

ZKGTD055

Micro three-axis long short focal length visible light stabilization gimbal



ZKGTD055 stabilized imaging gimbal adopts a three-frame gyro-stabilized control system and an embedded pan-tilt cable-passing form. It is equipped with a 13-megapixel visible-light CMOS sensor and a 2-megapixel starlight-level visible-light CMOS sensor, providing both large and small field angles. It can real-time output 1080P high-definition visible-light videos and simultaneously,It also has the functions of target detection, recognition, locking, and tracking.

Application scenarios: Traffic flow and law enforcement, border patrol, industrial and infrastructure inspection, emergency rescue and disaster response, night or low light park inspection, military terrain reconnaissance.

Camera Parameters

Parameter	13M CMOS	Starlight CMOS
Visible-light sensor	1/3" 13M CMOS	1/2.8" CMOS
Focal length	3.5mm	10.3mm
FOV	63.5° (H) ×38.5°(V) (±5%,1080P)	30.9° (H) ×17.4°(V) (±5%,1080P)
Photo resolution	4K、1920×1080	4K、1920×1080
Video resolution	4K@50fps、1920×1080@50fps	1920×1080@50fps
Distance	Visibility ≥8km, adult recognition distance ≥ 350m Urban low light: adult recognition ≥ 400m	

Basic parameters

Parameter	Value
Frm / Ctrl Yaw	-110°~+110°/-90°~+90°
Frm / Ctrl Pitch	-120°~+90°/-90°~+30°
Frm Roll	-30°~+30°
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Recognition	Persong and vehicle
Accuracy	≥85%
Video Code	H.264/H.265
Video bandwidth	2M/4M

Parameter	Value
Weight/AI of gimbal	55g±5g/38g±2g
Gimbal Size	44.0mm×46.0mm×60.0mm
AI Component Size	59.0mm×55.0mm×24.0mm
Video output	LAN、HDMI
Control	UartTTL、UDP、SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20°C~+55°C/-45°C~+60°C
Power	DC9V~16.8V@3A,Steady≤7.5W

ZKGTD060

Stabilization Gimbal with Micro Three-axis and Dual Optical Camera



ZKGTD060 stabilized gimbal adopts a three-frame gyro stabilization control and an embedded pan-tilt cable-penetrating form. It is equipped with a 13-megapixel visible light CMOS sensor and an infrared sensor, which can real-time output 1080P high-definition visible light video and infrared video. The product also has the functions of autonomous target recognition, target locking and tracking.

Application scenarios: Traffic flow and law enforcement, border patrol, industrial and infrastructure inspection, emergency rescue and disaster response, night or low light park inspection, military terrain reconnaissance.

Camera Parameters

Visible		Value	Value	
Visible light sensor	1/3"	13M CMOS	FOV	63.5° (H) ×38.5°(V) (±5%,1080P)
Photo resolution	4K、1920×1080		Focal length	3.5mm
Video resolution	4K@50fps、1920×1080@50fps			
Recognition	Visibility ≥8km, adult recognition distance ≥ 350m			
Infrared		Value	Value	
Detector band	8-14um,	long-wave	Focal length	7mm
Pixel number	256×192		FOV	24.8° (H) ×18.7° (V) (±5%,1080P)
Photo resolution	256×192		Video resolution	256×192@50fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥80m			

Basic parameters

Parameter	Value	Parameter	Value
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°	Weight/Al of gimbal	60g±5g/38g±2g
Frm / Ctrl Pitch	-120° ~ +90°/-90° ~ +30°	Gimbal Size	46.0mm×44.0mm×52.0mm
Frm/Roll	-30° ~ +30°	size of the control box	59.0mm×55.0mm×24.0mm
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Video output	LAN、HDMI
Recognition	Person or vehicle	Control	UartTTL、UDP、SBUS
Accuracy	≥85%	Storage	≤512G Micro SD card
Video Code	H.264/H.265	Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Video bandwidth	2M/4M	Power	DC9V ~ DC16.8V@3A,Steady≤7W

