

GERRS

CONSULTORÍA EN INGENIERÍA ELÉCTRICA





CRY2620 ACOUSTIC IMAGER

The CRY SOUND CRY2620 Industrial Acoustic Imager is easy to operate and can be used quickly. The device adopts the aluminum alloy shell, which is sturdy and durable, and can adapt to the complex and changeable working environment. Real-time sound image display, helping the detection of pressurized or vacuum leaks significantly faster compared to other previous methods.

CRY2620 only needs to adjust the two parameters of the test frequency range and the test dynamic range to meet the vast majority of test requirements.

The device supports camera mode, video mode, and flexible on-site data recording. The large-capacity TF data storage card can be expanded, and the test results can be quickly exported and reported.

It can help enterprises to reduce losses caused by gas leakage, partial discharge and other accidents.

High-performance microphones for efficient detection

64 digital MEMS microphones can provide exceptionally high sensitivity sound resolution and detection accuracy, real-time audio-visual display, anti-jamming, help detection.

Leakage assessment

By activating the leak measurement function, the camera continuously displays the amount of leaks and losses as well as the level of loss.

Analytics and reports

Template-based processing and recording of data, waveforms, spectram, spectrograms is supported by CRY SOUND report analysis tool software, generating ISO 50001 compliant, editable protocols in Excel format.

▲ Technical Specifications

Acoustic Specification

Microphone array	64 channels MEMS microphone
Effective test bandwidth	2kHz-40kHz
Dynamic range	2dB-12dB user adjustable
Test sound pressure level range	28-120dBA
Auto max/min dB gain	User-settable minimum test bandwidth 1kHz
Number of digits	24bit
Sound image FOV	62°
Sound image frame rate	At least 25 FPS
Leak detection rate	10m 5bar 2.4ml/s 0.5m 5bar 1.2ml/s
Detect distances	0.5m-70m

Camera

Camera FOV	62°
Camera focal length	3.04mm fixed focal length
Camera pixel	8 million pixel

Display

Resolution	1024*600(614,400 pixels)
Size	7 inch
Touch screen	Capacitive touch screen
Brightness	Adjustable
Photo notes	Up to 5 photos notes for reference
Source	Show single or multiple sources
Standard palettes	3: Grayscale, Ironbow, Blue-Red
Playback function	View photos, videos anytime, and add notes or tags

Storage

Internal storage	About 8G
External storage	TF memory card, at least 64G, expandable to 256G
Data storage format	.jpg (Picture),.mp4 (Video) and .wav(Recording)
Video length	5 minutes
Digital export	TF Card

Power

Battery capacity	1x6600mAH@7.2V Rechargeable battery and 1xexternal battery package, continuous
Battery life	4+6 hours operation time
Charger	USB Type-C port, USB PD protocol supported, 15W
Power consumption	15W for battery charge; 29W for maximum power consumption

Energy management	Sleep/Auto power off modes
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Interface

USB 3.0 Type-C USB host port
3.5mm headphone socket

Operating Environment

Operating environment	-20°C- +50° 10%-95%no condensation
Storage temperature	-20°C-+60°
Charging temperature	10°C-+45°C

General Specification

Ingress Protection (IP)	IP54
Size	272mmx174mmx42mm
Weight	1.7kg
Warranty	2 years

Self-diagnostic notification	Array-health test function to identify when microphone array needs attention
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System	Linux system
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Certification	CE,FCC, RoHS-compliant
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Supported Language

English, French, Chinese, German, Italian,Japanese, Korean Norwegian, Polish, Portuguese Russian, Spanish, Swedish

Software

Report types	Gas/ISO 50001-compliant
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Analysis	Waveform, Spectrum, Spectrogram, leakage assessment
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CRY2623 ACOUSTIC IMAGER

The CRY2623 Industrial Acoustic Imager is easy to operate and can be used quickly. The device adopts the aluminum alloy shell, which is sturdy and durable, and can adapt to the complex and changeable working environment. Real-time sound image display, helping the detection of pressurized or vacuum leaks significantly faster compared to other previous methods.

CRY2623 only needs to adjust the two parameters of the test frequency range and the test dynamic range to meet the vast majority of test requirements.

The device supports camera mode, video mode, and flexible on-site data recording. The large-capacity TF data storage card can be expanded, and the test results can be quickly exported and reported.

