MYK – 3A/1 LG – 10X EO 1920 X 1080 /Ta-Tr
Three-axis Single Light Gimbal Camera

1. Product Introduction

2. MYK – 3A/1 LG – 10X EO 1920 X 1080 /Ta-Tr

Gimbal Camera consists of a 10x continuous variable visible light camera, a three-axis servo stabilized platform, and image processing components. It has features such as light weight, 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, border patrol, search and rescue, and forest fire prevention .

3. Physical Picture

4. Product Functions

a) Identify and track typical targets.

b) Self-check and fault report.

c) Visible light 10x optical zoom.

d) Output visible light images.

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

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

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

h) Isolate the disturbances of the carrier, stabilize the line of sight.

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

j) Auto track the target and resist interference.

k) Memory tracking with rapid target reacquisition.

l) Adjust size of the wave gate.

m) Switch tracking targets.

n) Output information such as the system working status, camera working status and optical axis position.

o) 100Mbps Ethernet video interface (RTSP protocol).

p) Photo taking and video recording.

5. Mounting Platforms

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

6. Main Technical Parameters

Model	**MYK – 3A/1 LG – 10X EO 1920 X 1080 /Ta-Tr**
Visible Light Camera	
Resolution	1920×1080
Optical Zoom	10 times
Focal Length	4.8mm～48mm
Field of View Angle	60.2°×33.9°～6.6°×3.7°
Zoom	Auto focus, manual focus
Minimum Illumination	0.01Lux (black and white)

Servo Platform	
pan angle	360°×n (360° continuous rotation)

tilt angle	-115° ~ +90° (positive upward)
Frame angle accuracy	≤0.1°（1σ）
Stabilization Accuracy	≤0.1mrad (1σ)
Maximum Rotation Speed	Azimuth≥60°/s, Pitch≥60°/s
Maximum Rotational Acceleration	Azimuth≥60°/s, Pitch≥60°/s
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	≤400g
dimensions	88mm×109.3mm×130.75mm
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
Quick Release Type	Without 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

7. Mechanical Dimensions and Installation Interfaces