

L10

Intelligent Photoelectric Pod

Product Usage Instructions



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Integrated visible light imaging component

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It has a video storage function

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Support setting of storage format and duration

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Product overview

The L10 intelligent electro-optical pod adopts a three-axis servo stabilization platform and achieves stable imaging under complex aircraft motion postures through a high-precision servo control system. The system integrates a 10x visible light camera. This product is compatible with various small and medium-sized rotorcraft/fixed-wing unmanned aerial vehicles and special operation platforms, and is suitable for fields such as security, emergency response, inspection, and ecological monitoring. It has capabilities such as target search, situation awareness, image tracking, and target recognition.

Get to know the L10 intelligent photoelectric pod



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

- 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 and vehicles 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
- It supports the recognition of typical targets such as people and vehicles and can automatically track and identify targets within a certain range
- Real-time monitoring and display of the working status of sensor components
- Support web-based parameter configuration and firmware upgrade
- Real-time monitoring and display of the working status of sensor components
- Support keyboard control of the pod

Application scenarios



Multi-target tracking

It can lock onto multiple targets in real time, has strong anti-interference ability, is compatible with scenarios in the air and on the ground, accurately output the dynamic of the targets, and provide efficient data support for decision-making.



10x optical zoom

The camera achieves 10 optical zoom, which can not only display a broad picture but also capture distant details in detail. It can quickly lock onto the target and assist in operation decision-making.

Technical parameters

Single-target tracking

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

Multi-target tracking

Target type	people, cars, boats, airplanes
Recall rate	≥90%
Precision rate	≥80%
Minimum target size	32x32 @1080P
The number of tracking targets	≥20
Track the jump rate	≤15%
Update frame rate	≥20FPS

Visible light

Working band	0.4μm~0.9μm
Resolution	1920x1080
Focal length	4.7mm~47mm
Optical zoom	10X
Field of view	58.3°x7.1°
Detection distance	People 2.7 km, car 3.9 km
Recognition distance	People 0.6km, car 1km

Servo control

Course range	Nx360°
Pitch range	-120°~ 40°
Angle measurement accuracy	±45°

Power supply characteristics

Power supply range	11V~28V
Power consumption	15w (average)
Power consumption	30w (Peak value)

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	-45°C~ 70°C

Size and weight

Size	≤100mmx182mm×129mm
Weight	≤700g

Electrical interface

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

Competitive product comparison

Linkfly

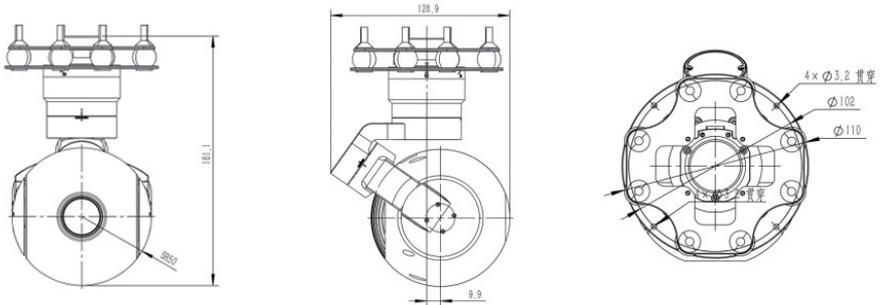
- ✓ **Multi-object tracking**
Incorporate multiple AI algorithms
- ✓ **The built-in storage is up to 2T**
Far exceeding the low storage of peers
- ✓ **No need to remove the card**
It can be browsed downloaded and deleted on the web
- ✓ **Strong wind resistance**
Fear not the fierce wind

VS

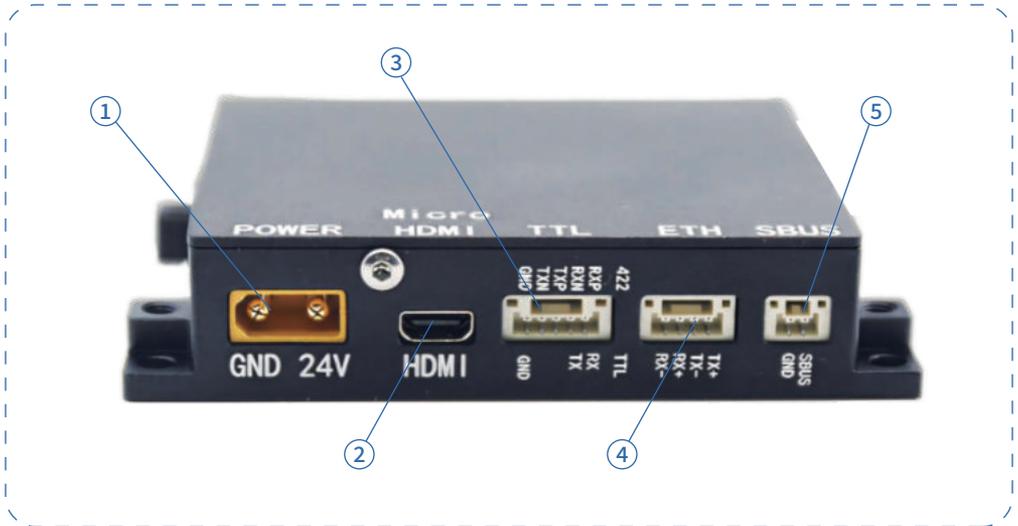
Other brands

- ✓ **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 performance

Dimensional structure



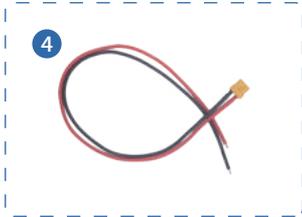
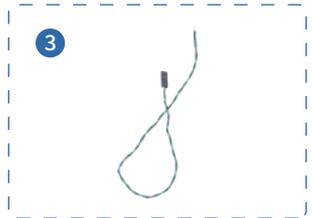
Interface description



- 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	L10	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