CRY8124 Acoustic Imaging Camera

Introduction

Introducing CRYSOUND'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 CRYSOUND'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

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 MEMS Microphone
Frequency Range	2k - 100k Hz
SPL Range	28 - 132 dB
Test Distance	0.2 - 200 m (1 - 656 ft)
Minimum Detectable Leak	10 m: 0.0029 L/min, 2.7 bar 0.5 m: 0.0028 L/min, 1.9 bar

Camera

Camera FOV	66°
Camera Pixels	13M pixels
Focal Length	4.3 mm (0.17 inches)
LED Light	4 × LED

Display

Resolution	1920 × 1200 (6× digital zoom)
Touch Screen	8 inches, capacitive touch screen
Brightness	600 nits, auto adjustment

Hardware Ports

USB-C 1	USB 3.0 for charging, HDMI, data export
USB-C 2	USB 2.0, USB-C sensor
3.5 mm Audio Jack	Headphone output
MicroSD Card Slot	External storage
Analog Input	Connect external analog sensor 4 channels, 20 - 100k Hz

General Specifications

Size	270 × 190 × 51 mm 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 to +50 ℃, 10 to 95 % no cond.
Storage Temp.	-20 to +70 ℃, 10 to 95 % no cond.
IP Rated	IP54
Storage Size	64GB internal, 64GB 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, etc.

Language

Language	Chinese, English, Korean, French, Japanese, Russian, German, Italian, etc.

Ordering Information

Name	Model	Description
Acoustic Imaging Camera	CRY8124	Detect gas leaks and partial discharge in non-explosive environments.
EX Acoustic Imaging Camera	CRY8125	IECEx and ATEX certified for detecting gas leaks and partial discharge in explosive environments.
Thermal Imaging Camera Module	IA1301/1302	Optional accessory: Resolutions of 384×288 and 640×512 are available.
Ultrasound Generator	IA1101	Optional accessory: Simulate gas leaks or partial discharge for system calibration.
Contact Ultrasound Sensor	IA3104	Optional accessory: Detect internal leaks in pipelines and valves.
Smart Battery Pack	IA2001	Standard accessory: Single battery provides 5h operation.
Smart Battery Charger	IA2101	Standard accessory: Charges 1 battery at a time. Lightweight, small size design.