



### 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

### SPECIFICATIONS

| FLIR Si2-PD            |                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Acoustic measurement   | 124 low-noise MEMS microphones, real-time sound visualization                                                                |
| Detection threshold    | 20 kHz: -15 dB SPL<br>35 kHz: 4 dB SPL<br>50 kHz: 10 dB SPL<br>80 kHz: 36 dB SPL<br>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                                          |
| 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<br>Resistive touch screen, TFT LCD, MIPI DSI                                                          |
| Integrated flashlight  | LEDs, two modes: ON / OFF                                                                                                    |
| Analysis and Reporting |                                                                                                                              |
| Online                 | FLIR Acoustic Camera Viewer (cloud service)<br><a href="https://acousticviewer.flir.com">https://acousticviewer.flir.com</a> |
| Offline                | FLIR Thermal Studio (desktop software)                                                                                       |

Specifications subject to change. For the most up-to-date specifications, please visit [flir.com](http://flir.com).

| 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, Acoustic USB Adapter Cable                                                   |
| Camera software update         | Automatic Over The Air (OTA) wireless update or via USB connection                                                                                        |
| Still image format             | .nls and .jpg                                                                                                                                             |
| Video recording & format       | Up to 5 minutes (.nls format)                                                                                                                             |
| Storage, internal              | 128 GB (SD card)                                                                                                                                          |
| Storage, external              | USB 8 GB, Cloud storage capacity is unlimited                                                                                                             |
| Image annotations              | Image tags, comments, and GPS coordinates                                                                                                                 |
| Power Supply                   |                                                                                                                                                           |
| Camera power input             | Nominal input voltage: 12 V DC<br>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<br>Usage: Up to 2.5 h<br>Charge time: approx. 2 h<br>Max output: 16.8 V DC, 5 A |
| Battery charger                | Input: 19–26 V DC, 2.8 A<br>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                                                                                                                               |



### SPECIFICATIONS, CONT.

|                             |                                                                                                  |
|-----------------------------|--------------------------------------------------------------------------------------------------|
| Radio                       | CFR47 FCC Part 15 Subpart C/E, ETSI EN 301 489-1/-17, ETSI EN 300 328, ETSI EN 301 893           |
| Ingress protection          | IP54                                                                                             |
| Safety                      | IEC 62368-1                                                                                      |
| Declaration of conformity   | See: <a href="https://support.flir.com/resources/DoC">https://support.flir.com/resources/DoC</a> |
| <b>Physical Data</b>        |                                                                                                  |
| Camera size                 | 184 x 276 x 167 mm (7.2. x 10.8 x 6.5 in)                                                        |
| Camera weight               | ~ 1.2 kg                                                                                         |
| Battery size                | 85 x 77 mm (RRC2504)                                                                             |
| Battery weight              | ~ 0.25 kg                                                                                        |
| Total weight                | ~ 1.45 kg (camera + battery)                                                                     |
| <b>Warranty and Service</b> |                                                                                                  |
| Warranty                    | <a href="http://www.flir.com/warranty/">http://www.flir.com/warranty/</a>                        |

| Shipping Information |                                                                                                                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging, type      | Cardboard box                                                                                                                                                                                                                         |
| Packaging, contents  | Camera<br>Battery (2 ea)<br>Battery charger<br>Power cable (4 ea)<br>Neck strap<br>Hard transport case<br>License card: FLIR Si-series Plugin for FLIR Thermal Studio, Perpetual license<br>Printed documentation<br>USB memory stick |
| Packaging, weight    | 6 kg (13 lb)                                                                                                                                                                                                                          |
| Packaging, size      | 365 x 190 x 490 mm (14.4 x 7.5 x 19.3 in)                                                                                                                                                                                             |
| EAN-13               | 7332558035726                                                                                                                                                                                                                         |
| UPC-12               | 845188033668                                                                                                                                                                                                                          |
| P/N                  | T912605                                                                                                                                                                                                                               |

Specifications subject to change. For the most up-to-date specifications, please visit [flir.com](http://flir.com).

For more information  
about FLIR Si2-PD™  
please scan or visit:



For technical or sales support, please visit:  
[www.flir.com/about/general-inquiries](http://www.flir.com/about/general-inquiries)

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