It can help enterprises to reduce losses caused by gas leakage, partial discharge and other accidents.

High-performance microphones for efficient detection

128 digital MEMS microphones can provide exceptionally high sensitivity, sound resolution and detection accuracy, real-time audio-visual display, anti-jamming, help detection.

Leakage assessment

By activating the leak measurement function, the camera continuously displays the amount of leaks and losses as well as the level of loss.

PD detection & PD type identification

Partial discharges can be detected before more serious faults would occur, even before a thermal camera would detect them.

Analytics and reports

Template-based processing and recording of data, waveforms, spectra, spectrograms is supported by CRY2623 report analysis tool software, generating ISO 50001 compliant, editable protocols in Excel format.

▲ Technical Specifications

Acoustic Specification

Microphone array	128 channels MEMS microphone
Effective test bandwidth	2kHz-48kHz
Dynamic range	0.5dB-12dB user adjustable
Test sound pressure level range	25.7-132.5dBA
Auto max/min dB gain	User-settable, minimum test bandwidth 1kHz
Number of digits	24bit
Sound image FOV	62°
Sound image frame rate	At least 25 FPS
Leak detection rate	10m 5bar 0.92ml/s 0.5m 5bar 0.55ml/s
Detect distances	0.3m-120m

Camera

Camera FOV	62°
Camera focal length	3.04mm fixed focal length
Camera pixel	8 million pixel

Display

Resolution	1024*600 (614,400 pixels)
Size	7 inch
Touch screen	Capacitive touch screen
Brightness	Adjustable
Photo notes	Up to 5 photos notes for reference
Source	Show single or multiple sources
Standard palettes	3: Grayscale, Ironbow, Blue-Red
Playback function	View photos, videos anytime, and add notes or tags

Storage

Internal storage	About 8G
External storage	TF memory card, at least 64G, expandable to 256G
Data storage format	.jpg (Picture) , .mp4 (Video) and .wav (Recording)
Video length	5 minutes
Digital export	TF Card

Power

Battery capacity	1×6600mAh@7.2V Rechargeable battery and 1×external battery package, continuous
Battery life	4+6 hours operation time
Charger	USB Type-C port, USB PD protocol supported, 15W
Power consumption	15W for battery charge; 29W for maximum power consumption
Energy management	Sleep/Auto power off modes
Interface	USB 3.0 Type-C USB host port 3.5mm headphone socket

Operating Environment

Operating environment	-20°C- +50°C, 10%-95% no condensation
Storage temperature	-20°C - +60°C
Charging temperature	10°C - +45°C

General Specification

Ingress Protection (IP)	IP54
Size	272mm×174mm×42mm
Weight	1.7kg
Warranty	2 years
Self-diagnostic notification	Array-health test function to identify when microphone array needs attention
System	Linux system
Certification	CE, FCC, RoHS-compliant, MSDS, CNEX, ATEX (under qualification.)

Supported Language

Supported Language	English, French, Chinese, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish
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Software

Report types	Gas/Electricity, ISO 50001-compliant
Analysis	Waveform, Spectrum, Spectrogram, leakage assessment, discharge type discrimination



CRY2624 ACOUSTIC IMAGER

CRY2624 Industrial Acoustic Imager is suitable for use in explosion-proof scenarios in chemical and energy industry. The device adopts the aluminum alloy shell, which is sturdy and durable, and can adapt to the complex and changeable working environment. Real-time sound image display, helping the detection of pressurized or vacuum leaks significantly faster compared to other previous methods.

CRY2624 only needs to adjust the two parameters of the test frequency range and the test dynamic range to meet the vast majority of test requirements.

The device supports camera mode, video mode, and flexible on-site data recording. The large-capacity TF data storage card can be expanded, and the test results can be quickly exported and reported.

It can help enterprises to reduce losses caused by gas leakage, partial discharge and other accidents.

High-Performance Microphones for Efficient Detection With ATEX Certification

128 digital MEMS microphones can provide exceptionally high sensitivity, sound resolution and detection accuracy, real-time audio-visual display, anti-jamming, help detection.

Leakage Assessment

By activating the leak measurement function, the camera continuously displays the amount of leaks and losses as well as the level of loss.

