

verified industrial
maintenance solutions



OFFICIAL DISTRIBUTOR

CRYSOUND

ACOUSTIC IMAGING TECHNOLOGY

LET YOU SEE LEAK AND PARTIAL DISCHARGE



www.vims.de

CRY2620

CRY2620 is the 64-MIC version hand-held industrial acoustic imager, supporting the ultrasonic frequencies. As an entry-level product of CRY SOUND, it has powerful functions. This device can help quickly detect potential pressurized gas leakage and vacuum leakage in noisy industrial environments. It can identify potential partial discharge fault points in the power generating facilities.



CRY2623

CRY2623 is the 128 MIC version hand-held industrial acoustic imager that supports the ultrasonic frequencies. Same as CRY2620, it can help quickly detect potential pressurized gas leakage and vacuum leakage in noisy industrial environments, and quickly identify potential partial discharge fault points when used in power systems.

As a superior product, it is more alert and responsive than CRY2620. Also, it has extra functions, including PRPD mapping function and partial discharge type analysis function.

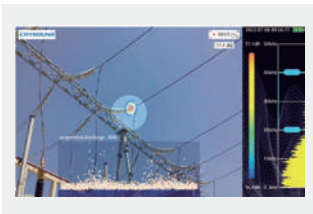
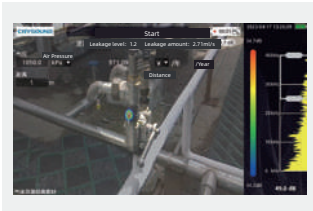
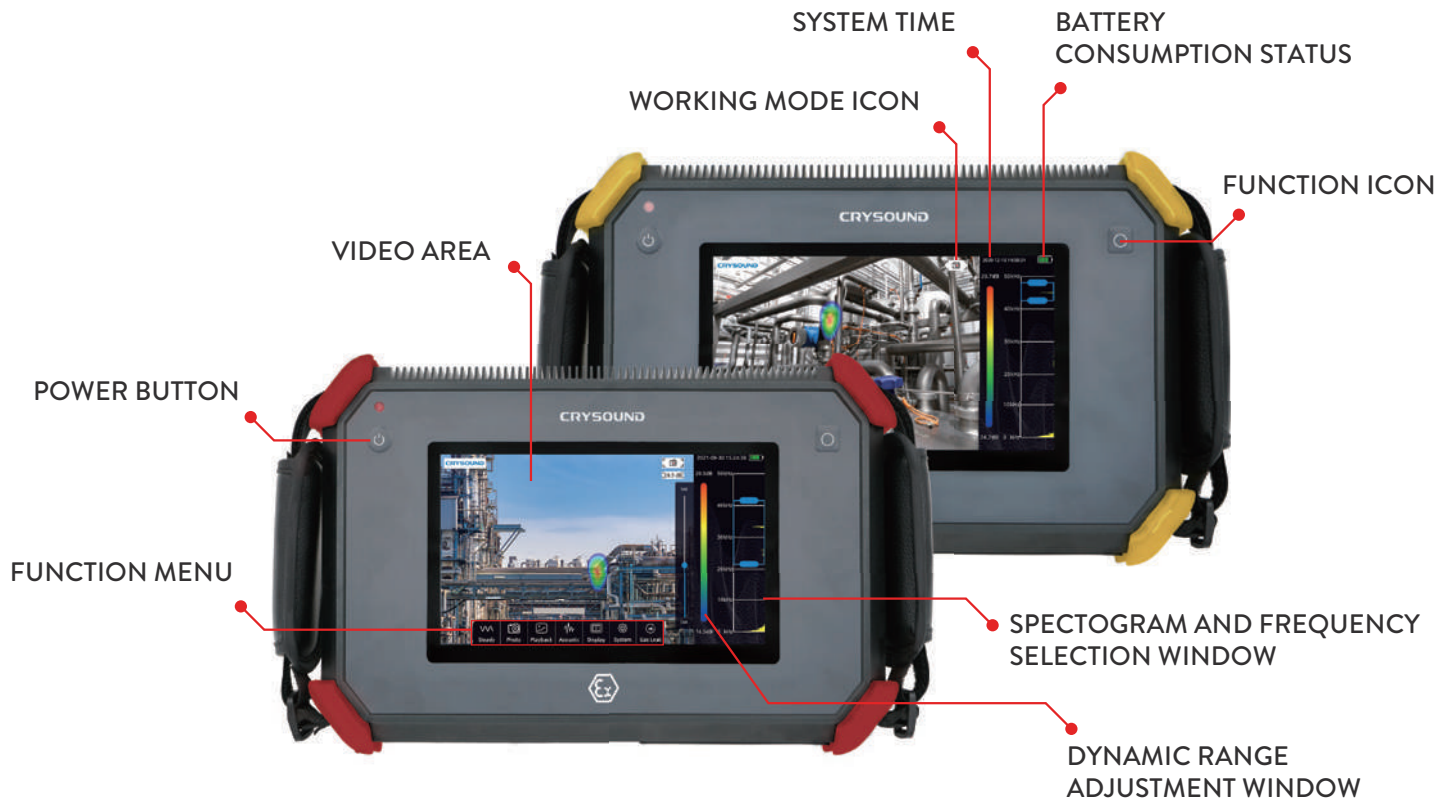


