



# CRY8124 Acoustic Imaging Camera

## Introduction

Introducing CRY SOUND’s cutting-edge acoustic imaging camera, revolutionizing industrial inspections with advanced capabilities. The CRY8124 acoustic imaging camera excels at pinpointing leaks, identifying electrical partial discharge, and detecting mechanical deterioration. The CRY8124 sets a new standard for sensitivity and efficiency. Featuring 200 microphones (the most in the industry), the CRY8124 allows smaller leaks and partial discharges to be detected at a greater distance.

The CRY8124 reporting software allows offline analysis, editing, and report generation, simplifying regular maintenance routines.

Elevate the CRY8124 effectiveness of your industrial inspections with CRY SOUND’s acoustic cameras.

## Features

- Realtime far-field sound source localization and visualization
- Leak detection and leak rate for all compressed (non-volatile) gasses
- Partial discharge detection and type recognition for insulators and switch gears
- Mechanical inspection for predictive maintenance for bearings and conveyors
- Report generation for critical data sharing

## Highlights

- **The Best Performance in the Industry**

With 200 microphones, 100kHz bandwidth, and the fastest processor in the industry, the CRY8124 can pinpoint smaller leaks and partial discharges at a greater distance than any other system.

- **8 Inch, 2M Pixel Display for Clear Insights Into Problems**

The CRY8124 display features 2K resolution, 6X digital zoom, and 600 nits display brightness for accurate viewing of field conditions in full sunlight.

- **Multiple Communication Methods**

Bluetooth and WiFi enable direct data transmission to local devices.

- **4 IEPE Sensor Inputs Enables a Wider Range of Applications**

Up to 4 IEPE sensors (accelerometers, microphones, etc.) and thermal camera can be added to the system enabling complex detection scenarios and allowing for future expansion.

- **Up to 10 Hours of Operation**

A single rechargeable Li-ion battery provides up to 5 hours of continuous operation. The CRY8124 comes standard with 2 batteries, offering a total runtime of up to 10 hours.

- **Ergonomic Design and Operation**

With a weight of only 3 lbs (1.4kg), the CRY8124 features a rubber molded grip for safe, single-handed operation.

- **2-year warranty**

CRY8124 is covered by a 2-year limited warranty.

# Technical Specifications

## Acoustic Specifications

|                         |   |
|-------------------------|---|
| Microphone array        | 200 channels MEMS microphone                            |
| Frequency range         | 2k - 100k Hz  |
| SPL range               | 28 - 132 dB   |
| Test distance           | 0.5 - 200 m (1 - 656 ft)                                |
| Minimum detectable leak | 10 m 2.7 bar 0.0029 L/min<br>0.5 m 1.9 bar 0.0028 L/min |

## Camera

|               |                      |
|---------------|----------------------|
| Camera FOV    | 66°                  |
| Camera pixels | 13M pixels           |
| Focal length  | 4.3 mm (0.17 inches) |
| LED light     | 4*LED                |

## Display

|              |                                   |
|--------------|-----------------------------------|
| Resolution   | 1920*1200 (6x digital zoom)       |
| Touch screen | 8 inches, capacitive touch screen |
| Brightness   | 600 nits, auto adjustment         |

## Hardware port

|                   |  |
|-------------------|--|
| USB-C 1           | USB 3.0 for charging, HDMI, data export                    |
| USB-C 2           | USB 2.0 for data export, USB sensor                        |
| 3.5 mm audio jack | Headphone output   |
| TF card slot      | External storage   |
| SIM card slot     | Inserting a 4G/5G network communication card               |
| Analog input      | Connect external analog sensor<br>4 channels, 20 - 100k Hz |

## General Specifications

|                 |  |
|-----------------|--|
| Size            | 270 * 190 * 51 mm<br>10.6 * 7.5 * 2.0 inches |
| Weight          | 1.4 kg (3 lbs)                               |
| Wi-Fi           | 802.11a/b/g/n/ac                             |
| Bluetooth       | BT 5.2                                       |
| GNSS            | GPS+BDS+GLONASS+GALILEO+QZSS                 |
| Operating temp. | -20 - +50 °C, 10 - 95 % no cond.             |
| Storage temp.   | -20 - +70 °C, 10 - 95 % no cond.             |
| IP rated        | IP54   |
| Storage size    | 64G internal, 64G external                   |

## Battery

|                  |   |
|------------------|---|
| Battery type     | Smart battery with indicator, replaceable |
| Battery capacity | 6600mAh @7.2V                             |
| Battery life     | Up to 5 hours                             |

## Software

|          |   |
|----------|---|
| Function | Multi-point imaging, directional focus, distance measurement, leak volume estimation, PRPD spectrum, type recognition, picture labelling, report export, and etc. |
|----------|---|

## Language

|          |  |
|----------|--|
| Language | Chinese, English, Korean, French, Japanese, Russian, German, Italian, EU Spanish, Portuguese, Hungarian, Dutch, Cambodian, Vietnamese, Turkish, Polish |
|----------|--|

# Ordering Information

| Name                          | Model       | Description   |
|-------------------------------|-------------|---|
| Acoustic Imaging Camera       | CRY8124     | Detect non-explosive gas leaks and partial discharge.           |
| EX Acoustic Imaging Camera    | CRY8125     | IECEX certified   |
| Thermal imaging camera module | IA1301/1302 | Resolutions of 384×288 and 640×512 are available.               |
| Ultrasound generator          | IA1101      | Simulate gas leaks or partial discharge for system calibration. |
| Smart battery pack            | IA2001      | Single battery provides 5h operation.                           |
| Smart battery charger         | IA2101      | Charges 1 battery at a time. Lightweight, small size design.    |

