MYK – 3A/2LG – IR – 640 X 512 /33X EO 1920 X 1080 / Ta-Tr

Three-axis Two-Light Gimbal Camera

1. Product Introduction

The **MYK – 3A/2LG – IR – 640 X 512 /33X EO 1920 X 1080 / Ta-Tr** Gimbal Camera consists of an uncooled infrared thermal imager, a 33x continuous zoom visible light camera, a three-axis servo-stabilized platform and image processing components. It has features such as light weight, high stabilization, high precision, high integration, automatic target identification and tracking. It can be integrated to the small and middle unmanned aerial vehicles to finish 24-hours security and surveillance tasks in the target area.

The gimbal camera can detect, identify, and track the ground targets for 24 hours both in daytime and nighttime. It also supports for infrared and visible light videos streaming in real time.

The gimbal camera has been adapted to a number of mainstream domestic flight control platforms, docked seamless with the flight control; and it can be accessed to the unit's ViewControlStudio display and control software platform, which can assist the overall unit complete the development of the unmanned aircraft system.

The application includes security and surveillance, search and rescue, and forest fire prevention .

2. Physical Picture

3. Product Functions

a）Identify and track typical targets.

b）Self-check and fault report. c）

Visible light 33x optical zoom.

d） Output infrared and visible light images.

e） Optical zoom, autofocus, manual focus, fog penetration and low illumination.

f） Infrared 1~4x electronic amplification, 6 kinds of color palette switching.

g）Freely rotate in azimuth,pitch and roll angle.

h） Various operating modes such as heading lock/manual search/following/attitude stabilization/tracking.

i） Isolate the disturbances of the carrier, stabilize the line of sight. j）

Lock/unlock the target, output the image with a tracking frame after the target is locked.

k）lAuto track the target and resist interference. l

）Memory tracking with rapid target reacquisition

m）Adjust size of the wave gate.

n） Switch tracking targets.

o） output information such as the system working status, camera working status and optical axis position.

p） 0Mbps Ethernet video interface (RTSP protocol).

q）Photo taking and video recording.

r）Quick-release.

4. Mounting Platforms

Dropped fixed-wing UAVs, rotary-wing UAVs, tethered UAVs, etc.

