FLIR Si2 LD

datasheet

SENSOR PARTNERS

FLIR Si2-LD™

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

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_2, 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

www.flir.com/Si2-LD

SPECIFICATIONS

Acoustic Measurement	
Detection threshold	20 kHz: -7 dB SPL 35 kHz: 4 dB SPL 50 kHz: 10 dB SPL 80 kHz: 36 dB SPL 100 kHz: 51 dB SPL
Bandwidth	2 kHz to 130 kHz
Directional resolution	From 1° up to 0.125°
Operating distance	From 0.3 m (1.0 ft) up to 200 m (656 ft)
Leak localization and detection	Automatic leak recognition including estimated leak size and annual cost
Leak rate detection threshold	0.0032 l/min from 2.5 m, 0.0044 l/min from 6 m
Supported gases	Compressed air, hydrogen, CO_2, methane, natural gas, helium, argon, ammonia
Other acoustic analysis modes	Mechanical fault detection
Imaging & Optical	
Digital camera	12 MP color
Camera field of view	75° 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, three modes off, normal and bright
Analysis and Reporting	
Online	FLIR Acoustic Camera Viewer (cloud service) www.acousticviewer.flir.com
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 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 and comments
(continued)	

For more information and to find your local support number, visit:
FLIR.com/contact/instruments-support
www.FLIR.com

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