

FLIR Si2-PD™

Industrial Acoustic Imaging Camera for Partial Discharge Detection



Key Features:

- Detect, locate, classify, and assess partial discharge (PD) faults from up to 200 m (656 ft) away
- Identify PD 30x smaller than ever before
- On-camera and software-based severity assessment of PD issues, and PD type classification provides best-in-class decision support
- One-handed operation with automatic tuning, 8x zoom, a 12 MP digital camera, and IP54 rating
- Made for enterprise scaling through the use of fleet management functionality so that managers can ensure the tools are being used and maintained properly

Main Applications:

- Monitor transmission & distribution conductors and components at long distances easily and reduce need for emergency repairs
- Inspect substation transformers to detect PD issues early, before they result in a dangerous and costly explosion
- Find PD issues in any piece of high-voltage equipment to reduce public complaints of radio interference and audible noise

www.flir.com/Si2-PD

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 Al-based severity assessment including recommended actions onboard camera
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)	
(continued)	'	



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SPECIFICATIONS, CONT.

Storage, external	USB 8 GB, Cloud storage capacity is unlimited
Image annotations	Image tags and comments
Power Supply	
Camera power input	Nominal input voltage: 12 V DC Max input: 17 V DC , 3.3 A (limited)
Battery	Li-lon rechargeable battery pack (RRC 2054):14.4 V DC, 3.45 Ah, 49.68 Wh Usage: Up to 2.5 h (depends on ambient conditions & usage, needs to be retested and confirmed with final product) Charge time: approx. 2 h Max output: 16.8 V DC, 5 A
Battery charger	Input: 19-26 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 max -20°C to 25°C recommended (determined by the battery)
Relative humidity	0-90% recommended
EMC	CFR47 FCC Part 15 Subpart B
Radio	CFR47 FCC Part 15 Subpart C/E, ETSI EN 301 489-1/-17/- 19, ETSI EN 300 328, ETSI EN 301 893
Protection class	IP54
Safety	IEC 62368-1
Declaration of conformity	See: https://support.flir.com/resources/DoC
Physical Data	
Camera size	288 mm × 182 mm × 159 mm (11 in × 7 in × 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 and Service		
Warranty	http://www.flir.com/warranty/	
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	7332558033036	
UPC-12	845188030179	
P/N	T912305	

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

