

# L40

## Intelligent Photoelectric Pod

Product Usage Instructions



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## Product Overview

Integrated visible light imaging component

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## Functional features/application scenarios

Support OSD information display

03

## Technical parameters

It has a video storage function

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## Comparison of competing products/Size structure

Support setting of storage format and duration

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## Interface description

Support real-time locking and tracking of moving targets

06

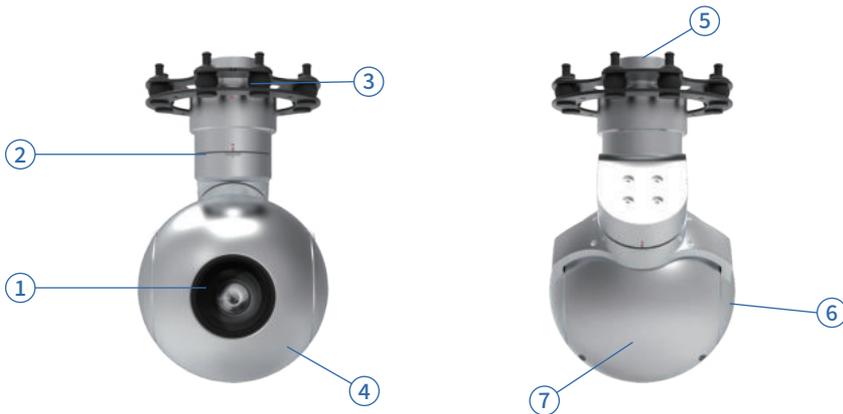
## Shipment list

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 L40



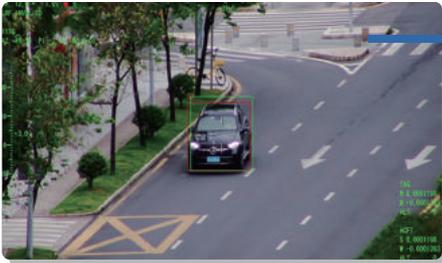
- ① Visible light
- ② Azimuth axis
- ③ Shock absorber
- ④ Front cover
- ⑤ Remove the ring quickly
- ⑥ Ear cups
- ⑦ Rear hood

- 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

- Integrated visible light imaging component
- It is equipped with mechanical stability for three-axis gyroscopes and electronic image stabilization functions
- It includes working modes such as manual control, intelligent tracking, scanning, following and returning, and supports quick mode switching and parameter presetting
- Support OSD information display
- It has a video storage function and supports Settings for storage format and duration
- Based on trajectory prediction, it supports real-time locking and tracking of moving targets
- It supports the recognition of typical targets such as people, vehicles, aircraft and ships, and can automatically track and identify targets within a certain range
- Supports the numbering marking of up to 20 typical targets and supports numbered target locking
- Real-time monitoring and display of the working status of sensor components
- Support web-based parameter configuration and firmware upgrade
- 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.



### 40x optical zoom

The camera achieves 40 optical zoom, which can not only present a broad picture but also capture distant details in detail.

# Technical parameters

## Single-target tracking

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

## Environmental parameters

Working temperature	-20°C~60°C
Storage temperature	-40°C~ 70°C
Protection grade	IP54

## 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

## Video and Storage

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

## Visible light

Frequency band	0.4μm~0.9μm
Detector	1/ 2.8 5MP
Focal length	4.25mm~170mm
Perspective field	66.35°~1.90°
Optical zoom	40X
Detection distance	People 11.1 km, car 20 km
Recognition distance	People 2.7km, car 11km

## Power supply characteristics

Power supply range	11V~28V
Power consumption	15w (average)
Power consumption	50w (Peak value)

## Size and weight

Size	≤120mmx205mm×145mm
Weight	≤1kg

## Servo control

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

## Electrical interface

Communication interface	Serial port 100-megabit network, SBUS
Video interface	100-megabit Network

