



FLIR Si2 PRO

datasheet



SENSOR
PARTNERS



FLIR Si2-Pro™

Industrial Acoustic Imaging Camera for Partial Discharge Detection, Pressurized Leak Detection and Mechanical Fault Detection



Key Features:

- Mechanical fault detection for early identification of bearing problems, preventing costly downtime
- Quantify leak rate and cost of industrial gas and compressed air leaks, to prioritize repair and calculate savings
- On-camera and in-software severity assessment and type classification of partial discharge (PD) issues
- Automatic frequency tuning, 8x zoom, 12 MP digital camera, IP54 rating, and a QR code reader
- Fleet management functionality for efficient tool usage and maintenance across large-scale operations

Main Applications:

- Ideal for routine inspections and preventative maintenance in various industrial settings
- Ensures adherence to safety standards by identifying potential hazards in bearings and gas systems
- Aids in managing and reducing operational costs through early leak detection and analysis
- Mechanical fault mode to detect faulty bearings to help plan repairs and avoid downtime

www.flir.com/Si2-Pro

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	2-130 kHz
Directional resolution	From 1° up to 0.125°
Operating distance	From 0.3 m (1.0 ft) up to 200 m (656 ft)
Severity assessment	Automatic AI-based severity assessment including recommended actions onboard camera
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 x 720
User Interface	
Display	Size: 5 in. 1280 x 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	.niz and .jpg
Video recording & format	Up to 5 minutes (.niz format)
(continued)	

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

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Revised 02/23/24
FLIR_Si2-Pro_datasheet-A4-24-0111



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