ZKGTD070A

Stabilization Gimbal with Micro Three-Axis and Dual Optical Camera



ZKGTD070A is a miniature three-axis dual-optical gyro-stabilized gimbal, integrating a long-wave uncooled infrared camera, a 13-megapixel high-definition visible-light camera, and a gyro-stabilized platform. The ZKGTD070A stabilization gimbal features small size, light weight, convenient portability, high reliability, etc, and can be mounted on miniature unmanned aerial vehicles to achieve real-time video transmission of visible light and infrared. It boasts all-weather and all-time target observation and detection capabilities. The product also has the functions of target detection, autonomous target recognition, target locking, and tracking, as well as target positioning and guidance capabilities.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Infrared	Value		Value
Wavelength	8-14um, long-wave	Focal length	9.1mm
Pixel number	640×512	FOV	48.3° (H) ×38.6° (V) (±5%,1080P)
Photo resolution	640×512	Video resolution	640×512@50fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 120m		
Visible	Value		Value
Visible light sensor	1/3" 13M CMOS	FOV	63.5° (H) ×38.5° (V) (±5%,1080P)
Photo resolution	4K、1920×1080	Focal length	3.5mm
Video resolution	4K@50fps、1920×1080@50fps		
Recognition	Visibility ≥8km, adult recognition distance ≥ 350m		

Basic parameters

Parameter	Value
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°
Frm / Ctrl Pitch	-120° ~ +90°/-90° ~ +30°
Frm/Roll	-30° ~ +30°
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Recognition	Person or vehicle
Accuracy	≥85%
Video Code	H.264/H.265
Video bandwidth	2M/4M

Parameter	Value
Weight/Al of gimbal	80g±5g/38g±2g
Gimbal Size	57.0mm×50.0mm×62.0mm
size of the control box	59.0mm×55.0mm×24.0mm
Video output	LAN、HDMI
Control	UartTTL、UDP、SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Power	DC9V ~ DC16.8V@3A,Steady≤7.5W

ZKGTD070B

Stabilization Gimbal with Micro Three-Axis and Dual Optical Camera



ZKGTD070B is a miniature three-axis dual-optical gyro-stabilized gimbal, integrating a long-wave uncooled infrared camera, a 2-megapixel starlight visible-light camera, and a gyro-stabilized platform. The ZKGTD070B stabilization gimbal features small size, light weight, convenient portability, high reliability, etc, and can be mounted on miniature unmanned aerial vehicles to achieve real-time video transmission of visible light and infrared. It boasts all-weather and all-time target observation and detection capabilities. The product also has the functions of target detection, autonomous target recognition, target locking, and tracking, as well as target positioning and guidance capabilities.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Infrared		Value	
Wavelength	8-14um, long-wave	Focal length	9.1mm
Pixel number	640×512	FOV	48.3° (H) ×38.6° (V) (±5%,1080P)
Photo resolution	640×512	Video resolution	640×512@50fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 120m		
Visible		Value	
Visible light sensor	1/2.8" CMOS	FOV	51.5° (H) ×28.9° (V) (±5%,1080P)
Photo resolution	1920×1080	Focal length	6.19mm
Video resolution	1920×1080@50fps		
Recognition	Visibility ≥8km, adult recognition distance ≥250m		

Basic parameters

Parameter	Value	Parameter	Value
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°	Weight/Al of gimbal	90g±5g/38g±2g
Frm / Ctrl Pitch	-120° ~ +90°/-90° ~ +30°	Gimbal Size	60.0mm×50.0mm×62.0mm
Frm/Roll	-30° ~ +30°	size of the control box	59.0mm×55.0mm×24.0mm
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Video output	LAN、HDMI
Recognition	Person or vehicle	Control	UartTTL、UDP、SBUS
Accuracy	≥85%	Storage	≤512G Micro SD card
Video Code	H.264/H.265	Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃
Video bandwidth	2M/4M	Power	DC9V ~ DC16.8V@3A,Steady≤7.5W

ZKGTT155

Stabilization Positong and Guidance Gimbal with Micro Three-axis and Three Optical Camera



