FLIR

FLIR Si124™

The FLIR Si124 is an easy-to-use, stand-alone system for detecting partial discharge problems in high voltage electrical systems. This lightweight, one-handed solution is designed to help maintenance, manufacturing, and engineering professionals identify issues up to 10 times faster than with traditional methods. Built with 124 microphones, the Si124 produces a precise acoustic image that visually displays ultrasonic information, even in loud industrial environments. The acoustic image is transposed in real time on top of a digital camera picture, which allows the user to accurately pinpoint the source of the sound. Equipped with the FLIR Acoustic Camera Viewer cloud service, this smart tool automatically saves images to the cloud after they're captured. Users can then access stored files and separate sound sources for deeper analysis and classification of problems. Through a regular maintenance routine, the FLIR Si124 can help facilities save money on utility bills.
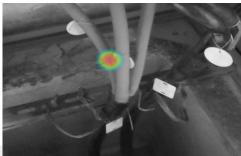
www.flir.com/si124

FIND PARTIAL DISCHARGE PROBLEMS FASTER

Detect partial discharge and coronas up to 10 times faster with sound imaging vs. traditional methods

- Locate problems precisely, even in loud industrial environments, thanks to high-resolution acoustic images and 124 built-in microphones

- Optimize staff time, as minimal training is required to use Si124

- View visual and sound images simultaneously

IMPROVE RELIABILITY

Minimize equipment failures and downtime that result from partial discharge issues

- Analyze partial discharge pattern and classify problems to improve reliability of electrical systems

- Classify partial discharge type, including surface discharge, floating discharge, and discharge into air

- Evaluate frequency to determine the type and severity of the discharge, which allows maintenance to be scheduled

INSPECT EASILY

Locate, analyze, and classify discharge with this convenient, smart tool

- Safely detect problems from a distance up to 100 m (328 ft)

- Upload, store, and backup data; create reports; and conduct deep analysis using FLIR Acoustic Camera Viewer cloud analytics

- View images in the cloud immediately after capture thanks to the automatic upload feature

- Operate the lightweight camera with one hand, and easily review images on-screen even in bright, outdoor conditions

SPECIFICATIONS

Acoustic specifications	Si124
Acoustic measurement	124 low-noise MEMS microphones, real-time sound visualization
Sensitivity, accuracy	<0 dB
Dynamic range	>120 dB
Bandwidth	2 kHz to 31 kHz, adjustable range
Distance	From 0.3 m (1.0 ft) up to 100 m (328 ft)
Discharge classification	• Discharge into air • Surface discharge • Floating discharge

User interface	
Display	Size: 5 in, 800 × 480 Color: 24 bit RGB Brightness: 1000 cd/m² (adjustable)
Input device	Resistive touchscreen
Power On indicator	Red LED
Video image resolution	1640 × 1234
Video frame rate	25 fps
Acoustic image frame rate	30 fps
Zoom	2x digital zoom

Communication and data storage	
Wireless data transfer	Wi-Fi 2.4 GHz and 5 GHz IEEE 802.11.b/g/n/ac wireless LAN
Storage, internal	32 GB SD card, non-removable
Storage, external	8 GB USB mass storage, provided with device

Power supply	
Nominal input voltage	12 V Max input: 15 V 2 A
External battery	LiFePO 12 V 7 Ah, 84 Wh Usage: 7 h (depends on ambient conditions) Charge time: 4 to 6 h
Battery charger	Input: 100-240 V ~ 50/60 Hz 1.5 A Max output: 13.8 V, 4.0 A
Internal battery (only for camera backup use)	Li-Ion 6 Wh

Environmental	
Operating and storage temperature range	Recommended -10°C to 50°C (14°F to 122°F)
Operating and storage humidity	Recommended 0 to 90%

Physical data	
Camera size	273 × 170 × 125 mm (10.7 × 6.7 × 4.9 in)
Camera weight	Camera: 980 g (2.2 lb)
Battery size	90 × 145 × 65 mm (3.5 × 5.7 × 2.6 in)
Battery weight	985 g (2.2 lb)
Total weight, incl. all accessories	2.9 kg (6.4 lb)
Battery cord length	0.9 m (3.0 ft), extended 2 m (6.6 ft)

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

◆FLIR® | The World's Sixth Sense®