CRY2624

CRY2624 is the ATEX version anti-explosion hand-held industrial acoustic imager, support the ultrasonic frequencies, with II 3G Ex ic IIC T5 Gc explosion-proof grade. While sharing with similar functions with CRY2623, CRY2624 can be applied in a wider range of situations due to its anti-explosion function. It can be utilized in chemical plants containing dangerous flammable gases and hazardous area that have the strictly explosion-proof.



FUNCTION INTRODUCTION



LEAK RATE QUANTIFICATION

Acoustic imager could realistically estimate the leak flow rates. The screen shows the leak level and corresponding economic value loss data.

PRPD (PHASE RESOLVED PARTIAL DISCHARGE)

The acoustic imager comes with a PRPD mapping function that can judge the type of partial discharge and help the user to diagnose discharge faults.

FOCUSING FUNCTION

The focusing function is mainly used to eliminate environmental interference noise, reflection noise, multi-source interference. It narrows the test area to the aperture, eliminating interference from sources outside the aperture and helping you to find small leaks in complex sound field environments.

ULTRASONIC MONITORING

The equipment can modulate the signal in the ultrasonic frequency band to the audible frequency band, and can monitor the sound with headphones. Ultrasonic modulation is realized by superheterodyne. The reference frequency of modulation can be set. It is recommended to set a frequency band of about 38.6kHz for near modulation and monitoring.

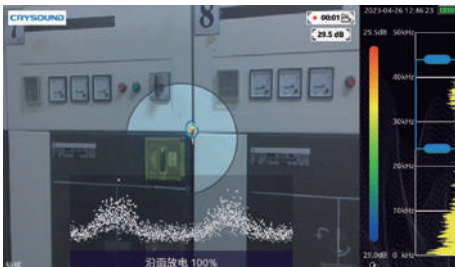
LEAK RATE QUANTIFICATION

Compressed air is a major source of power, but leaks can be a big problem in factories. Leakage accounts for 10–50% of the total air supply, resulting in significant energy loss. Even a small 1mm hole can cause a loss of about 3525 kWh per year. Large factories may have thousands of leakage points. Many inspectors listen for gas leaks, which means that by the time a leak is detected, it is already leaking quite badly. The CRY SOUND acoustic imager can quickly detect gas leaks from a distance and estimate the leakage volume in real-time, reducing inspection time and energy waste.



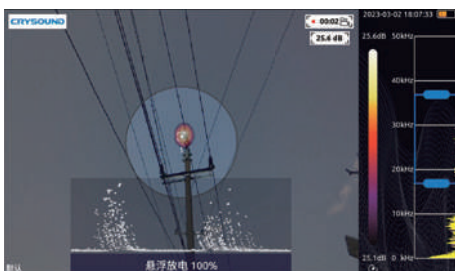
PRPD INTELLIGENT RECOGNITION

PRPD (Phase Resolved Partial Discharge) is a method of displaying partial discharge pulses with phase identification. Different types of discharges exhibit different characteristics in the PRPD map. Based on the PRPD map, the CRY SOUND acoustic imager has added an offline partial discharge type identification function, which can display the type of partial discharge in real-time during the inspection process, making every customer a master of partial discharge fault diagnosis.



