CRY2626G Drone-Mounted Acoustic Imaging Camera

Introduction

The CRY2626G is the world's first drone-mounted acoustic imaging camera for detection of pressurized system leaks and electrical partial discharge. The camera utilizes a microphone array with beamforming technology to pinpoint and acquire sound source distribution data and overlay it on a high-resolution video image.

The system features a 2-axis electric gimbal that allows pan and tilt control of the camera from the drone remote controller. This is beneficial for swiftly identifying potential gas leaks and partial discharge faults.

Featuring a robust and lightweight aluminum alloy body, the CRY2626G is designed to be durable under the most demanding environmental conditions. The included DJI SKYPORT allows for easy assembly and disassembly. Both photo and video modes are supported and data is stored on a large-capacity TF card for easy export of test results.

Features

- Designed to be mounted on a DJI M300 RTK or M350 RTK drone, the camera feed is displayed on the remote control.
- Structural and algorithmic noise reduction allow an effective testing distance of up to 35 meters.
- PRPD spectrum display with the ability to show discharge types.
- Interfaces with the DJI SKYPORT mounting system, convenient installation.
- Generate reports to share key data.

Highlights

- **Enhance Inspection with 2-axis Gimbal**

  The included two-axis gimbal provides +/- 90 degrees of Pan control and -90 to +20 degrees of Tilt. The gimbal mounting also provides stability and vibration reduction for sharper images.

- **Drone Motor Noise Suppression**

  The CRY2626G combines physical sound-absorbing material and advanced software algorithms to suppress or eliminate interference from the drone motors and blades.

- **Real-time Display of Test Results**

  Processed image results are transmitted in real-time to the drone Remote Controller display for immediate feedback on both the PRPD spectrum and type.

- **Rapid Deployment, Take off in 1 Minute**

  The DJI SKYPORT mounting and communication interface allows for quick and easy installation leading to very rapid deployment in the field. The camera can be quickly mounted onto drones within 1 minute.

- **Long Flight Time, Impressive Measurement Distance.**

  With a total payload weight of 1.4kg the CRY2626G can be deployed for flight times of up to 30 minutes depending on drone specifications. Effective detection distance is up to 35 meters under ideal conditions.

Technical Specifications

Acoustic Specifications

Microphone array	128 channels MEMS microphone
Frequency range	2k - 48k Hz
SPL range	28 - 132 dB
Test distance	0.5 - 35 m

Camera

Camera FOV	62°
Camera pixels	8M pixels
Focal length	3.04 mm

Storage

Internal storage	8G internal
External storage	64G external TF card
Data format	.jpg (picture), .mp4 (video), .wav (audio)

Gimbal

Pan	-90 - +90°
Tilt	-90 - -20°
Accuracy	1°

General Specifications

Size	340 * 232 * 167 mm
Weight	1.4 kg
Flight time	30 minutes, *Depending on environmental conditions
IP rate	IP42
Connector	Skyport V2
Operating temp.	-20 - +50 ℃
Storage temp.	-20 - +70 ℃
Operation humidity	10 - 95 %, no condensation
Drone	Dji M300 RTK, M350 RTK

Certifications

Safety	IEC 61010-1
EMC	IEC 61326-1
Vibration	2g, IEC 60068-2-6
Shock	25g, IEC 60068-2-27

Software

Function	PRPD spectrum, identification of partial discharge types, microphone test
Report type	ISO 50001 template for gas leak and partial discharge
Protocol	Dji PSDK protocol
Language	Chinese, English

Ordering Information

Name	Model	Description
Drone-mounted Acoustic Imaging Camera	CRY2626G	Drone-mounted acoustic imaging camera device
Landing Gear	IA1401	Used for installation on a drone, providing space for mounting a 2626G.
Downward Gimbal Connector	IA1402	Used for installation on a drone to increase the payload weight capacity of the drone.
Protective Case	IA3002	Used for storing the Drone-mounted Acoustic Imaging Camera, Landing Gear, and Downward Gimbal Connector.