ZKGTT155 is a miniature three-axis three-optical inertial stabilized positioning and guidance gimbal, integrating a long-wave uncooled infrared camera, a 50-megapixel high-definition visible-light camera, a laser rangefinder, and a gyro-stabilized platform. The ZKGTT155 gimbal can be mounted on miniature unmanned aerial vehicles, featuring a long detection distance for armed personnel. It enables real-time video transmission of visible light and infrared, realizing battlefield reconnaissance and forward close-range reconnaissance missions under special terrain conditions, with the capability to perform tasks in all weather and at all times. The product is equipped with a laser ranging function, which can measure the position information of targets. It also has the functions of target detection, recognition, locking, and tracking, as well as target positioning and guidance capabilities.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Infrared		Value	
Wavelength	8-14um, long wave	Focal length	18mm
Pixel number	640×512	FOV	24.4° (H) ×19.5° (V) (±5%,1080P)
Photo resolution	640×512	Video resolution	640×512@50fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 220m		
Visible		Value	
Visible light sensor	1/2.5" CMOS, effective pixels 48M	Focal length of the lens	4.7mm
Photo resolution	8K、4K、1920×1080	FOV	59.5° (H) ×35.5° (V) (±5%,1080P)
Video resolution	4K@50fps、1920×1080@50fps		
Recognition	Visibility ≥8km, adult recognition distance ≥400m		
Laser		Value	
Wavelength	905nm	Range	10-1200m
Accuracy	±1m	Frequency	≤4Hz

Basic parameters

Parameter	Value	Parameter	Value
Frm / Ctrl Yaw	-110°~+110°/-90°~+90°	Weight of ginbal	165g±5g
Frm / Ctrl Pitch	-120°~+90°/-90°~+30°	Weight of AI	42g±2g
Frm Roll	-30°~+30°	Gimbal Size	79.0mm×75.0mm×90.0mm
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Video output	LAN、HDMI
Recognition	Person or vehicle	Control	UartTTL、UDP、SBUS
Accuracy	≥85%	Storage	≤512G Micro SD card
Video Code	H.264/H.265	Operating/Storage T°	-20℃~+55℃/-45℃~+60℃
Video bandwidth	2M/4M	Power	DC10.8V~26.4V@3A,Steady≤9W

ZKGTT170

Stabilization Positong and Guidance Gimbal with Micro Three-axis and Three Optical Camera



ZKGTT170 is a miniature three-axis three-optical inertial stabilized positioning and guidance gimbal, integrating a long-wave uncooled infrared camera, a 50-megapixel high-definition visible-light camera, a laser rangefinder, and a gyro-stabilized platform. The ZKGTT170 gimbal can be mounted on miniature unmanned aerial vehicles, featuring a long detection distance for armed personnel. It enables real-time video transmission of visible light and infrared, as well as battlefield observation, reconnaissance, and the execution of forward close-range reconnaissance missions under special terrain conditions, with the capability to perform tasks in all weather and at all times. The product is equipped with a laser ranging function, which can measure the position information of targets. It also possesses target detection, recognition, locking and tracking capabilities, as well as target positioning and guidance capabilities.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Infrared		Value	
Wavelength	8-14um, long-wave	Focal length	25mm
Pixel number	640×512	FOV	17.5 (H) ×14.0 (V) (±5%,1080P)
Photo resolution	640×512	Video resolution	640×512@50fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 300m.		
Visible		Value	
Visible light sensor	1/2.5" CMOS, effective pixels 48M	Focal length of the lens	4.7mm
Photo resolution	8K、4K、1920×1080	FOV	59.5° (H) ×35.5° (V) (±5%,1080P)
Video resolution	4K@50fps, 1920×1080@50fps		
Recognition	Visibility ≥8km, adult recognition distance ≥400m		
Laser		Value	
Wavelength	905nm	Range	10-1200m
Accuracy	±1m	Frequency	≤4Hz

Basic parameters

Parameter	Value
Frm / Ctrl Yaw	-110°~+110°/-90°~+90°
Frm / Ctrl Pitch	-120°~+90°/-90°~+30°
Frm Roll	-30°~+30°
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Recognition	Person or vehicle
Accuracy	≥85%
Video Code	H.264/H.265
Video bandwidth	2M/4M

Parameter	Value
Weight of ginbal	175g±5g
Weight of AI	42g±2g
Gimbal Size	79.0mm×76.0mm×91.0mm
Video output	LAN、HDMI
Control	UartTTL、UDP、SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20°C~+55°C/-45°C~+60°C
Power	DC10.8V~26.4V@3A,Steady≤9.5W

ZKGT215 Micro three-axis three-light stable image gimbal



ZKGT215 it is a miniature three-axis, three-light inertial stabilization gimbal, integrating a long-wave non-cooled infrared camera, a 50 million pixel high-definition wide-angle visible light camera, a 48 million pixel continuous zoom visible light camera, and a gyro-stabilized platform. It offers a considerable observation range for personnel and vehicles, enabling real-time video transmission of both visible and infrared images. The gimbal has the capability to observe and detect targets around the clock, day and night.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance border, patrol, military terrain reconnaissance and long-range target reconnaissance, target guidance and strike.

