

CRY8125 Ex Acoustic Imaging Camera

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

Introduction

CRYSOUND 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 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 4 channels, 20 - 100k Hz

General Specifications

Size	270 × 190 × 51 mm 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 ℃, 10 to 95 % no cond.
Storage Temp.	-20 to +70 ℃, 10 to 95 % no cond.
IP Rated	IP54
Storage Size	64GB internal, 64GB external
Ex Marking	**Ⓔx II 3 G Ex ic IIC T5 Gc** **Ⓔx II 3 D Ex ic IIIC T100℃ 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.