FLIR Si2-PD

P/N: T912305

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Website

http://www.flir.com

Customer support

http://support.flir.com

General description
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

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)
Severity assessment	Automatic AI-based severity assessment including recommended actions onboard camera

Imaging and 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

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Imaging and Optical	
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

Power supply	
Camera power input	Nominal input voltage: 12 V DC Max input: 17 V DC , 3.3 A (limited)
Battery	Li-Ion 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

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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	7332558032619
UPC-12	845188029739

Supplies & accessories:

- T911987; Acoustic camera tester incl. table tripod
- T912186; Battery charger incl. power supply
- T912306; Battery for FLIR Si2 series
- T300527; FLIR Si-series Plugin for FLIR Thermal Studio, Perpetual license
- T300243; FLIR Thermal Studio Pro, 1 Year Subscription
- T300083; FLIR Thermal Studio Pro, Perpetual license
- T300341; FLIR Thermal Studio Standard, 1 Year Subscription
- T300258; FLIR Thermal Studio Standard, Perpetual license
- T850154; Thermal Studio Pro Perpetual 10 activa
- T850153; Thermal Studio Pro Perpetual 15 activa
- T850152; Thermal Studio Pro Perpetual 20 activa
- T850151; Thermal Studio Pro Perpetual 30 activa
- T850150; Thermal Studio Pro Perpetual 40 activa
- T850149; Thermal Studio Pro Perpetual 50 activa
- T850146; Thermal Studio Std Perpetual 20 activa
- T850145; Thermal Studio Std Perpetual 30 activa
- T850144; Thermal Studio Std Perpetual 40 activa
- T850143; Thermal Studio Std Perpetual 50 activa
- T850136; Thermal Studio Pro 1Y 10 activa
- T850135; Thermal Studio Pro 1Y 15 activa
- T850134; Thermal Studio Pro 1Y 20 activa
- T850133; Thermal Studio Pro 1Y 30 activa
- T850132; Thermal Studio Pro 1Y 40 activa
- T850131; Thermal Studio Pro 1Y 50 activa
- T850128; Thermal Studio Std 1Y 20 activa
- T850127; Thermal Studio Std 1Y 30 activa
- T850126; Thermal Studio Std 1Y 40 activa

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- T850125; Thermal Studio Std 1Y 50 activa