ICI | INFRARED CAMERAS INC

FIX MOUNTED ACOUSTIC IMAGING

REDUCE COSTS, IMPROVE RELIABILITY

Designed for fixed mounted monitoring applications, the Sound Detect FM leverages ultrasonic frequencies and microphone array beamforming technology to obtain sound source distribution data in real-time. Users can not only detect potential air, gas, and vacuum leaks in noisy industrial environments but also find partial discharge faults from electrical devices. The Sound Detect FM sends information related to partial discharge type, estimated leak size, and earnings loss values to a digitized monitoring station. Remote assessments can help facilities save money on utility bills, delay expensive repairs, and reduce downtime.

Sound Detect FM

FIND PROBLEMS FASTER

Built with 128 MEMS microphones, the Sound Detect FM locates pressurized leaks in compressed air systems or detects partial discharge from high-voltage electrical systems. Acoustic imaging cameras can help users classify leak severity and partial discharge type in real-time, faster than traditional air leak detection methods.

ADAPTABLE & EASY TO INSTALL

Sturdy and lightweight, the Sound Detect FM easily affixes to ceilings, walls, and poles. Users can also integrate the system into robots, cars, and other mobile units. The durable aluminum shell is rated IP56 for protection against water, dust, snow, and wind meeting the demands of industrial environments. The camera lens features an anti-glare coating for clear vision in sunny conditions.

24/7 REAL-TIME MONITORING

The Sound Detect FM acoustic system is designed for real-time remote monitoring through wireless networks as well as wide area networks. Receive accurate status information regarding equipment and automatic alarm notifications when measurements exceed user defined thresholds. Data can be recorded and archived to improve product and process traceability.

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SOUND DETECT FM
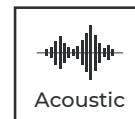
Acoustic

The Sound Detect FM is an remote monitoring system for acoustic image management and signal analysis. It uses 128 microphones to locate precise acoustic sounds and sends automatic alarms notifications to a digitized station if thresholds are exceeded. More sensitive and accurate than the human ear, the Sound Detect FM can locate and identify leaks faster with sound imaging vs. traditional methods. SDK is available.

Features

- 128 MEMS microphones to detect more, faster
- 24/7 real-time acoustic monitoring
- Environmental indoor/outdoor
- 4 area boxes to marks regions of interest
- Integrates into existing networks
- Affix to ceilings, walls, and poles
- Install on drones, cars, and robots
- Automatic alarms

Applications

- 24/7 remote monitoring
- Gas leak detection
- Partial discharge
- Plant/General maintenance
- Home/building Inspections
- Acoustic applications

Accessories

- RJ45 Ethernet cable
- 8 GB Micro-SD card
- SDK available

Specifications

- **Acoustic Measurement:** 128 MEMS microphones
- **Dynamic Range:** 25.7 dB to 132.5 dB
- **Bandwidth:** 2 kHz to 48 kHz, settings dependent
- **Distance:** 25 m (82') recommended, up to 120 m (394')
- **Operation Range:** -10 °C to 50 °C (14 °F to 122 °F)
- **Storage Range:** -20 °C to 60 °C (-4 °F to 140 °F)
- **Humidity:** 10% to 95%, non-condensing
- **Dimensions:**
  183 mm X 169 mm X 85.4 mm (L x W x D ± 0.5 mm)
  (7.2" x 6.7" x 3.4" (L x W x H ± 0.02"))
- **Weight:** 1.3 kg (2.87 lbs)
- **Power:** 12V - 20V DC, ~ 14W
- **Interface:** RJ45 Ethernet port
- **Protocols:** RTSP/RTMP
- **Video Format:** H.264 streaming
- **Video Frame Rate:** 25 fps (minimum)
- **Image Format:** JPG
- **Image Polarity:** 3 options
- **Audio Format:** WAV
- **Storage:** 8 GB SD (up to 64 GB)
- **Digital Camera:** 8 MP, 3.04 mm fixed focus, 62° FOV
- **IP Rating:** IP56
- **Mounting:** 1/4" -20 UNC thread/M5 screws
- Automatic alarms
- Wireless network support

Sound Detect FM

Specifications subject to change without notice.