

L40T

three-axis gyro-stabilized dual-optical gimbal

Product Usage Instructions



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Product Overview

It features high-precision two-axis stability

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Functional features/application scenarios

It has the functions of character overlay and picture-in-picture

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Technical parameters

It has the function of electronic image stabilization

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Comparison of competing products/Size structure

It has an anti-occlusion tracking function

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Interface description

It has the function of recognizing specific targets

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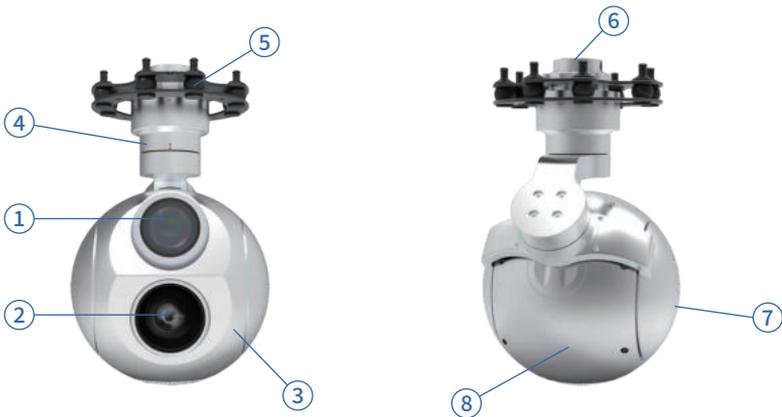
Shipment list

Support web-based parameter configuration and firmware upgrade

Product overview

The L40 intelligent electro-optical pod adopts a three-axis servo stabilization platform and achieves stable imaging under complex on-board motion postures through a high-precision servo control system. The system integrates a 40x visible light camera. This product is compatible with various small and medium-sized rotorcraft/fixed-wing unmanned aerial vehicles and special operation platforms. It is suitable for fields such as security, emergency response, inspection, and ecological monitoring, and has capabilities such as target search, situation awareness, image tracking, and target recognition.

Get to know the L40T



- | | | |
|-----------------|---------------------------|-------------|
| ① Infrared | ④ Azimuth axis | ⑦ Ear cups |
| ② Visible light | ⑤ Shock absorber | ⑧ Rear hood |
| ③ Front cover | ⑥ Remove the ring quickly | |

- After using the pod, please store the equipment in a dry environment
- Infrared thermal imaging lenses must not be aimed at strong energy sources such as the sun, laser beams, lava, etc., otherwise it will cause irreparable damage to the thermal imaging module
- Be sure to wipe the dirt on the surface of the lens with a soft and dry cleaning cloth
- Do not touch the surface coating of the infrared lens directly with your hands or scratch it with hard objects
- The external pin port of the pod serial port must not be connected to the power supply

Functional features

- It has the dual-light imaging function of visible light and long-wave infrared
- It is equipped with high-precision two-axis stability function, fully isolating the azimuth and pitch Angle movement of the carrier
- It features multiple working modes such as manual, tracking, following and collection
- It has the functions of character overlay and picture-in-picture
- It has the function of taking photos and recording videos simultaneously with both visible and infrared light
- It features an electronic image stabilization function, providing a sub-pixel-level stable experience
- It has an anti-occlusion tracking function, and target recognition assists in stable tracking
- It has a specific target recognition function and can automatically identify four types of targets: people, vehicles, ships and aircraft
- It has multi-target tracking function, and the target is locked by keyboard and voice numbering
- It features anti-link delay function and precise locking of moving targets
- It has the function of remote web page upgrade
- It has the function of laser ranging
- Support keyboard control of the pod

Application scenarios



500m to view license plates

License plates can be clearly identified at a distance of 500 meters. Long-distance detection avoids disturbing at close range, quickly locks onto the target, and improves the efficiency and practicality of evidence collection in scenarios such as traffic law enforcement and security monitoring.



Thermal imaging

Infrared color plates are abundant and can be applied in forest fire fighting, river sewage discharge, photovoltaic inspection, emergency rescue, military and police reconnaissance, wildlife protection, etc.

