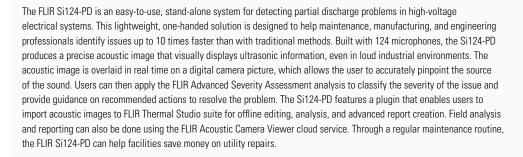
FLIR Si124-PD™

Industrial Acoustic Imaging Camera for Partial Discharge Detection







Detect partial discharge and corona up to 10 times faster with ultrasonic 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 the Si124-PD
- View visual and sound images simultaneously
- Operate the lightweight camera with one hand and easily review images on-screen, even in bright, outdoor conditions



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 negative corona, positive and negative corona, floating discharge, and surface or internal discharge
- Evaluate frequency to determine the type and severity of discharge, allowing maintenance to be scheduled



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

- Safely detect problems from distances up to 130 m (430 ft)
- Upload, store, and back up data; create reports; and conduct deep analysis using FLIR Acoustic Camera Viewer cloud analytics
- View images in the cloud immediately after capture thanks to automatic upload feature
- Determine the level of threat from partial discharge with Advanced Severity Assessment software analytics

CREATE ADVANCED REPORTS

Edit and analyze images and create extensive reports with FLIR Thermal Studio suite

- Customize templates and combine acoustic and thermal images in the same report
- Preview, open, and post-process images and make adjustments in reports; continue to work where you left off the day before
- Includes predefined report templates
- Features Rapid Report generator









SPECIFICATIONS

FLIR Si124-PD			
Acoustic measurement	124 low-noise MEMS microphones, real-time sound visualization		
Dynamic range, low limit	<-15 dB (frequency-dependent)		
Dynamic range, high limit	>120 dB (frequency-dependent)		
Bandwidth	2 kHz to 35 kHz, adjustable range		
Distance	From 0.3 m (1 ft) up to 130 m (430 ft)		
Discharge detection	Automatic detection 50 / 60 Hz		
Discharge classification	Negative corona Positive and negative corona Floating discharge Surface or internal discharge PRPD pattern provided in FLIR Acoustic Camera Viewer or FLIR Thermal Studio		
Severity assessment	Automatic Al-based severity assessment including recommended actions in FLIR Acoustic Camera Viewer or FLIR Thermal Studio.		
User interface	'		
Display	Size: 5 in, 800 × 480 pixels		
	Color: 24 bit RGB		
	Brightness: 1000 cd/m² (adjustable)		
Input device	Resistive touchscreen		
Power On indicator	LED (red)		
Video image resolution	800 × 480		
Camera FOV	62° × 49°		
Video frame rate	25 fps		
Acoustic image frame rate	30 fps		
Zoom	2x digital zoom		
Analysis and reporting			
Online	FLIR Acoustic Camera Viewer (cloud service)		
Offline	FLIR Thermal Studio (desktop software)		

Included	in	the	box	
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Communication and data storag			
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 images	Yes		
Video recording	Yes, up to 5 minutes		
Storage, internal	32 GB / 2000 snapshots (typical) SD card, non-removable		
Storage, external	8 GB / 500 snapshots (typical) USB mass storage, provided with device		
Power supply			
Camera power input	Nominal input voltage 12 V Max input: 15 V, 2.5 A		
External battery	LiFePO 12 V, 7 Ah, 84 Wh Usage: Up to 7 hours (depends on ambient conditions) Charge time: 4 to 6 hours Max output: 13.8 V, 4.0 A		
Battery charger	Input: 100 to 240 V AC, 50/60 Hz, 1.3 A Max output: 14.6 V, 4.0 A		
Internal battery (only for camera backup use)	Li-lon 6 Wh		
Environmental data			
Operating temperature range	-10°C to 50°C (14°F to 122°F)		
Storage temperature range	-20°C to 70°C (-4°F to 158°F)		
Physical data			
Camera size	273 mm × 170 mm × 125 mm (10.7 in × 6.7 in × 4.9 in)		
Camera weight	Camera: 980 g (2.2 lb)		
Battery size	90 mm × 145 mm × 65 mm (3.5 in × 5.7 in × 2.6 in)		
Battery weight	985 g (2.2 lb)		
Total weight, incl. all accessories	2.9 kg (6.4 lb)		
Battery cord length	0.75 m (2.46 ft), extended 1.5 m (4.92 ft)		

For a complete list of specifications, go to www.flir.com/Si124-PD $\,$

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