CRYSOUND

CRY8120 Series

Advanced Acoustic Imaging Camera

Product Introduction

Introducing CRYSOUND's cutting-edge acoustic cameras, revolutionizing industrial inspections with advanced capabilities. The CRY8120 series acoustic imaging camera excels at pinpointing leaks, identifying electrical partial discharge, and detecting mechanical deterioration, performing over 10 times faster than traditional methods. In gas leak detection, the acoustic imaging camera can quickly pinpoint the location of gas leaks and estimate leakage volume and economic losses in real-time. In partial discharge detection, the acoustic imaging camera can display PRPD charts in real-time and identify discharge types to assist in further decision-making.

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 that any other system.

8-inch, 2M pixel display for clear insights into problems

Featuring an 8-inch display with 1920 × 1200 resolution (13 million pixels), 6X digital zoom, and high-brightness (700 nits), the CRY8120 Series Acoustic Camera is easy to see in direct sunlight conditions.

Reduced weight, additional features

The CRY8120 Series total system weight is only 3 lbs (1.4kg), allowing easy all-day operation. With integrated Bluetooth, WiFi, GPS, thermal camera, and 4 additional IEPE inputs for contact sensors, the CRY8120 Series is the most versatile detection system on the market.

Up to 10 hours of operation

A single rechargeable Li-on battery provides up to 5 hours of continuous operation. An optional 2nd battery is provided for additional capacity. (battery sold separately)

Technical Specifications

▶ Acoustic Specifications

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

▶ Camera

Camera FOV	66°
Focal length	4.3 mm (0.17 inches)
Camea pixel	13M pixel
Digital zoom	1x - 6x
Fill light	LED*4

▶ Display

Resolution	1920 * 1200
Size	8 inches
Touchscreen	Capacitive touchscreen
Brightness	600 nits, support auto and manual adjustment

▶ Storage

Storage	64G internal, 64G external TF card
Data format	.jpg (picture), .mp4 (video), .wav (audio), .cdat (data)
Video length	10 minutes
Date export	USB-C, Wi-Fi, TF card

▶ Battery

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

▶ General Specification

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 - +50 °C, 10 - 95 %, no cond.
Storage temp.	-20 - +70 °C, 10 - 95 %, no cond.
IP rated	IP54
Storage size	64G internal, 64G external
Warranty	2 years

▶ Certificate

Safety	IEC 61010-1
EMC	IEC 61326-1
Vibration	2g, IEC 60068-2-6
Shock	25g, IEC 60068-2-27
Drop test	1.2 m (4 ft)

▶ Software

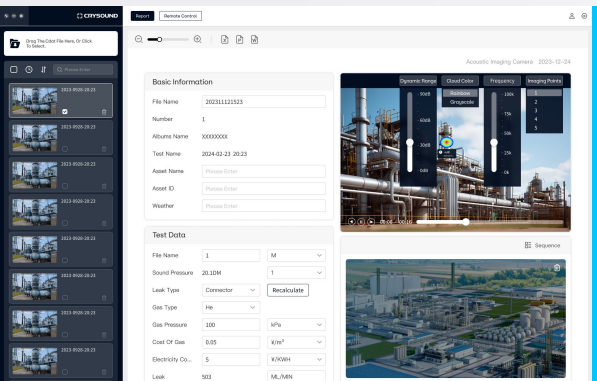|	
Function	Multi-point imaging, directional focus, distance measurement, leak volume estimation, PRPD spectrum, partial discharge type recognition, picture labelling, report export, and etc.

▶ 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
Analog input	4 channels, 20 - 100k Hz IEPE, phantom power supply

▶ Language

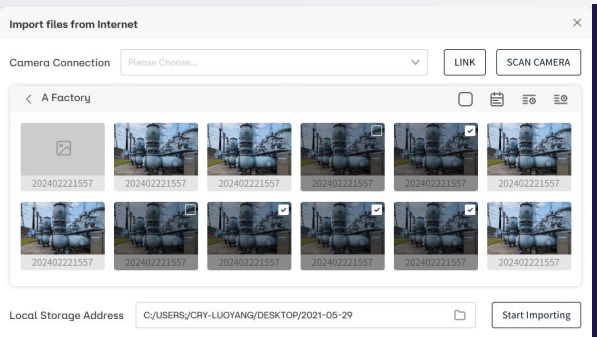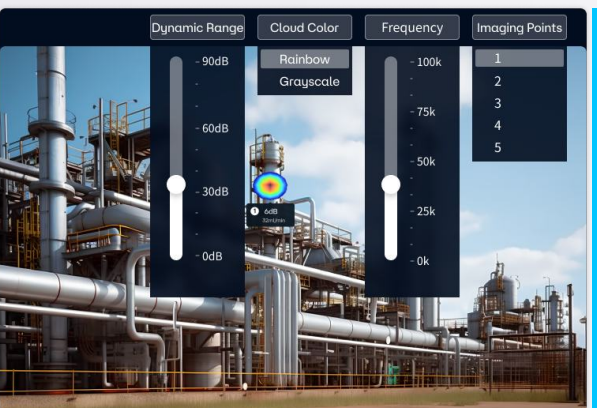|	
Language	Chinese, English, Korean, French, Japanese, Russian, German, Italian, EU Spanish, Portuguese, Hungarian, Dutch, Cambodian, Vietnamese, Turkish, Polish

Reporting Software

Real-time preview and editing of reports

The reporting software provides real-time preview and editing capabilities, allowing users to view results immediately during the process of editing reports and ensuring consistency with the final exported report.