Technical parameters

Single-target tracking

Target type	General objective
Tracking rate	≥32 pixels per frame
Update frame rate	≥50FPS

Servo control

Course range	Nx360°
Pitch range	-120°~40°
Roll range	-75°~75°

Multi-object tracking

Target type	People, vehicles, ships, planes
Recall rate	≥90%
Precision rate	≥80%
Target size	Minimum 32x32 @1080P
The number of tracking targets	≥20
Track the jump rate	≤15%
Update frame rate	≥20FPS

Thermal imaging

Working band	8μm~14μm
Resolution	640x512
Pixel	12μm
Focal length	35mm/F1.2
Field of view	12.4°x9.9°
Detection distance	People1.8km, car 4.4km
Recognition distance	People0.4km, car1.1km

Visible light

Frequency band	0.4μm~0.9μm
Resolution	1920x1080
Focal length	4.25mm~170mm
Perspective field	66.35°~1.90°
Detection distance	People 11.1 km, car 20 km
Recognition distance	People 2.7km, car 11km

Interface size

Size	≤Φ135mmx195mm×150mm
Weight	≤1.3kg
Power supply	12~28VDC
Power consumption	20w(average) 50w(peak)
Interface	Serial port 100-megabit network, SBUS
Video interface	100-megabit Network

Video and Storage

Photo format	JPEG
Video format	MP4, TS
Encoding format	H.264, H.265
Video Protocol	RTSP, UDP, etc
Storage	Maximum 2T

Environmental parameters

Working temperature	-20°C~60°C
Storage temperature	-40°C~70°C

Competitive product comparison

Linkfly

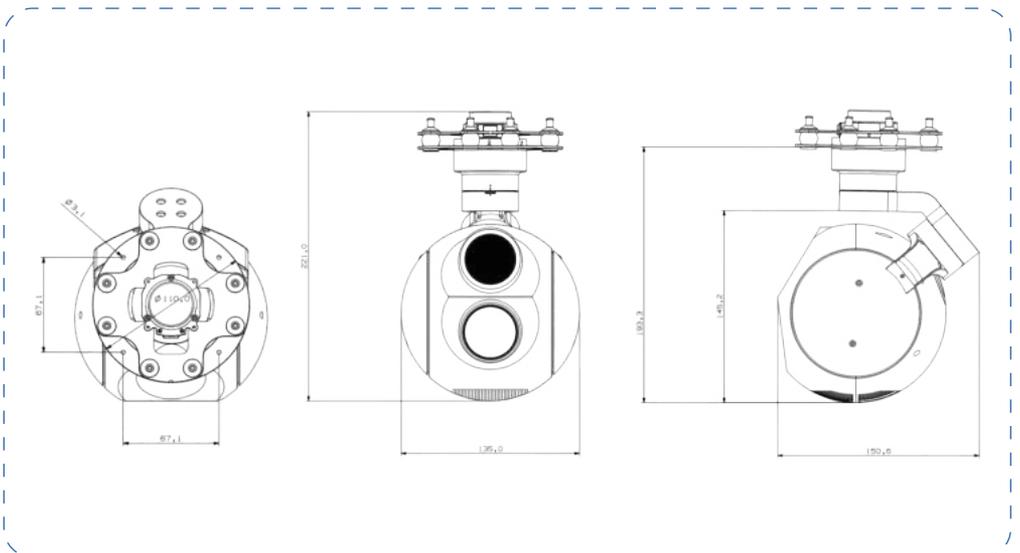
- ✓ **Multi-object tracking**
Incorporate multiple AI algorithms
- ✓ **The built-in storage is up to 2T**
Far exceeding the low storage of peers
- ✓ **No need to remove the card**
It can be browsed downloaded and deleted on the web
- ✓ **Strong wind resistance**
Fear not the fierce wind

VS

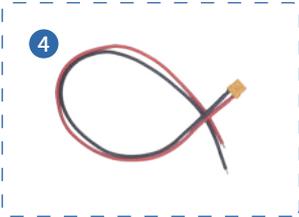
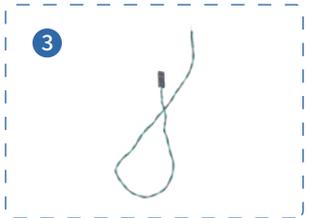
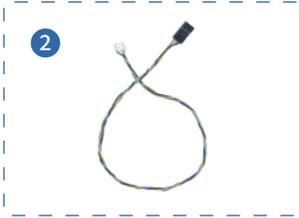
Other brands

- ✓ **Single-target tracking**
Without the support of AI algorithms
- ✓ **256/512G**
It fails to meet the users' demands
- ✓ **The card needs to be removed.**
Please remove the card to preview, download and delete
- ✓ **Weak wind resistance**
Poor wind performance

Dimensional structure



*The protection grade can be selected as IP66, and the standard is IP54
The infrared is optional with 1280*1024



THANKS