

MYK3A/4LG/EO4K25LF45WA/IR640/LR1500/Ta-Tr



1. Product Overview

The gimbal camera integrates an uncooled infrared thermal imager, 48MP wide-angle and long-focus visible light cameras, an eye-safe laser rangefinder, and a three-axis stabilized platform. It is designed for lightweight UAVs (<50 cm wheelbase) and supports high-precision imaging, automatic target detection, and tracking.

2. Key Functions

- Automatic target identification and tracking
- Infrared and visible light imaging output
- Infrared enhancement and pseudo-color modes
- 3-axis rotation (pan, tilt, roll)
- Stabilized line of sight
- Laser ranging

- Target lock/unlock with tracking frame
- Anti-interference tracking
- Tracking point switching
- Network control (UDP) and video output (RTSP/UDP)
- Photo capture and video recording
- Picture-in-picture display

3. Mounting Platform

Suitable for small rotor UAVs.

4. Technical Specifications

Infrared Thermal Imager

Detector Type: Uncooled Focal Plane Detector

Waveband: 8–14 μm

Resolution: 640×512

Pixel Size: 12 μm

Focal Length: 9.1 mm

Field of View: 48.7° × 38.6°

Temp Range: -20°C to +150°C ($\pm 2\%$) / 0°C to +500°C ($\pm 3\%$)

Digital Zoom: 8x

Visible Light Cameras

Long-focus: 48MP, 25mm focal length, 4K@30fps

Wide-angle: 48MP, 4.5mm focal length

Laser Rangefinder

Wavelength: 905nm

Max Distance: >1.5 km

Accuracy: <1 m

Servo Platform

Pan: $\pm 150^\circ$ | Tilt: -130° to +90° | Roll: $\pm 40^\circ$

System Parameters

Storage: MicroSD (<512GB)

Voltage: 10~26V (12V nominal)

Weight: ~240g

Environmental

Operating Temp: -20°C to -55°C

Storage Temp: -40°C to -60°C

