

# Message Map CRYSOUND

## Headline

CRYSOUND helps identify possible air, gas and vacuum leakage faults in noisy industrial environments and visualize partial discharge, arcing, and tracking, neutralizing defects that pose a threat to safety and electrical asset reliability.

# **Key Points**

Adaptable	Accurate	Agile
IP54	128 MEMS	COMPLETE
ΑΤΕΧ	FOCUSING FUNCTION	REPORTING
RUGGED	INTELLIGENT RECOGNITION	PRO VERSION

# **Expanded Arguments for the Key Points**

### Adaptable

#### 1. IP54

With a high level of protection (IP54) against dust and humidity, it is designed to operate flawlessly even in the most demanding industrial environments.

#### 2. ATEX

CRY2624 is a portable explosion-proof industrial acoustic imager in ATEX version, supporting ultrasonic frequencies, with explosion-proof level II 3G Ex ic IIC T5 Gc. It can be used in chemical plants containing hazardous flammable gases and in areas with strict explosion protection restrictions.

#### 3. RUGGED

The industrial acoustics imager is made of an aluminum alloy shell, which is strong and durable and can adapt to the complex and changeable working environment. The robustness of our solution guarantees reliable, long-lasting use, making it the ideal tool for detecting compressed air leaks in difficult conditions.

#### Accurate

#### 1. 128 MEMS

The sensitivity of our ultrasonic camera is simply sublime. Thanks to its 128 state-of-the-art MEMS sensors, it enables ultra-sensitive detection of compressed air leaks. With unrivalled sensitivity, our solution guarantees reliable results and proactive maintenance at a distance range up to 120 m., automatically showing on the camera screen the distance from the defect.

#### 2. FOCUSING FUNCTION

The focusing function is mainly used to eliminate environmental interference, reflection noise, multisource interference and so on. When the test environment is noisy and the cloud image is more than single, scattered and chaotic, the focusing function can be activated to concentrate the audiovisual cloud image presentation within a circle and eliminate other sources of interference. Even in the noise and distractions of industrial environments, our camera detects the smallest variations in sound, enabling precise identification of leakage sources.

#### 3. INTELLIGENT RECOGNITION

- a. The Acoustic Imager features a PRPD (Phase Resolved Partial Discharge) mapping function to assess the type of partial discharge and help the user diagnose discharge faults. Partial discharges can be detected before more serious faults occur, even before a thermal camera detects them. Based on the PRPD card, the CRYSOUND Acoustic Imager has added an offline partial discharge type identification function, which can display the partial discharge type in real-time during the inspection process directly on the camera screen, making every customer a master of partial discharge fault diagnosis.
- b. The CRYSOUND acoustic imager can quickly detect gas leaks at a distance and estimate leak volume in real-time, reducing inspection time and wasted energy. Simply enter the atmospheric pressure (unit: kPa) and distance (unit: m) of the gas leak based on the actual site situation. The software will calculate the leakage level and the approximate range of the gas leakage based on the gas pressure, distance and calculated leakage energy (for reference), providing an estimate of the gas leak.

#### Agile

#### 1. COMPLETE

CRYSOUND Range takes into account all customers' needs, from a basic solution (CRY2620), to a superior one (CRY2623) also available in ATEX version (CRY2624).

This range of acoustic cameras is easy to use, with just two parameters to meet the vast majority of test requirements. It supports camera mode, video mode, and flexible on-site data recording. The high-capacity TF memory card can be expanded, and test results can be exported and reported quickly. English, French, German, Russian and Chinese are supported in the reporting software. The CRYSOUND camera firmware supports the following languages: English, French, German, Italian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Chinese, Korean and Japanese.

#### 2. REPORTING

The video or picture can be tagged within the imager itself with image, audio and text. A total of six tag contents can be added for the three tag types:

- a. The picture tag can take a picture as tag content, while the picture content can be a nameplate, a character tag, and so on.
- b. The audio tag can record a piece of audio as tag content, the audio can be a human voice or another live voice.
- c. The text tag lets you enter a paragraph of text as tag content. It also supports keyboard input and scanning of two-dimensional codes.

SDT Ultrasound Solutions also provides a free management system for creating reports by simply inserting photos taken by the CRYSOUND imager into the LEAKReporter CMS.

#### 3. PRO VERSION

The LEAKChecker, included in the CRYSOUND case, together with the LEAKReporter CMS help you pinpoint leaks and quickly create reports.

Whatever your situation, our versatile range offers a solution tailored to your needs, enabling you to achieve your energy-saving and preventive maintenance objectives.