Camera Parameters

Visible	50M HD wide-angle		48M HD continuous zoom
Visible light sensor	1/2.5" CMOS, effective pixels 48M	Visible Light Sensor	1/2" CMOS, effective pixel 48M
Focal length	4.7mm	Focal length	15.3 ~ 49.7mm
FOV	59.5° (H) ×35.5° (V) (±5%,1080P)	FOV	H 7.2° ~ 22.6° (±5%) V 3.9° ~ 12.5° (±5%)
Photo resolution	8K、4K、1920×1080	Photo resolution	8K、4K、1920×1080
Video resolution	4K@50fps, 1920×1080@50fps	Video resolution	4K@50fps、1920×1080@50fps
Recognition	Visibility ≥8km, adult recognition distance ≥1500 m		
Infrared	Value		Value
Wavelength	8-14 um, long wave	FOV	48.3° (H) ×38.6° (V) (±5%,1080P)
Focal number	640×512	Focal length	9.1mm
Photo resolution	640×512	Video resolution	640×512@50fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 120m		

Basic parameters

Parameter	Value
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°
Frm / Ctrl Pitch	-120° ~ +90°/-90° ~ +30°
Frm/Roll	-45° ~ +45°
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Recognition	Person or vehicle
Accuracy	≥85%
Target location	CEP 10 Meters

Parameter	Value
Weight/Al of gimbal	215g±5g/42g±2g
Gimbal Size	83.0mm x 92.0mm x 100.0mm
Video output	Internet, HDMI
Control	TTL serial port, network, SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃
Power	DC10.8V ~ 26.4V@3A,Steady≤9.5W

ZKGETT225

Micro three-axis three-light
stable image gimbal



ZKGETT225 is a miniature three-axis, three-light inertial stabilization gimbal, integrating a 50 million pixel high-definition wide-angle visible light camera, a 48 million pixel continuous zoom visible light camera, a laser, and a gyroscope-stabilized platform. It offers a long observation range for personnel and vehicles, enabling real-time video transmission in both visible and infrared modes, with the capability to observe and detect targets around the clock, day and night.

Application scenarios: Urban security and anti-terrorism monitoring, emergency relief and disaster response, industrial and infrastructure inspection, power and energy facilities maintenance border, patrol, military terrain reconnaissance and long-range target reconnaissance, target guidance and strike.

Camera Parameters

Visible	50M HD wide-angle		48M HD continuous zoom
Visible light sensor	1/2.5" CMOS, effective pixels 48M	Visible Light Sensor	1/2" CMOS, effective pixel 48M
Focal length	4.7mm	Focal length	15.3 ~ 49.7mm
FOV	59.5° (H) ×35.5° (V) (±5%,1080P)	FOV	H 7.2° ~ 22.6° (±5%) V 3.9° ~ 12.5° (±5%)
Photo resolution	8K、4K、1920×1080	Photo resolution	8K、4K、1920×1080
Video resolution	4K@50fps, 1920×1080@50fps	Video resolution	4K@50fps、1920×1080@50fps
Recognition	Visibility ≥8km, adult recognition distance ≥1500 m		
laser	Value		Value
Security requirement	Class 1 laser	Laser ranging range	10m—700m
Laser wave length	905nm	ranging accuracy	±1m
Measuring frequency	≤4Hz		
Rain Test	Capable of normal operation under light rain conditions		

Basic parameters

Parameter	Value	Parameter	Value
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°	Weight/Al of gimbal	225g±5g/42g±2g
Frm / Ctrl Pitch	-120° ~ +90°/-90° ~ +30°	Gimbal Size	83.0mm×92.0mm×100.0mm
Frm/Roll	-45° ~ +45°	Video output	Internet, HDMI
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Control	TTL serial port, network, SBUS
Recognition	Person or vehicle	Storage	≤512G Micro SD card
Accuracy	≥85%	Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Target location	CEP 10M	Power	DC10.8V ~ 26.4V@3A,Steady≤10W