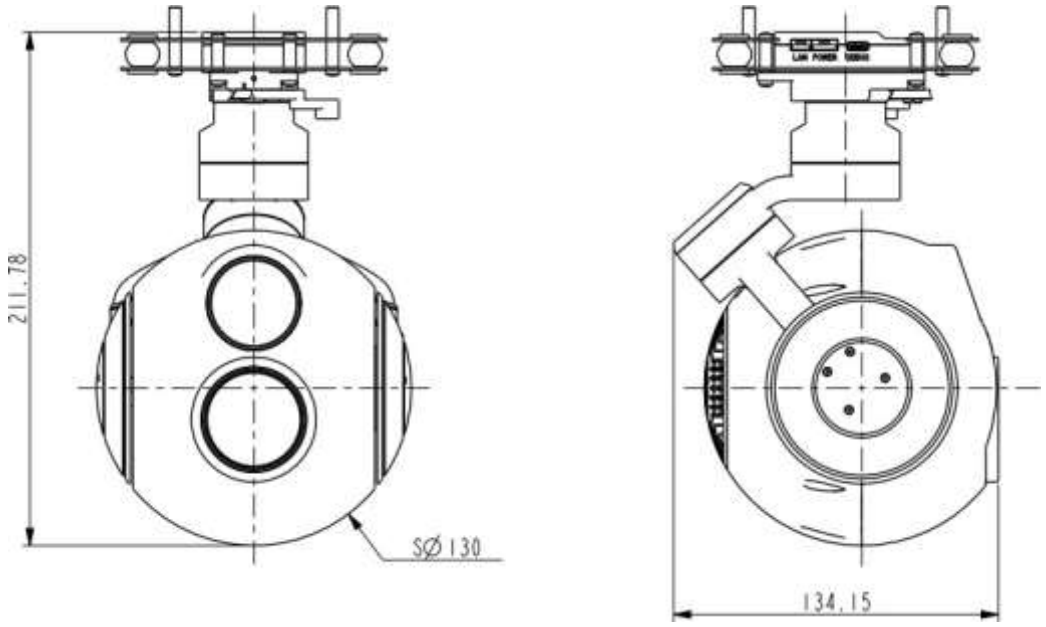
5. Main Technical Parameters

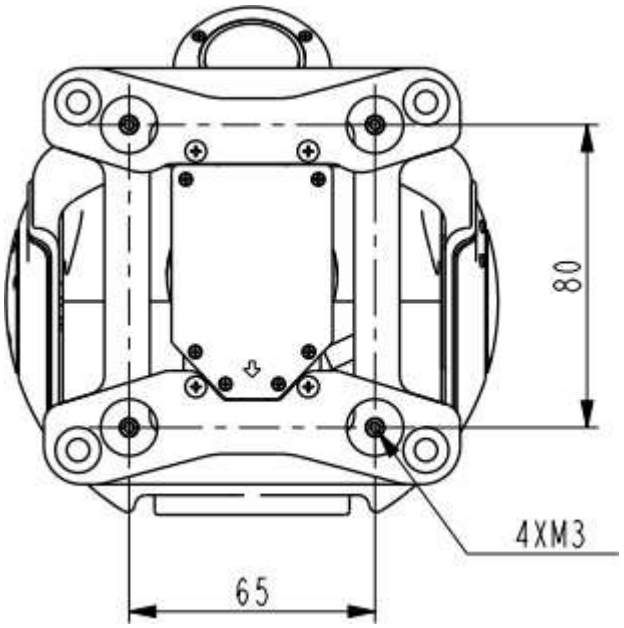
Model	**MYK – 3A/2LG – IR – 640 X 512 /33X EO 1920 X 1080 / Ta-Tr**
Infrared Thermal Imager	
Detector Type	Uncooled Focal Plane Detector
Working Waveband	8μm～14μm

Detector Resolution	640×512
Pixel Size	12μm
Lens Focal Length	35mm
Field of View	12.5°×10°
Pallete	6
Noise Equivalent Temperature Difference	NETD≤50mK
Minimum Resolvable Temperature Difference	MRTD≤500mK
Visible Light Camera	
Resolution	1920×1080
Optical Zoom	33 X
Focal Length	4.8mm～158mm
Field of View Angle	58.9°×33.1°～2.4°×1.4°
Zoom	Auto focus, manual focus
Minimum Illumination	0.01Lux (black and white)
Servo Platform	
Pan Angle	360°×n (360° continuous rotation)
Tilt Angle	-110° ~ +45° (positive upward)
Roll Angle	-40°～+40°
Frame angle accuracy	≤0.3°（1σ）
Stabilization Accuracy	≤0.1mrad (1σ)
Maximum Rotation Speed	Azimuth≥50°/s, Pitch≥50°/s
Maximum Rotational Acceleration	Azimuth≥20°/s², Pitch≥20°/s²
Imaging Processing Module	
Automatically identification	Automatically identify selected targets≥32
Target tracking	Target dimension≥16×16
Tracking frame rates	50HZ
Image output	RTSP/UDP/RTMP optional, 200kbps～6Mbps settable
System parameters	
Voltage	12V - 32VDC
Consumption	Stable Power Consumption: ≤30W, 24VDC power-up peak current ≤5A
Weight	≤1kg
dimensions	≤130mm×134.2mm×211.8mm
Interface	
Control Interface	RS232/TTL/RS422/ 100 Mbit(optional)
Video Interface	100 megabit Ethernet
Storage Interface	≤128G Memory Card (Mini SD Card)
Picture Format	jpg Format
Video Format	avi Format
Arm Type	Oblique arm

Quick Release Type	With quick release
Environmental Adaptability	
Working Temperature	-20℃ ~ +55℃
Storage Temperature	-40℃ ~ +60℃
Vibration Condition	Acceleration of 6g; 5 minutes in each of the vertical, lateral and longitudinal directions.
Impact Condition	Peak acceleration of 20g, duration of 11ms
Protection Level	Can fly in light rain

6. Mechanical Dimensions and Installation Interfaces

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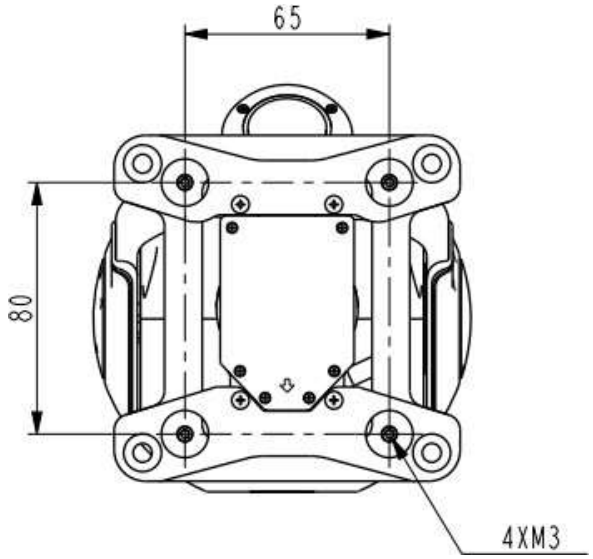
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