



# CRY8125 Ex Acoustic Imaging Camera

Industry's First TÜV-Certified Intrinsically Safe Acoustic Imaging Camera

## Introduction

CRY SOUND introduces the new CRY8125 Ex Acoustic Imaging Camera, certified by TÜV and compliant with standards for use in explosive atmospheres. With its advanced capabilities, the CRY8125 redefines industrial inspection by precisely locating leaks, identifying partial electrical discharges, and detecting mechanical wear.

The CRY8125 is fully certified under IECEx and ATEX, and compliant with IEC 60079-0 and IEC 60079-11, ensuring safe operation in explosive atmospheres.

The integrated workflow of the CRY8125 – from image capture and analysis to report generation – significantly improves the efficiency of gas leak detection, ensuring safer and more reliable daily operations.

## Features

- Leak detection in explosive gas and dust atmospheres (Zone 2)
- Real-time far-field sound source localization and visualization
- Leak detection and leak rate measurement for all compressed (non-volatile) gases
- Partial discharge detection and type recognition for insulators and switchgears
- Mechanical inspection for predictive maintenance of bearings and conveyors
- Report generation

## Highlights

- **TÜV-Certified Zone 2 IECEx and ATEX Certificate**  
The CRY8125 is TÜV-certified under IECEx and ATEX and meets IEC 60079-11 and 60079-0 standards. It can be used for gas leak detection in the explosive gas and dust atmospheres.
- **Endure 28-Day Extreme Reliability Testing for the Most Robust Protection**  
The CRY8125 undergoes 28 days of 90% humidity, 90°C high-temp and -25°C low-temp aging, immediately followed by drop testing. After all these extreme testing, it still maintains an IP54 rating to ensure no ingress of gas or dust.
- **Detection Any Type of Gas in Explosive Atmospheres**  
The CRY8125 can detect any type of gas leaks – such as natural gas, hydrogen and CO – in explosive atmospheres. It also quantifies leak rates and estimates economic losses in real time, enabling fast analysis and maintenance decision-making.
- **Comprehensive Hardware Configuration**  
Bluetooth and Wi-Fi enable direct data transmission to local devices. Up to 4 IEPE sensors (accelerometers, microphones, etc.) can be added to the system, enabling complex detection scenarios and allowing for future expansion.
- **8 Inch, 2M Pixel Display for Clear Insights into Problems**  
The CRY8125 display features 2K resolution, 6× digital zoom, and 600 nits display brightness for accurate viewing of field conditions in full sunlight.
- **2-Year Warranty**  
The CRY8125 is covered by a 2-year limited warranty.

## Technical Specifications

### Acoustic Specifications

|                         |                                                             |
|-------------------------|-------------------------------------------------------------|
| Microphone Array        | 208 MEMS Microphones                                        |
| Frequency Range         | 2k – 100k Hz                                                |
| SPL Range               | 28 – 132 dB                                                 |
| Test Distance           | 0.2 – 200 m (1 – 656 ft)                                    |
| Minimum Detectable Leak | 10 m: 0.0029 L/min, 2.7 bar<br>0.5 m: 0.0028 L/min, 1.9 bar |

### Camera

|               |                      |
|---------------|----------------------|
| Camera FOV    | 66°                  |
| Camera Pixels | 13M pixels           |
| Focal Length  | 4.3 mm (0.17 inches) |
| LED Light     | 4 × LED              |

### Display

|              |                                  |
|--------------|----------------------------------|
| Resolution   | 1920 × 1200 (6× digital zoom)    |
| Touch Screen | 8 inches, capacitive touchscreen |
| Brightness   | 600 nits, auto adjustment        |

### Hardware Ports

|                   |                                                            |
|-------------------|------------------------------------------------------------|
| USB-C 1           | USB 3.0 for charging, HDMI, data export                    |
| USB-C 2           | USB 2.0, USB-C sensor                                      |
| 3.5 mm Audio Jack | Headphone output                                           |
| MicroSD Card Slot | External storage                                           |
| Analog Input      | Connect external analog sensor<br>4 channels, 20 – 100k Hz |

### General Specifications

|           |                                              |
|-----------|----------------------------------------------|
| Size      | 270 × 190 × 51 mm<br>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 to +50 °C, 10 to 95 % no cond.

Storage Temp. -20 to +70 °C, 10 to 95 % no cond.

IP Rated IP54

Storage Size 64GB internal, 64GB external

**Ex Marking**  
II 3 G Ex ic IIC T5 Gc  
II 3 D Ex ic IIIC T100°C Dc

### Battery

Battery Type Smart battery with indicator, replaceable

Battery Capacity 6600mAh @ 7.2V

Battery Life Up to 5 hours

### Language

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

## Ordering Information

| Name                       | Model   | Description                                                                                        |
|----------------------------|---------|----------------------------------------------------------------------------------------------------|
| Acoustic Imaging Camera    | CRY8124 | Detect gas leaks and partial discharge in non-explosive environments.                              |
| Ex Acoustic Imaging Camera | CRY8125 | IECEx and ATEX certified for detecting gas leaks and partial discharges in explosive environments. |
| Contact Ultrasound Sensor  | IA3104  | Detect internal leaks in pipelines and valves.                                                     |
| Ultrasound Generator       | IA1101  | Simulate gas leaks or partial discharges for system calibration.                                   |
| Tripod Clamp               | IA1901  | Attach the acoustic imaging camera to the tripod.                                                  |
| Smart Battery Pack         | IA2001  | A single battery provides 5 hours of operation.                                                    |
| Smart Battery Charger      | IA2101  | Charge one battery at a time. Lightweight, compact design.                                         |