ZKGTKF270

Micro three-axis four-light
stable image gimbal



ZKGTKF270 it is a miniature three-axis four-light inertial stabilization gimbal, integrating a long-wave non-cooled infrared camera, a 50 million pixel high-definition wide-angle visible light camera, a 48 million pixel continuous zoom visible light camera, a laser rangefinder, and a gyro-stabilized platform. It offers a considerable observation range for personnel and vehicles, enabling real-time video transmission of both visible and infrared images. The gimbal has the capability to observe and detect targets around the clock and in all weather conditions, as well as to locate targets.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance border, patrol, military terrain reconnaissance and long-range target reconnaissance, target guidance and strike.

Camera Parameters

Visible	50M HD wide-angle		48M HD continuous zoom	
Visible light sensor	1/2.5" CMOS, effective pixels 48M		Visible Light Sensor	1/2" CMOS, effective pixel 48M
Focal length	4.7mm		Focal length	15.3 ~ 49.7mm
FOV	59.5° (H) ×35.5° (V) (±5%,1080P)		FOV	H 7.2° ~ 22.6° (±5%) V 3.9° ~ 12.5° (±5%)
Photo resolution	8K、 4K、 1920×1080		Photo resolution	8K、 4K、 1920×1080
Video resolution	4K@50fps, 1920×1080@50fps		Video resolution	4K@50fps、 1920×1080@50fps
Recognition	Visibility ≥8km, adult recognition distance ≥1500 m			
Infrared	Value		Value	
Wavelength	8-14 um, long wave		FOV	17.5 (H) ×14.0 (V) (±5%,1080P)
Focal number	640×512		Focal length	25mm
Photo resolution	640×512		Video resolution	640×512@50fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 300m			
laser	Value		Value	
Security requirement	Class 1 laser		Laser wave length	905nm
Laser ranging range	10m—1200m		Ranging accuracy	±1m
Measuring frequency	≤4Hz			

Basic parameters

Parameter	Value	Parameter	Value
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°	Weight/Al of gimbal	280g±5g/42g±2g
Frm / Ctrl Pitch	-120° ~ +90°/-90° ~ +30°	Gimbal Size	83.0mm×94.0mm×106.0mm
Frm/Roll	-45° ~ +45°	Video output	Internet, HDMI
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Control	TTL serial port, network, SBUS
Recognition	Person or vehicle	Storage	≤512G Micro SD card
Accuracy	≥85%	Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃
Target location	CEP 10M	Power	DC10.8V ~ 26.4V@3A,Steady≤9W

ZKGTG60A

Tactical Miniature Electro-Optical Gimbal



ZKGTG60A is a tactical-level miniature three-axis tri-optical inertial stabilized gimbal, comprising a long-wave uncooled infrared camera, a 13-megapixel high-definition visible-light wide-angle camera, a 2-megapixel starlight telephoto visible-light camera, and a gyro-stabilized platform. It has a relatively long observation distance for personnel and vehicles, enabling real-time video transmission of visible light and infrared, and is capable of all-weather and all-time target observation and detection. It also has the capabilities of target detection, recognition, locking and tracking, as well as target positioning and guidance.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Visible	13M CMOS		2M Starlight CMOS
Visible Light Sensor	1/3" 13M CMOS	Visible Light Sensor	1/2.8" CMOS
Focal length	3.5mm	Focal length	16mm
FOV	63.5° (H) ×38.5° (V) (±5%,1080P)	FOV	19.0° (H) ×11.2° (V) (±5%,1080P)
Photo resolution	4K、1920×1080	Photo resolution	1920×1080
Video resolution	4K@50fps、1920×1080@50fps	Video resolution	1920×1080@50fps
Recognition	Visibility ≥8km, adult recognition distance ≥600 m		
Infrared	Value		Value
Wavelength	8-14 um, long wave	FOV	24.4° (H) ×19.5° (V) (±5%,1080P)
Photo resolution	640×512	Focal Length	18mm
Video resolution	640×512@50fps		
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 220m		

Basic parameters

Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°
Frm / Ctrl Pitch	-140° ~ +95°/-90° ~ +30°
Frm/Roll	-50° ~ +50°
Angle accuracy	2mrad
Framework form	Three-axis
Target location	CEP 10M

