

SDT Ultrasound



CRYSOUND

Acoustic Imaging Camera

See and Hear More Leaks and Partial Discharges.

 **ATEX**





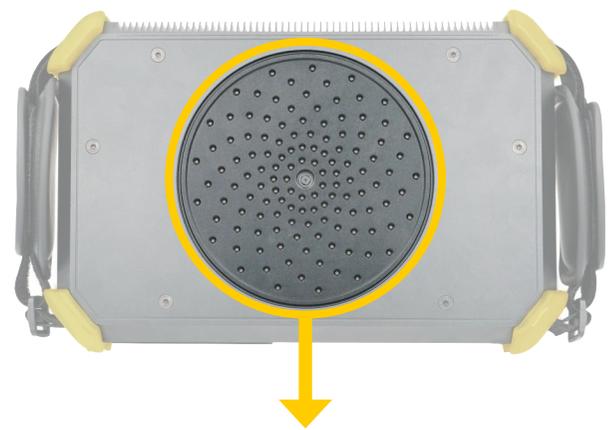
SDT Ultrasound Solutions is pleased to present its cutting-edge compressed air leak and partial discharge detection device for energy management and condition monitoring.

CRYSOUND

is a portable industrial acoustic imager that supports the ultrasound frequency band.

The instrument uses microphone array beamforming technology (128 MEMS) to acquire sound source distribution data, and collects video images in real-time thanks to the high-definition camera.

The CRYSOUND industrial acoustic imager helps you to quickly detect pressurized gas and vacuum leaks in noisy industrial installations. Used in power systems, it lets you rapidly identify partial discharge locations.



Ultrasound Sensor Array
128 Digital MEMS



CRY2620 Base Kit
Basic version
64 MEMS



CRY2620 Pro Kit
Basic version
64 MEMS
+ LEAKChecker



CRY2623 Base Kit
Superior version
128 MEMS



CRY2623 Pro Kit
Superior version
128 MEMS
+ LEAKChecker



CRY2624
Superior ATEX version
128 MEMS





Rugged

Made of strong and durable an aluminum alloy shell.

Multi-type Gases

Detects all types of pressurized gases leaks.

Distance measurement

It automatically calculates the distance during leak detection between 0.3 m to 120 m.

High Test Accuracy

Leak detection rate is 1m, 7 bar, 0.37 ml/s, 10 m, 7 bar, 0.7 ml/s.

IP54

Easy to Operate

Adjust only two parameters to start detecting: the test frequency range and test dynamic range.

Explosion-proof certification

ATEX-II 3 G Ex ic IIC T5 Gc
(CRY2624 only)

Fully Functional

Complete the recording of test results with photos, audio and video. These can be tagged within the imager itself.



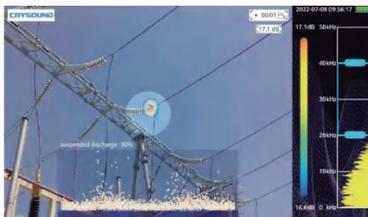
High efficiency

With a high frame rate of 25 FPS and a wide 62° field of view, it's the ideal assistant for efficient inspections.



High intelligence

It quickly detects gas leaks from a distance and estimates leak volume in real time, reducing inspection time and energy wastage.



High resistance to interference

Integrated focus function and advanced anti-interference algorithms to eliminate peripheral interference. In noisy environments, it concentrates audiovisual data within a circle, enhancing detection accuracy.

High vigilance

The CRY SOUND Acoustic Imager has a PRPD (Phase Resolved Partial Discharge) mapping function for diagnosing discharge faults, even before thermal cameras detect them. It offers real-time partial discharge type identification during inspections directly on the camera screen.





LEAKReporter

SDT Ultrasound Solutions also provides a free management system for creating reports by simply inserting photos taken by the CRY SOUND imager into the LEAKReporter CMS. LEAKReporter is a program that allows you to efficiently survey and thoroughly inspect your factory for leaks in five fast and easy steps:



- Create a survey to identify potential leaks.
- Document your findings with detailed pictures for visual clarity.
- Input ultrasonic readings for accurate analysis.
- Utilize measurements to estimate the cost impact of leaks.
- Synchronize your completed survey seamlessly with the web browser.



A desktop reporting software is also available.

Acoustic Specification		Software	
Microphone array	<ul style="list-style-type: none"> • CRY2620: 64 channels MEMS microphone • CRY2623/CRY2624: 128 channels MEMS microphone 	Report types	Gas/Electricity, ISO 50001-compliant
Effective test bandwidth	<ul style="list-style-type: none"> • CRY2620: 2 kHz-40 kHz • CRY2623/CRY2624: 2 kHz-48 kHz 	Analysis	Waveform, spectrum, spectrogram, leakage assessment, discharge type discrimination
Dynamic range	Up to 110 dB	Power	
Test sound pressure level range	<ul style="list-style-type: none"> • CRY2620: 28-120 dBA • CRY2623/CRY2624: 25.7-132.5 dBA 	Battery capacity	1×6600 mAh@7.2 V Rechargeable battery and 1× external battery, continuous operation
Auto max/min dB gain	User-settable, minimum test bandwidth 1 kHz	Battery life	Operating time 4+6 hours
Number of digits	24 bit	Charger	USB Type-C port, USB PD protocol supported, 15 W
Sound image FOV	62°	Power consumption	15 W for battery charging; 29 W for maximum consumption
Sound image frame rate	At least 25 FPS	Energy management	Sleep/Auto power off modes
Leak detection rate	<ul style="list-style-type: none"> • CRY2620: 10 m 5 bar 2.4 ml/s 0.5 m 5 bar 1.2 ml/s • CRY2623/CRY2624: 1 m 7 bar 0.37 ml/s 10 m 7 bar 0.7 ml/s 	Interface	
Detect distances	<ul style="list-style-type: none"> • CRY2620: 0.5 m-70 m • CRY2623/CRY2624: 0.3 m-120 m 	USB 3.0 Type-C USB host port	
Display		USB 3.0 Type-C host port 3.5 mm headphone jack	
Resolution	1024*600 (614,400 pixels)	Operating Environment	
Size	17,78 cm	Operating environment	-20 °C – +50 °C, 10% – 95% no condensation
Touch screen	Capacitive touch screen	Storage temperature	-20 °C – +60 °C
Brightness	Adjustable	Charging temperature	10 °C – +45 °C
Photo notes	Up to 5 photos notes for reference	General Specification	
Source	Show single or multiple sources	Ingress Protection (IP)	IP54
Standard palettes	3: Grayscale, Ironbow, Blue-Red	Size	272 mm × 174 mm × 42 mm
Playback function	View photos, videos anytime, and add notes or tags	Weight	1.7 kg
Storage		Warranty	2 years
Internal storage	About 8 G	Self-diagnostic notification	Array health test function to determine whether the microphone array needs attention
External storage	TF memory card, at least 64 G, expandable to 256 G	System	Linux system
Data storage format	.jpg (image), .mp4 (video) and .wav (audio)	Certification	CE, FCC, RoHS-compliant, MSDS, CNEX, ATEX-II 3 G Ex ic IIC T5 Gc (CRY2624 only)
Video length	5 minutes	Supported Languages	
Digital export	TF Card	English, French, Chinese, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish.	

Available only in Europe and French-speaking African countries.

SDT Mission:

SDT provides ultrasound solutions that help our customers gain a better understanding about the health of their factory. We help them predict failures, control energy costs, and improve product quality while contributing to the overall reliability of their assets.



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