PD Detection & PD Type Identification

Partial discharges can be detected before more serious faults would occur, even before a thermal camera would detect them.

Analytics And Reports

Template-based processing and recording of data, waveforms, spectra, spectrograms is supported by CRY SOUND report analysis tool software, generating ISO 50001 compliant, editable protocols in Excel format.

▲ Technical Specifications

Acoustic Specification

Microphone array	128 channels MEMS microphone
Effective test bandwidth	2kHz-48kHz
Dynamic range	0.5dB-12dB user adjustable
Test sound pressure level range	25.7-132.5dBA
Auto max/min dB gain	User-settable, minimum test bandwidth 1kHz
Number of digits	24bit
Sound image FOV	62°
Sound image frame rate	At least 25 FPS
Leak detection rate	10m 5bar 0.92ml/s 0.5m 5bar 0.55ml/s
Detect distances	0.3m-120m

Camera

Camera FOV	62°
Camera focal length	3.04mm fixed focal length
Camera pixel	8 million pixel

Display

Resolution	1024*600 (614,400 pixels)
Size	7 inch
Touch screen	Capacitive touch screen
Brightness	Adjustable
Photo notes	Up to 5 photos notes for reference
Source	Show single or multiple sources
Standard palettes	3: Grayscale, Ironbow, Blue-Red
Playback function	View photos, videos anytime, and add notes or tags

Storage

Internal storage	About 8G
External storage	TF memory card, at least 64G, expandable to 256G
Data storage format	.jpg (Picture) , .mp4 (Video) and .wav (Recording)
Video length	5 minutes
Digital export	TF Card

Power

Battery capacity	1×6600mAH@7.2V Rechargeable battery and 1×external battery package, continuous
Battery life	4+6 hours operation time
Charger	USB Type-C port, USB PD protocol supported, 15W
Power consumption	15W for battery charge; 29W for maximum power consumption
Energy management	Sleep/Auto power off modes

Interface

USB 3.0 Type-C USB host port
3.5mm headphone socket

Operating Environment

Operating environment	-20°C- +50°C, 10%-95% no condensation
Storage temperature	-20°C - +60°C
Charging temperature	10°C - +45°C

General Specification

Ingress Protection (IP)	IP54
Size	272mm×174mm×42mm
Weight	1.7kg
Warranty	2 years
Self-diagnostic notification	Array-health test function to identify when microphone array needs attention
System	Linux system

Certification

ATEX, CE, FCC, RoHS-compliant, MSDS, CNEX

Supported Language

English, French, Chinese, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish

Software

Report types	Gas/Electricity, ISO 50001-compliant
Analysis	Waveform, Spectrum, Spectrogram, leakage assessment, discharge type discrimination