## Competitive product comparison

### Linkfly

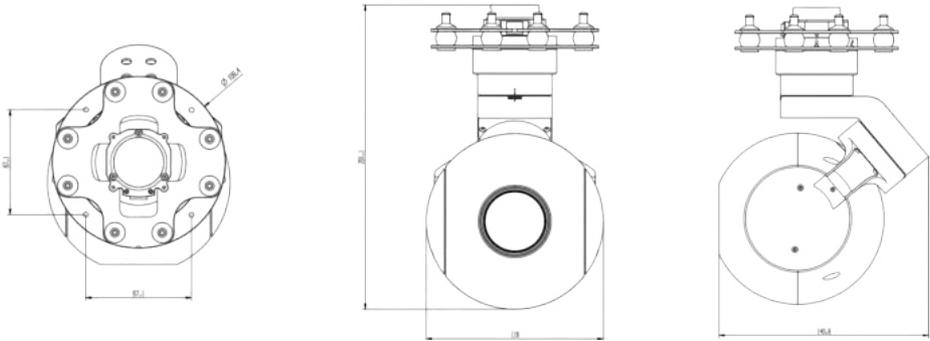
- ✓ **Multi-object tracking**  
Incorporate multiple AI algorithms
- ✓ **The built-in storage is up to 2T**  
Far exceeding the low storage of peers
- ✓ **No need to remove the card**  
It can be browsed downloaded and deleted on the web
- ✓ **Strong wind resistance**  
Fear not the fierce wind

VS

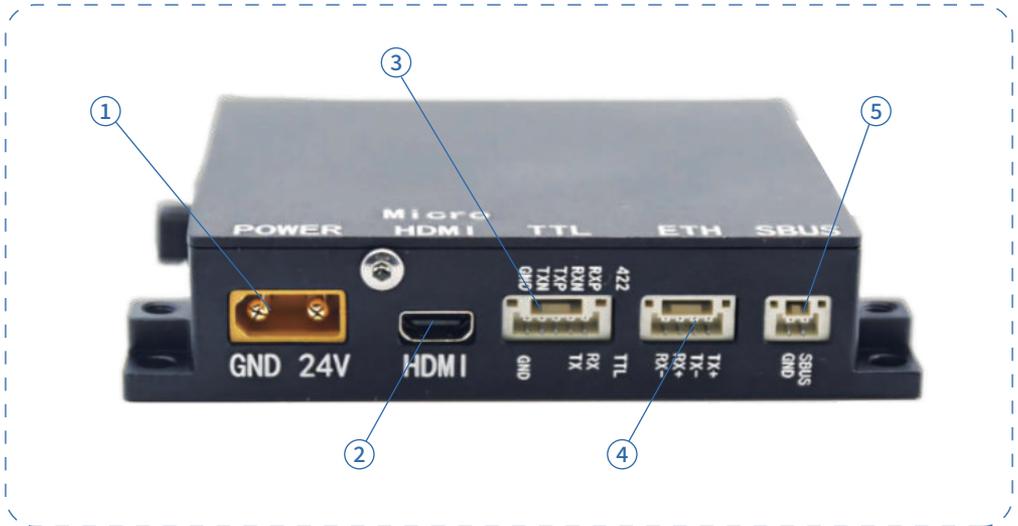
### Other brands

- ✓ **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



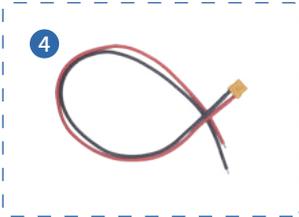
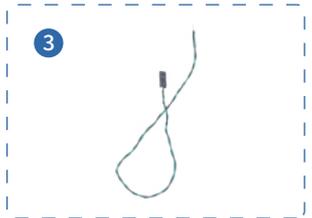
## Interface description



- ① POWER interface
- ② HDMI interface
- ③ TTL interface
- ④ ETH interface
- ⑤ SBUS interface

## Shipment list

Serial number	Product Name	Model specification	Unit	Quantity	Example	Remarks
1	Pod products	L40	units	1	1	
2	TTL line	3P-18CM	Root	1	1	
3	SBUS line	2P-18CM	Root	1	1	
4	Power cord	XT-30	Root	1	1	
5	Network cable	General	Root	1	1	
6	Card reader	General	individual	1	1	
7	Shock absorber	/	individual	1	1	
8	Packaging box	/	individual	1	1	
9	Quick disassembly	LQ-V10	individual	1	1	



# THANKS