Parameter	Value
Weight/Al of gimbal	202g±5g/42g±2g
Gimbal Size	87.0mm×72.0mm×109.0mm
Video output	Internet, HDMI
Control	TTL serial port, network,SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Power	DC10.8V ~ 26.4V@3A,Steady≤10.5W

ZKGTG60B

Tactical Miniature Electro-Optical Gimbal



ZKGTG60B is a tactical-level miniature three-axis dual-optical inertial stabilized gimbal, comprising a 48-megapixel continuous zoom visible-light camera, a 2-megapixel starlight visible-light camera, and a gyro-stabilized platform. It has a relatively long observation distance for personnel and vehicles, enabling real-time visible-light video transmission. It is capable of day-and-night all-weather target observation and detection, and also has the capabilities of target detection, recognition, locking, tracking, positioning and guidance.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Visible	48M HD continuous zoom		2M Starlight CMOS	
Visible Light Sensor	1/2" CMOS, effective pixel 48M		Visible Light Sensor	1/2.8" CMOS
Focal length	15.3 ~ 49.7mm		Focal length	6.19mm
FOV	H 7.2° ~ 22.6° (±5%) V 3.9° ~ 12.5° (±5%)		FOV	51.5° (H) × 28.9° (V) (±5%,1080P)
Photo resolution	8K、 4K、 1920×1080		Photo resolution	1920×1080
Video resolution	4K@50fps、 1920×1080@50fps		Video resolution	1920×1080@50fps
Recognition	Visibility ≥8km, adult recognition distance ≥1500 m Urban low light: adult recognition ≥250m			

Basic parameters

Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Frm / Ctrl Yaw	-110° ~ +110° / -90° ~ +90°
Frm / Ctrl Pitch	-140° ~ +95° / -90° ~ +30°
Frm/Roll	-50° ~ +50°
Angle accuracy	2mrad
Framework form	Three-axis
Target location	CEP 10M

Parameter	Value
Weight/Al of gimbal	202g±5g/42g±2g
Gimbal Size	87.0mm×76.0mm×109.0mm
Video output	Internet, HDMI
Control	TTL serial port, Network,SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Power	DC10.8V ~ 26.4V@3A,Steady≤8.5W

ZKGTG60C

Tactical Miniature Electro-Optical Gimbal



ZKGTG60C is a tactical-level miniature three-axis tri-optical inertial stabilized gimbal, comprising a 13-megapixel high-definition visible-light wide-angle camera, a 2-megapixel starlight telephoto visible-light camera, a laser rangefinder, and a gyro-stabilized platform. It has a relatively long observation distance for personnel and vehicles, enabling real-time visible-light video transmission, and is capable of all-weather and all-time target observation and detection. The product is equipped with a laser ranging function that can measure target position information. It also has the capabilities of target detection, recognition, locking and tracking, as well as target positioning and guidance.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Visible	13M CMOS		2M Starlight CMOS	
Visible Light Sensor	1/3" 13M CMOS		Visible Light Sensor	1/2.8" CMOS
Focal length	3.5mm		Focal length	16mm
FOV	63.5° (H) ×38.5° (V) (±5%,1080P)		FOV	19.0° (H) ×11.2° (V) (±5%,1080P)
Photo resolution	4K、1920×1080		Photo resolution	1920×1080
Video resolution	4K@50fps、1920×1080@50fps		Video resolution	1920×1080@50fps
Recognition	Visibility ≥8km, adult recognition distance ≥350 m; Urban low light: adult recognition ≥600m.			
Laser	Value			
Safety Requirements	Class 1 Laser		Laser Ranging Rang	10m—1200m
Laser Wavelength	905nm		Ranging Accuracy	±1m
Measurement Frequency	≤4Hz			

Basic parameters

Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°
Frm / Ctrl Pitch	-140° ~ +95°/-90° ~ +30°
Frm/Roll	-50° ~ +50°
Angle accuracy	2mrad
Framework form	Three-axis
Target location	CEP 10M

Parameter	Value
Weight/Al of gimbal	202g±5g/42g±2g
Gimbal Size	87.0mm×72.0mm×109.0mm
Video output	Internet, HDMI
Control	TTL serial port, Network,SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Power	DC10.8V ~ 26.4V@3A,Steady≤8.5W

