rate and cost prediction for prioritizing repairs.
- Seamless reporting options, including online analysis via FLIR Acoustic Viewer and offline reporting with FLIR Thermal Studio software.

Main Applications

- Leak detection in manufacturing and process industries
- Preventative maintenance and equipment optimization
- Energy efficiency and compliance

SPECIFICATIONS

Measurement & Analysis	
Acoustic measurement	96 low-noise MEMS microphones, real-time sound visualization
Detection threshold	20 kHz: –5 dB 35 kHz: 9 dB 50 kHz: 15 dB 80 kHz: 41 dB 100 kHz: 56 dB
Bandwidth	2 kHz to 100 kHz
Directional resolution	From 1° up to 0.125°
Operating distance	From 0.3 m (1.0 ft) up to 130 m (427 ft)
Auto distance	Automatic distance up to 5 m (16.45 ft)
Leak localization and detection	Automatic leak recognition including estimated leak size and annual cost
Leak rate detection threshold	0.5 m: 0.004 l/min 2.5 m: 0.010 l/min 6.0 m: 0.017 l/min
Autofilter, automatic frequency selection	No
Band-pass filter	Yes
Supported gases	Compressed air
Mechanical mode	No

Imaging & Optical	
Digital camera	12 MP color
Camera field of view	65° diagonal
Video frame rate	Camera: 60 fps / Acoustic image: 30 fps / Screen: 70 fps
Zoom	8x Digital zoom
Video image resolution	1280 × 720

User Interface	
Display	Size: 5 in. 1280 × 720, Resistive touch screen, TFT LCD, MIPI DSI
Integrated flashlight	LEDs, two modes: ON / OFF

Analysis & Reporting	
Online	FLIR Acoustic Viewer (cloud service) https://acousticviewer.flir.com
Offline	FLIR Thermal Studio (desktop software)

Communication & 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 image format	.nlz and .jpg
Video recording & format	Up to 5 minutes (.nlz format)
Storage, internal	32 GB (SD card)
Storage, external	8 GB (USB), Cloud storage capacity is unlimited
Image annotations	Image tags and comments

Power	
Camera power input	Nominal input voltage: 12 V DC Max input: 17 V DC, 3.3 A (limited)
Battery	Li-ion 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
Battery charger	Input: 19 V to 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 (–4°F to 122°F) max –20°C to 25°C (–4°F to 77°F) recommended
Relative humidity	0% to 90% recommended
EMC	CFR47 FCC Part 15 Subpart B,

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

SPECIFICATIONS, CONT.

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 mm x 276 mm x 167 mm (7 in x 11 in x 6 in)
Camera weight	~ 1.2 kg
Battery size	85 mm × 77 mm (RRC2504)
Battery weight	~ 0.25 kg
Total weight (camera + battery)	~ 1.45 kg
Warranty & Service	
Warranty	http://www.flir.com/warranty/

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

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	490 mm × 365 mm × 190 mm (19.3 in × 14.4 in × 7.5 in)
EAN-13	7332558035139
UPC-12	845188032838
P/N	Si1-LD: T912537 Si1-LD (No Wi-Fi): T912544

For more information about FLIR Si1-LD™, please scan or visit:

For technical or sales support, please visit:
www.flir.com/about/general-inquiries