L10TR

Intelligent Photoelectric Pod

Product Usage Instructions

Directory

Product overview

The L10TR three-axis three-frame gyro-stabilized three-optical pan-tilt adopts a miniaturized and lightweight industrial design. It is equipped with a 10x continuous optical zoom visible light camera, a long-wave uncooled infrared imaging component, and an anti-delay module, AI target recognition and multi-target tracking module. It is mainly applied in the monitoring fields of imaging, detection, tracking and recognition of ground targets. It meets the needs of line inspection, accident investigation, emergency rescue, law enforcement evidence collection, anti-terrorism and anti-violence, etc.

Get to know L10TR
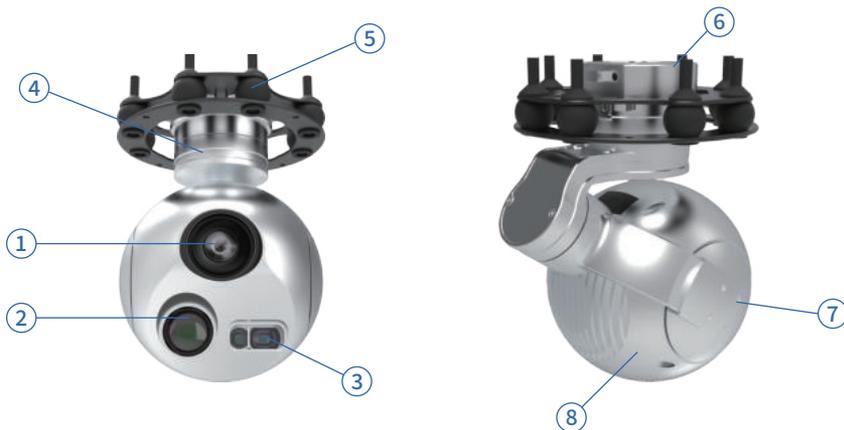
| №		№		№	
①	Visible light	④	Azimuth axis	⑦	Ear cups
②	Infrared	⑤	Shock absorber	⑧	Rear hood
③	Laser	⑥	Remove the ring quickly		

- 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 mechanical stability for three-axis gyroscopes and electronic image stabilization functions
- It features multiple working modes such as manual, tracking, following and collection
- It has the function of laser ranging
- It has the functions of character overlay and picture-in-picture
- 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
- Support keyboard control of the pod

Application scenarios
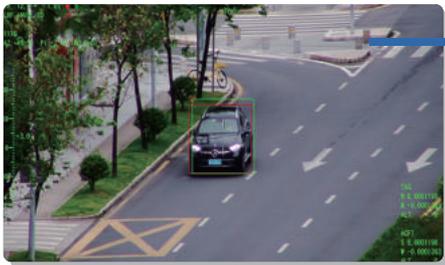
500m to view license plates

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	≥30 pixels per frame
Update frame rate	≥50FPS

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

Servo control

Course range	Nx360°
Pitch range	-120°~ 40°
Roll range	-45°~45°

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℃~60℃
Storage temperature	-40℃~ 70℃

Thermal imaging

Working band	8μm~14μm
Resolution	640x512
Pixel	12μm
Focal length	19mm/F1.0
Field of view	23°×18.4°
Detection distance	People1.0km, car 2.4km
Recognition distance	People 0.2km, car 0.6km

Visible light

Frequency band	0.4μm~0.9μm
Resolution	1920x1080
Focal length	4.7mm~47mm
Perspective field	58.3°~7.1°
Detection distance	People 2.7 km, car 11.9 km
Recognition distance	People 0.6km, car 2.9km

Laser ranging

Band	905mm
Ranging range	5m~1500m
Ranging accuracy	±1m
Ranging frequency	1Hz

Interface size

Size	≤φ100mmx160mm×127mm
Weight	≤800g
Power supply	11~ 28VDC
Power consumption	15w(average) 30w(peak)
Interface	Serial port 100-megabit network、SBUS
Video interface	100-megabit Network

Competitive product comparison

Linkfly
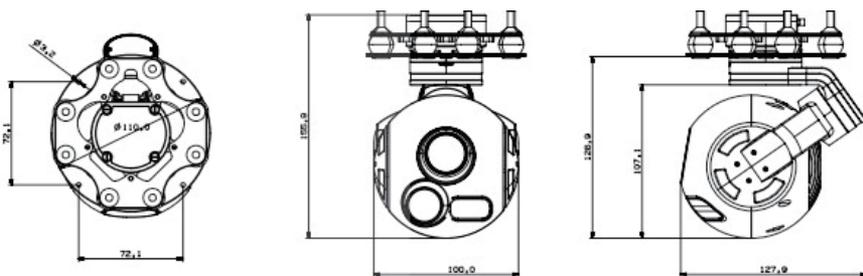
⊘ **Multi-object tracking**
Incorporate multiple AI algorithms

⊘ **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

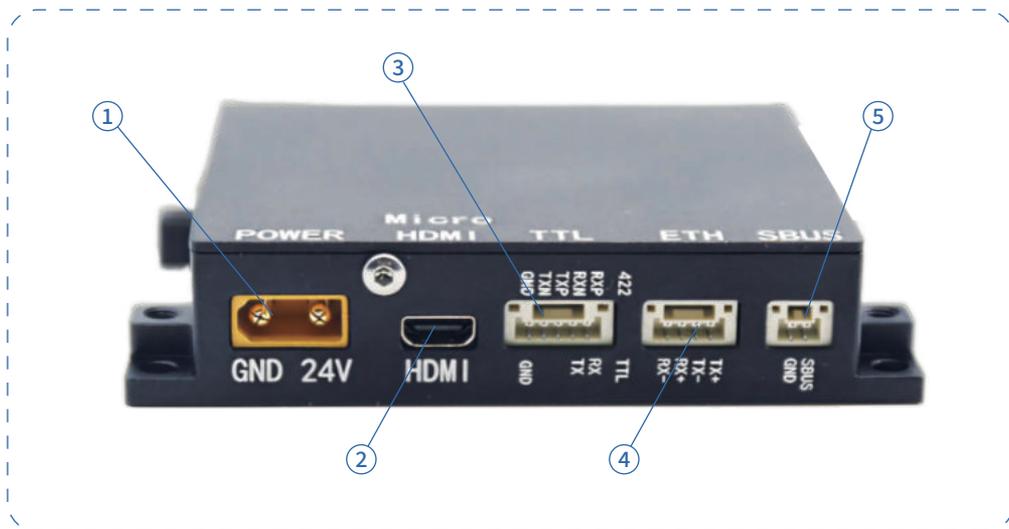⊘ **Strong wind resistance**
Fear not the fierce wind

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**
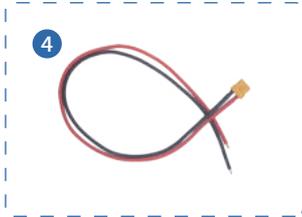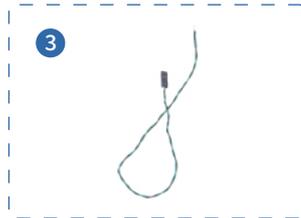Poor performance

Dimensional structure

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

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	L10TR	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	

1	2	3
4	5	6
7	8	9

THANKS