Import data from the camera via Wi-Fi

When Acoustic Imaging Camera and PC are in the same network, reporting software can connect to the device, accessing stored images and videos. Users can select desired ones in the preview window, then import to the PC with a click to generate a report.
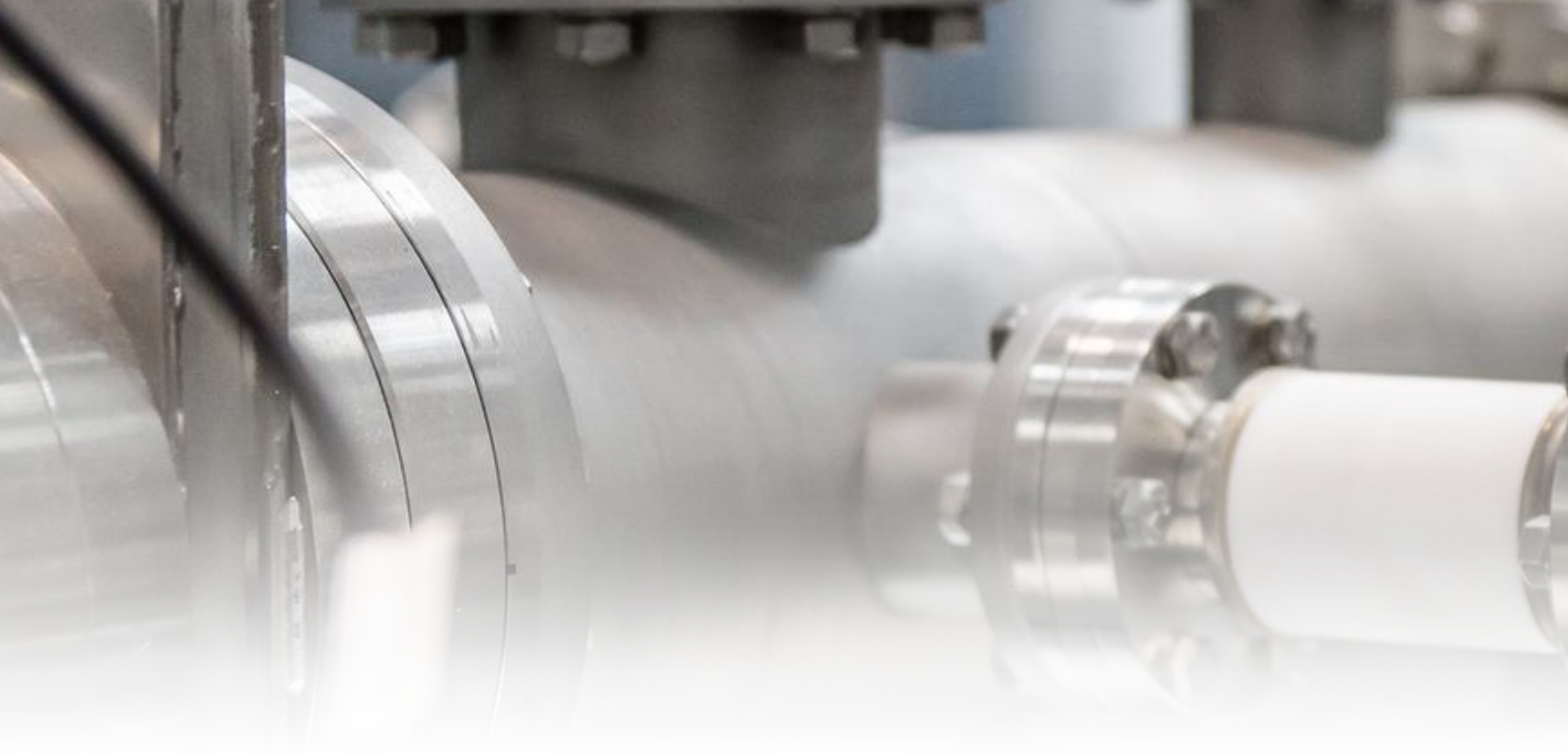

Full Off-line editing capabilities

The reporting software supports off-line adjustment and editing of recorded parameters like dynamic range, frequency and imaging points. This allows users to conduct in-depth analysis of recorded images to pinpoint issues and problems, even in the office.

Multimode display of acoustic and thermal images

When the optional Thermal Camera Module is used with the Acoustic Imaging Camera, the display and reports show both parameters on one display, presenting a multidimensional view of the data.

Ordering Information

CRY8124 Acoustic Imaging Camera

Detects gas leaks in non-explosive environments, and partial discharge (identifies Partial Discharge Type).

CRY8125 EX Acoustic Imaging Camera

The CRY8125 is IECEx certified. Detects gas leaks in both explosive and non-explosive environments, and partial discharge (identifies Partial Discharge Type).

IA1301/1302 Thermal imaging camera module

- Resolutions of 384×288 (IA1301) and 640×512 (IA1302) are available. Compatible with the CRY8120 series Acoustic Imaging Camera.

IA1101 Ultrasound generator

- Calibrates the positioning accuracy and SPL of Acoustic Imaging Camera.
- Simulates gas leak and partial discharge.

IA2001 Smart battery pack

- Integrated LED state of charge (SOC) indicator.
- Comprehensive safety protection functions, such as overcharge, over-discharge, overcurrent, overtemperature, short circuit, etc.
- Worldwide approvals and certification of safety standards.

IA2101 Smart battery charger

- Charges 1 battery with charging control.
- Full safety protection functions, such as over voltage, over current, reverse connection protection, etc.
- Worldwide approvals and certification of safety standards.

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