SURFACE DISCHARGE

Surface discharge refers to the discharge phenomenon along the interface of different aggregated state dielectrics. Usually, the discharge along the surface of solid dielectrics is more common in gas or liquid dielectrics.



SUSPENSION DISCHARGE

There is poor contact discharge due to a small gap between an internal metal part and a conductor (or grounding body), such as the transformer core and metal bolts, where they lose electrical potential connection.



CORONA DISCHARGE

Corona discharge usually occurs when the high voltage conductor is completely surrounded by gas.

PRODUCT FEATURES



FAST TEST DISTANCE

The effective test distance is 0.3-120 m



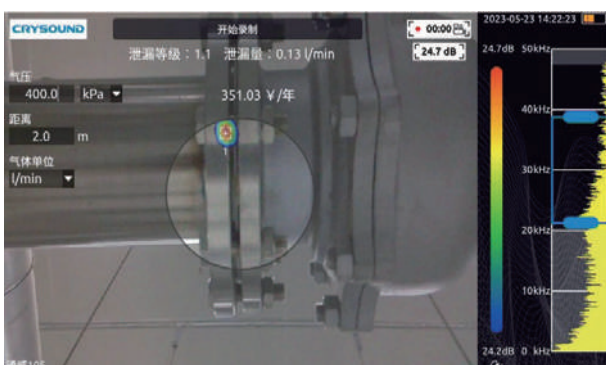
HIGH TEST ACCURACY

The leak detection rate is
10 m, 5 bar, 0.92 ml/s
0.5 m, 5 bar, 0.55 ml/s



HIGH EFFICIENCY

With the high refresh rate of 25 FPS and large field of view of 62°, it is a great assistant for efficient inspections.



HIGH NOISE IMMUNITY

With "FOCUS" function and advanced noise-immunity algorithms, it can minimize the impact of environmental noise.

	CRY2620	CRY2623	CRY2624
ACOUSTIC SPECIFICATION			
○ MICROPHONE ARRAY	64 channels MEMS microphone	128 channels MEMS microphones	
○ EFFECTIVE TEST BANDWIDTH	2kHz~40kHz	2kHz~48kHz	
○ DYNAMIC RANGE	0.5dB-12dB user adjustable		
○ TEST SOUND PRESSURE LEVEL RANGE	28~120dBA	25.7~132.5dBA	
○ THRESHOLD VALUES	-40dB~100dB		
○ NUMBER OF DIGITS	24 bit		
○ 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	10m 5bar 0.92ml/s 0.5m 0.14bar 1.6m/s	0.5m 5bar 0.55ml/s 0.5m 0.14bar 1.6m/s
○ DETECT DISTANCES	0.5m~70m	0.3m~120m	
GENERAL SPECIFICATION			
○ INGRESS PROTECTION (IP)	IP54		
○ SIZE	272mm x 174mm x 42mm		
○ WEIGHT	1.7kg		
○ WARRANTY	2 years		
○ SELF-DIAGNOSTIC NOTIFICATION	Array-health test function to identify when microphone array needs attention		
○ SYSTEM	Linux system		
○ CERTIFICATE	CE, FCC, RoHS-Compliant	CE, FCC, RoHS-Compliant, MSDS	ATEX, CE, FCC, RoHS-Compliant, MSDS
SOFTWARE			
○ REPORT TYPES	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	Grayscale, Ironbow, Blue-red		
○ PLAYBACK FUNCTION	View photos & videos anytime Add notes or tags		
DISPLAY			
○ INTERNAL STORAGE	8G		
○ EXTERNAL STORAGE	TF memory card, 64G, expandable to 256G		
○ DATA STORAGE FORMAT	JPG(Picture) MP4(Video) WAV(Audio)		
○ VIDEO LENGTH	5 minutes		
○ DIGITAL EXPORT	TF Card		
CAMERA			
○ CAMERA FOV	62°		
○ CAMERA FOCAL LENGTH	3.04mm fixed focal length		
○ CAMERA PIXEL	8 million pixel		
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		
○ SUPPORTED LANGUAGE	English, French, Chinese, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, etc.		