

CRY8125 Ex Acoustic Imaging Camera

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

Introduction

The CRY8125 Ex Acoustic Imaging Camera is designed for gas leak detection, electrical partial discharge analysis, and mechanical inspection in explosive industrial environments. TÜV-certified under IECEx and ATEX, and compliant with IEC 60079-0 and IEC 60079-11, it supports safe and reliable inspection in applicable explosive atmospheres.

Featuring a 200-microphone array, frequency range up to 100 kHz, and a 120° ultra-wide field of view, the CRY8125 enables sensitive acoustic detection across a wider inspection area. Intelligent automatic frequency selection automatically selects a suitable inspection frequency band to reduce background noise interference, while PC and Acoustic Link mobile remote control allow users to view and operate the camera from a more suitable location.

Optional Contact Ultrasound Sensor and Thermal Imaging Camera Module extend the system to valve internal leak detection and thermal anomaly inspection. Integrated image capture, analysis, data management, and report generation provide an efficient workflow from detection and diagnosis to documentation.

Features

- Leak detection in explosive gas atmospheres (Zone 2) and dust atmospheres (Zone 22)
- Real-time acoustic localization and visualization
- Gas leak detection and leak rate estimation
- Partial discharge detection, PRPD analysis and type recognition
- Intelligent automatic frequency selection and remote control
- Expandable inspection and report generation

Highlights

- **Certified for IECEx and ATEX Explosion Protection**

  The CRY8125 is certified under IECEx and ATEX for use in Zone 2 gas and Zone 22 dust atmospheres. It complies with IEC 60079-0 and IEC 60079-11 and is suitable for operation at ambient temperatures from -20°C to +50°C.

- **PC & Mobile Remote Control**

  View and control CRY8125 from a PC or the Acoustic Link mobile app, with remote parameter adjustment, interface switching, photo capture, and video recording for easier inspection review and collaboration.

- **Clear Display & Ergonomic Field Operation**

  An 8-inch, 1920 × 1200 high-resolution display with up to 600-nit brightness and 6× digital zoom pairs with a lightweight 1.5 kg design. Two batteries provide up to 10 hours of combined runtime for extended field inspections.

- **Expandable Inspection Capabilities**

  Optional Contact Ultrasound Sensor and Thermal Imaging Camera Module expand CRY8125 for valve internal leak detection, thermal anomaly inspection, and more comprehensive equipment diagnostics across a wider range of industrial applications, subject to applicable certification and conditions of use.

- **Exceptional Acoustic Detection Performance**

  A 200-microphone array, frequency range up to 100 kHz, and high-performance processing platform enable sensitive gas leak and partial discharge detection. At 5.6 bar, the minimum detectable leak rate is 0.0022 L/min at 10 m.

- **2-Year Warranty**

  CRY8125 is covered by a 2-year limited warranty.

Technical Specifications

Acoustic Specifications	
Microphone Array	200 MEMS Microphones
Frequency Range	2k - 100k Hz
SPL Range	28 - 132 dB
Minimum Detectable Leak	10 m: 0.0022 L/min, 5.6 bar 0.5 m: 0.0015 L/min, 5.6 bar
Test Distance	0.2 - 240 m (1 - 787 ft)

Camera	
Camera FOV	120°(D) 94°(H) × 76°(V)
Camera Pixels	13M pixels
Focal Length	2.3 mm (0.09 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	1.5 kg (3.31 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	64 GB internal, 64 GB 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

Software	
Function	Multi-point imaging, directional focus, automatic frequency selection, leak rate estimation, PRPD spectrum, partial discharge type recognition, remote control, picture labelling, report export, etc.
Language	Chinese, English, Korean, French, Japanese, Russian, German, etc.

Ordering Information

Name	Model	Description
Acoustic Imaging Camera	CRY8124	Detect gas leaks and partial discharge in non-explosive atmospheres.
Ex Acoustic Imaging Camera	CRY8125	IECEx and ATEX certified for detecting gas leaks and partial discharge in explosive atmospheres.
Contact Ultrasound Sensor	IA3105	Enable internal valve leak detection in explosive atmospheres.
Ultrasound Generator	IA1101	Simulate gas leaks or partial discharge 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	Charges one battery at a time. Lightweight, compact design.

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