ZKGTG60D

Tactical Miniature Electro-Optical gimbal



ZKGTG60D is a tactical-level miniature three-axis and four-light inertial stabilized gimbal, which integrates a long-wave uncooled infrared camera, a 13-megapixel high-definition visible light wide-angle camera, a 2-megapixel starlight visible light camera, a laser rangefinder, and a gyro-stabilized platform. It has a relatively long observation distance for personnel and vehicles, enabling real-time video transmission of visible light and infrared. It is capable of all-weather observation and target detection day and night, and also has the capabilities of laser ranging, target detection, recognition, locking, tracking, positioning and guidance.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Visible	13M CMOS		2M Starlight CMOS	
Visible Light Sensor	1/3" 13M CMOS		Visible Light Sensor	1/2.8" CMOS
Focal length	3.5mm		length	16mm
FOV	63.5° (H) ×38.5° (V) (±5%,1080P)		FOV	19.0° (H) ×11.2° (V) (±5%,1080P)
Photo resolution	4K、1920×1080		Photo resolution	1920×1080
Video resolution	4K@50fps、1920×1080@50fps		Video resolution	1920×1080@50 fps
Recognition	Visibility ≥8km: adult recognition distance ≥600 m			
infrared camera				
Detector band	8-14μm, long-wave		FOV	48.3° (H) ×38.6° (V) (±5%,1080P)
Photo resolution	640×512		Focal length	9.1mm
Video resolution	640×512@50fps			
Recognition	visibility ≥8km, humidity ≤60%, temp difference ≥5K adult recognition distance >120m			
Laser	Value		Value	
Safety Requirements	Class 1 Laser		Ranging Accuracy	±1m
Laser Wavelength	905nm		Frequency	≤4Hz
Laser Ranging Range	10m—1200m			

Basic parameters

Parameter	Value	Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Weight/Al of gimbal	235g±5g/42g±2g
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°	Gimbal Size	87.0mm×72.0mm×109.0mm
Frm / Ctrl Pitch	-140° ~ +95°/-90° ~ +30°	Video output	Internet, HDMI
Frm/Roll	-50° ~ +50°	Control	TTL serial port, Network,SBUS
Angle accuracy	2mrad	Storage	≤512G Micro SD card
Framework form	Three-axis	Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Target location	CEP 10M	Power	DC10.8V ~ 26.4V@3A,Steady≤10.5W

ZKGTX80A

Tactical Miniature Electro-Optical Gimbal



ZKGTX80A is a tactical-level miniature three-axis four-optical inertial stabilized gimbal, comprising a long-wave uncooled infrared camera, a 13-megapixel high-definition visible-light wide-angle camera, a 2-megapixel starlight telephoto visible-light camera, a laser rangefinder, and a gyro-stabilized platform. It has a relatively long observation distance for personnel and vehicles, enabling real-time visible-light video transmission, and is capable of all-weather and all-time target observation and detection. The product is equipped with a laser ranging function that can measure target position information. It also has the capabilities of target detection, recognition, locking and tracking, as well as target positioning and guidance.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Visible	13M CMOS	2M Starlight CMOS
Visible Light Sensor	1/3" 13M CMOS	Visible Light Sensor 1/2.8" CMOS
Focal length	3.5mm	Focal length 16mm
FOV	63.5° (H) ×38.5° (V) (±5%,1080P)	FOV 19.0° (H) ×11.2° (V) (±5%,1080P)
Photo resolution	4K、1920×1080	Photo resolution 1920×1080
Video resolution	4K@50fps、1920×1080@50fps	Video resolution 1920×1080@50fps
Recognition	Visibility ≥8km: adult recognition distance ≥600 m	
Infrared	Value	Value
Wavelength	8-14 um, long wave	FOV 17.5° (H) ×14.0° (V) (±5%、1080P)
Photo resolution	640×512	Optical Focal Length 25mm
Video resolution	640×512@50fps	
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 300m	
Laser	Value	Value
Safety Requirements	Class 1 Laser	Frequency ≤4Hz
Laser Wavelength	905nm	Ranging Accuracy ±1m
Laser Ranging Range	10m—1200m	

