

# OBTAINING BETTER, FASTER RESULTS

## IMPROVE PREDICTIVE MAINTENANCE WITH ACOUSTIC TECHNOLOGY

ICI's Sound DetectAI leverages sonic and ultrasonic frequencies to quickly and reliably locate partial discharge as well as the smallest of gas leaks. Constructed with 124 individual microphones, the Sound DetectAI effortlessly detects and locates low level noise caused by equipment failures, even in the loudest industrial environments. Designed to be portable and lightweight, the acoustic imager is also extremely easy to use and requires little-to-no training. The camera also comes with a built-in processor that pinpoints a leak's location on the screen.



Sound DetectAI



## INSTANTLY IDENTIFY AIR LEAKS

The Sound DetectAI's 124 low-noise microphones makes identifying air leaks simple and up to 10 times faster than traditional air leak detection methods. With built-in processing capabilities, users can instantly identify a leak on the camera's screen, allowing for real-time analysis and problem resolution.



## INTUITIVE DESIGN

The Sound DetectAI was specifically designed for portability and ease of use. Its lightweight, ergonomic design allows users to operate the camera without need for a tripod or support device. With a simple user interface, users can operate the camera with minimal training.



## ON CAMERA ANALYTICS

Designed with a user interface that provides instant information on leak location and leak size, the Sound DetectAI allows users to quickly analyze and address the leak issue. Built-in features enable users to instantly estimate the cost of the leak and begin the process of saving energy and money.



The Sound DetectAI is a standalone system for acoustic image management and signal analysis. It uses 124 microphones to locate precise acoustic sounds and visualizes them on a 5" color touchscreen. More sensitive and accurate than the human ear, the Sound DetectAI can locate both inaudible signals, as well as source the direction of a sounds from < -15 dB to > 120 dB up to ~130 m (430') distance.

## Features

- Real-time sound visualization
- 5" color touchscreen, 800 x 480
- Environmental indoor/outdoor use
- Lightweight with carrying bag
- Cloud services

## Applications

- Gas leak detection
- Plant/General maintenance
- Home/building Inspections
- Acoustic applications

## Options & Accessories

- Battery bay accessory attachment
- **External battery:** Li-Ion, 10.80V, 3.35A, 36.20 W, IP40, 84.9 mm x 58.8 mm x 21.9 mm (3.34" x 2.31" x .86"), 170 g (5.99 lbs), Operation time: > 2h (conditions dependent), Charging time: 2-3 hours
- **Battery charger:** Input I9-26V DC, 2.8A max, Output: 17.4V DC, 4A max, 120 mm x 64 mm x 43 mm (4.7" x 2.5" x 1.7"), Operation range: 0 °C ± 40 °C (32 °F - 104 °F), 170 g (5.99 lbs)
- **Charger power supply:** Input 100-240VAC / 50-60 Hz, Output I9V DC ± 5% / 3.4A, Maximum power: 65 W, 95 mm x 51 mm x 25.4 mm (3.7" x 2" x 1"), 270 g (9.5 oz) Operation range: 0 °C ± 40 °C (32 °F - 104 °F)
- **External battery Tracer:** LiFePO<sub>4</sub>, 12V, 7A, 84 Wh, IP64, 985 g (2.2 lbs), 90 mm x 145 mm x 65 mm (3.5" x 5.7" x 2.5"), Usage time: 6 hours (conditions dependent), Charging time: 4-6 hours.
- **Battery charger Tracer:** Input 100-240V - 50/60Hz, I.3-1.5A; Max output: 13.8-14.6V, 4.0A (charger dependent, see charger documentation or charger ID-plate)
- Carry bag

## Specifications

- **Acoustic Measurement:** 124 low-noise MEMS microphones
- **Dynamic range:**
  - Low limit: < -15 dB
  - High limit: > 120 dB
- **Bandwidth:** 2 kHz to 35 kHz, settings dependent
- **Bandwidth Air leak mode:** 20 kHz to 35 kHz
- **Bandwidth Power mode:** 10 kHz to 35 kHz
- **Distance:** 0.3 m (1.0 ft), up to ~130 m (430')
- **Operation Range:** -10 °C to 50 °C (14 °F to 122 °F)
- **Storage Range:** -10 °C to 50 °C (14 °F to 122 °F)
- **Humidity:** 10% to 90%, relative
- **Dimensions:**
  - 273 mm x 170 mm x 125 mm (L x W x D ± 0.5 mm)
  - (10.7" x 6.7" x 4.9" (L x W x H ± 0.02"))
- **Weight:** 980 g (2.2 lbs), including accessories: 2.9 kg (6.4lbs)
- **Power:** 15V DC, 2.5A
- **Battery:** Li-ion, 6 W
- **External Battery Tracer:**
  - LiFePO<sub>4</sub>, 12V, 7A, 84 W, 985 g (2.2 lbs), 90 x 145 x 65 mm (3.5" x 5.7" x 2.6"), IP64
- **Battery Charger Tracer:**
  - Input 100-240V - 50/60Hz, I.3-1.5A; Max output 13.8-14.6V, 4.0A (charger dependent, see charger documentation or charger ID-plate)
- **Battery Cord Length:** 0.9 m (3.0'), extended 2 m (6.6')
- **Operation Time:** 6 hours (conditions dependent)
- **Charging Time:** 4-6 hours
- **Interface:** USB
- **Video Frame Rate:** 25 fps (max)
- **Image Resolution:** 800 x 480
- **Storage:**
  - Internal: 32 GB SD, non-removable
  - External: 8 GB USB
- **Screen:** 5" color touchscreen, 800 x 480
- **Brightness:** adjustable
- **Zoom:** 2x digital zoom
- **IP Rating:** IP51
- **Wireless data transfer:** 2.4 GHz and 5 GHz IEEE 802.11b/g/n/ac secured wireless LAN
- Cloud services
- Real-time sound visualization