

CRY8124 Acoustic Imaging Camera

Introduction

The CRY8124 Acoustic Imaging Camera combines high-sensitivity acoustic imaging with intelligent inspection tools for gas leak detection, electrical partial discharge analysis, and mechanical inspection. Featuring a 200-microphone array, frequency range up to 100 kHz, and a 120° ultra-wide field of view, it enables fast localization and visualization of weak acoustic anomalies across a wider inspection area.

Intelligent automatic frequency selection automatically selects a suitable inspection frequency band to reduce background noise interference and repeated manual adjustment. PC and Acoustic Link mobile remote control provide greater flexibility for field inspections, while optional Contact Ultrasound Sensor and Thermal Imaging Camera Module extend the system to valve internal leak detection and thermal anomaly inspection.

With built-in data management, offline analysis, editing, and report generation, the CRY8124 supports an efficient workflow from inspection and diagnosis to documentation and reporting.

Features

- Real-time acoustic localization and visualization
- Gas leak detection and leak rate estimation
- Partial discharge detection, PRPD analysis and type recognition
- Intelligent automatic frequency selection and remote control
- Expandable inspection and report generation

Highlights

- **120° Ultra-Wide Field of View**

  The 120° ultra-wide field of view covers more equipment in a single inspection, reducing repositioning and repeated captures while providing a more complete view in space-constrained environments.

- **Exceptional Acoustic Detection Performance**

  A 200-microphone array, frequency range up to 100 kHz, and high-performance processing platform enable sensitive gas leak and partial discharge detection. At 5.6 bar, the minimum detectable leak rate is 0.0022 L/min at 10 m.

- **Intelligent Automatic Frequency Adjustment**

  Automatically analyzes the acoustic environment and selects a suitable inspection frequency band, reducing repeated manual adjustments and background noise interference while retaining FFT analysis, manual frequency adjustment, and frequency-band locking.

- **PC & Mobile Remote Control**

  View and control CRY8124 from a PC or the Acoustic Link mobile app, with remote parameter adjustment, interface switching, photo capture, and video recording for easier inspection review and collaboration.

- **Expandable Inspection Capabilities**

  Optional Contact Ultrasound Sensor and Thermal Imaging Camera Module expand CRY8124 for valve internal leak detection, thermal anomaly inspection, and more comprehensive equipment diagnostics across a wider range of industrial applications.

- **Clear Display & Ergonomic Field Operation**

  An 8-inch, 1920 × 1200 high-resolution display with up to 600-nit brightness and 6× digital zoom pairs with a lightweight 1.5 kg design. Two batteries provide up to 10 hours of combined runtime for extended field inspections.

- **2-Year Warranty**

  CRY8124 is covered by a 2-year limited warranty.

Technical Specifications

Acoustic Specifications	
Microphone Array	200 MEMS Microphones
Frequency Range	2k - 100k Hz
SPL Range	28 - 132 dB
Minimum Detectable Leak	10 m: 0.0022 L/min, 5.6 bar 0.5 m: 0.0015 L/min, 5.6 bar
Test Distance	0.2 - 240 m (1 - 787 ft)

Camera	
Camera FOV	120°(D) 94°(H) × 76°(V)
Camera Pixels	13M pixels
Focal Length	2.3 mm (0.09 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 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	1.5 kg (3.31 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	64 GB internal, 64 GB 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, automatic frequency selection, leak rate estimation, PRPD spectrum, partial discharge type recognition, remote control, picture labelling, report export, etc.
Language	Chinese, English, Korean, French, Japanese, Russian, German, etc.

Ordering Information

Name	Model	Description
Acoustic Imaging Camera	CRY8124	Detect gas leaks and partial discharge in non-explosive atmospheres.
Ex Acoustic Imaging Camera	CRY8125	IECEx and ATEX certified for detecting gas leaks and partial discharge in explosive atmospheres.
Thermal Imaging Camera Module	IA1301/1302	Resolutions of 384 × 288 and 640 × 512 are available.
Contact Ultrasound Sensor	IA3104	Detect internal leaks in pipelines and valves.
Ultrasound Generator	IA1101	Simulate gas leaks or partial discharge for system calibration.
Tripod Clamp	IA1901	Attach the acoustic imaging camera to the tripod.
Smart Battery Pack	IA2001	A single battery provides 5 hours of operation.
Smart Battery Charger	IA2101	Charges one battery at a time. Lightweight, compact design.