The FLIR Si124 is an intelligent, easy-to-use imaging system designed to visually show pressurized leaks in compressed air systems and display partial discharge problems in high-voltage electrical systems. This lightweight, one-handed solution can help utility, manufacturing, and engineering professionals identify efficiency loss and potential failures up to 10 times faster than traditional methods. Built with 124 microphones and a frequency range that covers audible and ultrasound (2 kHz to 35 kHz), the Si124 sees through background noise commonly found in industrial environments to produce precise acoustic imagery. The acoustic image is overlaid in real time on top of a digital camera picture, which allows the user to accurately pinpoint the source of the sound and classify problems. Equipped with the FLIR Acoustic Camera Viewer cloud service, this smart tool automatically saves images to the cloud after they are captured. Users can then apply the FLIR Advanced Severity Assessment analysis to classify the severity of the issue and provide guidance on recommended actions to resolve the problem. Adopting the FLIR Si124 as part of a regular maintenance routine, professionals can identify issues fast—helping utilities keep the power flowing and manufacturing operations going.

www.flir.com/Si124
### SPECIFICATIONS

**Acoustic specifications**

<table>
<thead>
<tr>
<th>Si124</th>
</tr>
</thead>
</table>

- **Acoustic measurement**: 124 low-noise MEMS microphones, real-time sound visualization
- **Sensitivity, accuracy**: <15 dB
- **Dynamic range**: >120 dB (frequency-dependent)
- **Bandwidth**: 2 kHz to 35 kHz, adjustable range
- **Distance**: From 0.3 m (1.0 ft) up to 130 m (430 ft)
- **Compressor / Vacuum Leak Rates**
  - In typical industrial environment:
    - >0.032 l/min @ 3 bar from 3 m (9.8 ft)
    - >0.05 l/min @ 3 bar from 10 m (32.8 ft)
  - Absolute minimum detection in quiet environment: 0.016 l/min @ 1.2 bar from 0.3 m (1.0 ft)
- **Electrical discharge classification**
  - Negative corona
  - Positive and negative corona
  - Floating discharge
  - Surface or internal discharge
  - PRPD pattern provided in FLIR Acoustic Camera Viewer cloud service.

**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**: 800 × 480
- **Video frame rate**: 25 fps
- **Acoustic image frame rate**: 30 fps
- **Zoom**: 2x digital zoom

**Communication and data storage**

- **Wi-Fi**: 2.4 GHz and 5 GHz IEEE 802.11.b/g/n/ac wireless LAN
- **Storage, internal**: 32 GB/2000 snapshots (typical) on non-removable SD card
- **Storage, external**: 8 GB/500 snapshots (typical) USB mass storage, provided with device

**Power supply**

- **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 h (depends on ambient conditions)
  - Charge time: 4 to 6 h
  - Max output: 13.8 V, 4.0 A
- **Battery charger**: Input: 100-240 V AC, 50/60 Hz 1.3 A
  - Max output: 14.8 V, 4.0 A

**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: 988 g (2.2 lbs)
- **Battery size**: 90 × 145 × 65 mm (3.5 × 5.7 × 2.6 in)
- **Battery weight**: 985 g (2.2 lbs)
- **Total weight**: 2.9 kg (6.4 lbs)
- **Battery cord length**: 0.75 m (2.46 ft), extended 1.5 m (4.92 ft)

**Included in the Box**

- Camera, camera pouch, hand strap, USB memory stick, and battery with cable, charger, and pouch

---

**Wilsonville**

27700 SW Parkway Ave.
Wilsonville, OR 97070
USA
Ph: +1 866.477.3687

**Nashua**

9 Townsend West
Nashua, NH 03063
USA
Ph: +1 866.477.3687

**Latin America**

Av. Antonio Bardella, 320
Sorocaba, SP 18085-852
Brasil
Ph: +55 15 3238 8070

**Canada**

3430 South Service Road, Suite 103
Burlington, ON L7N 3J6
Canada
Ph: +1 800.613.0507

**www.teledyneflir.com**

NASDAQ: TDY

Equipment described herein is subject to US export regulations and may require a license prior to export. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2021 Teledyne FLIR, LLC All rights reserved. Created 05/27/21

21-0617-INS