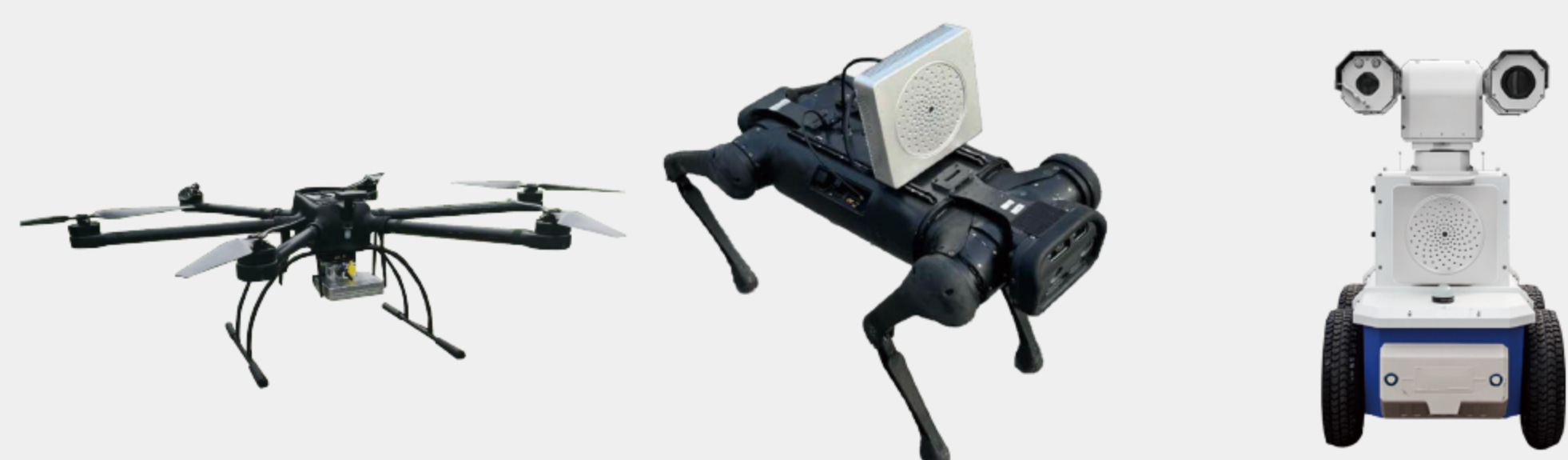


CRY2623M FIXED ACOUSTIC IMAGER

CRY2623M Fixed Acoustic Imager uses microphone array beamforming technology to obtain sound source distribution data, and cooperates with high-definition cameras to capture video images in real time. It can help users realize remote monitoring system based on local network (LAN, etc.), wide area network (WAN, ADSL, 4G and private network, etc.), and help users realize industrial digital transformation, and support remote real-time monitoring of video images. As such, this provides facilities with further insight into product quality or safety issues, as well as the ability to rapidly detect them. Changes to compressors, pumps, pipes, cables, etc. can be understood in real time and in advance, rather than manually.

Intelligent Inspection System

The CRY2623M can also be used as a payload for inspection, including UAV, robot, car or other mobile unit, Realizing more intelligent inspection and monitoring applications.



128 digital MEMS microphones

High-performance microphones for efficient detection.

24/7 Real-time monitoring

Real-time monitoring, automatic fault detection, reducing the number of manual inspections. It helps enterprises reduce maintenance costs.

Some size easy to install

183mm x 169mm x 83.35mm, contactless deployment.

Early detection of equipment problems

In the early stage of equipment failure, once the sound is abnormal, it will be reminded in time, including leakage, PD or other scenarios that the monitored object will have sound changes.

Find faults that cannot be found by other means

Pressure, temperature, vibration sensors often fail to sense some early failures.

Factory automation product inspection & Alarms

CRY2623M can be deployed in the factory line and fully integrated with the factory system, support the factory's automatic inspection, and improve the production inspection efficiency. With fully digitized processes, real-time monitoring data can be recorded and archived, improving product and process traceability.

▲ Technical Specifications

Main Technical Specifications

Device Model	CRY2623M
Number of Microphone Channels	128 channels
Test Frequency Range	2kHz ~ 48kHz
Port	RJ45
Data communication	RTSP/RTMP streaming transmission
Camera Resolution	800W
Frame Rate	25FPS
Test Distance	0.5~50m
Weight	About 1.3kg
Size	183mm X 169mm X 85.35mm
Storage	8G internal storage, 64G TF card expansion storage
Operating Temperature	-10°C~+50°C
Supply Voltage	DC12-20V
Power Consumption	About 14W
IP Degree of Protection	IP56
Fixed way	Bottom 1/4 -20UNC thread/M5 screw fixing
Explosion-proof certification	CNEX

Intrinsically Safe Power Supply

Intrinsically safe maximum open circuit voltage	DC 6.5V
Intrinsically safe maximum output current	2.0A

Digital Signal Barrier

Explosion-proof parameters	Um=250V AC/DC, Uo=6V, Io=505mA, Po=0.75W IIC: Co=28μF, Lo=0.12mH
Operating Voltage	5V
Maximum withstand voltage	6V
Terminal resistance	12Ω
Polarity	Dual Polarity
Weight	About 110g
Applicable equipment wiring	Two-wire, three-wire, four-wire
Explosion-proof certification	Zone 0, Zone 1, Zone 2; IIA, IIB, IIC, T4-T6
Environmental Conditions	Continuous use temperature -20~60°C; Storage temperature -40~80°C

Acoustic Imaging Guardian Minimum Leakage (Pressure 0.5Mpa, 20-40kHz site environment noise 40dB)

Distance to Sound Source (m)	Leakage CCM(±1)
0.5-2	28
2-4	46
4-6	47
6-8	50
8-10	53
10-12	66
12-14	70
14-16	78
16-18	90
18-20	97