Basic parameters

Parameter	Value	Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Weight/Al of gimbal	250g±5g/42g±2g
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°	Gimbal Size	88.0mm×91.0mm×120.0mm
Frm / Ctrl Pitch	-140° ~ +95°/-90° ~ +30°	Video output	Internet, HDMI
Frm/Roll	-60° ~ +60°	Control	TTL serial port, Network,SUBS
Angle accuracy	2mrad	Storage	≤512G Micro SD card
Framework form	Three-axis	Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃
Target location	CEP 10M	Power	DC10.8V ~ 26.4V@3A,Steady≤12W

ZKGTX80B

Tactical Miniature Electro-Optical gimbal



ZKGTX80B is a tactical-level miniature three-axis tri-optical inertial stabilized gimbal, comprising parameters of a 48-megapixel continuous zoom visible-light camera, a 2-megapixel starlight visible-light camera, a laser rangefinder, and a gyro-stabilized platform. It has a relatively long observation distance for personnel and vehicles, enabling real-time visible-light video transmission, and is capable of all-weather and all-time target observation and detection. The product is equipped with a laser ranging function that can measure target position information. It also has the capabilities of target detection, recognition, locking and tracking, as well as target positioning and guidance.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Visible	48M HD continuous zoom	2M Starlight CMOS	
Visible Light Sensor	1/2" CMOS, effective pixel 48M	Visible Light Sensor	1/2.8" CMOS
Focal length	15.3 ~ 49.7mm	Focal length	6.19mm
FOV	H 7.2° ~ 22.6° (±5%) V 3.9° ~ 12.5° (±5%)	FOV	51.5° (H) × 28.9° (V) (±5%,1080P)
Photo resolution	8K、4K、1920×1080	Photo resolution	1920×1080
Video resolution	4K@50fps、1920×1080@50fps	Video resolution	1920×1080@50fps
Recognition	Visibility ≥8km: adult recognition distance ≥1500 m. Urban low light: adult recognition ≥250m.		
Laser Rangefinder		Value	
Safety Requirements	Class 1 Laser	Laser Ranging Rang	10m—1200m
Laser Wavelength	905nm	Ranging Accuracy	±1m
Frequency	≤4Hz		

Basic parameters

Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Frm / Ctrl Yaw	-110° ~ +110° / -90° ~ +90°
Frm / Ctrl Pitch	-140° ~ +95° / -90° ~ +30°
Frm/Roll	-60° ~ +60°
Angle accuracy	2mrad
Framework form	Three-axis
Target location	CEP 10M

Parameter	Value
Weight/Al of gimbal	250g±5g/42g±2g
Gimbal Size	88.0mm×93.0mm×120.0mm
Video output	Internet, HDMI
Control	TTL serial port, Network,SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Power	DC10.8V ~ 26.4V@3A,Steady≤12W

ZKGTX80C Tactical Miniature Electro-Optical gimbal



ZKGTX80C is a tactical-level miniature three-axis four-optical inertial stabilized gimbal, comprising a 13-megapixel high-definition visible-light wide-angle camera, a 48-megapixel continuous zoom visible-light camera, a 2-megapixel starlight telephoto visible-light camera, a laser rangefinder, and a gyro-stabilized platform. It has a relatively long observation distance for personnel and vehicles, enabling real-time visible-light video transmission, and is capable of all-weather and all-time target observation and detection. It also has the capabilities of target detection, recognition, locking and tracking, as well as target positioning and guidance.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Visible 13M CMOS		48M HD continuous zoom	
Visible Light Sensor	1/3" 13M CMOS	Visible Light Sensor	1/2" CMOS, effective pixel 48M
Focal length	3.5mm	Focal length	15.3 ~ 49.7mm
FOV	63.5° (H) × 38.5° (V) (±5%,1080P)	FOV	H 7.2° ~ 22.6° (±5%) V 3.9° ~ 12.5° (±5%)
Photo resolution	4K、1920×1080	Photo resolution	8K、4K、1920×1080
Video resolution	4K@50fps、1920×1080@50fps	Video resolution	4K@50fps、1920×1080@50fps
Recognition	Visibility ≥8km: adult recognition distance ≥1500 m		
Visible 2M Starlight CMOS			
Visible Light Sensor	1/2.8" CMOS	FOV	19.0° (H) × 11.2° (V) (±5%,1080P)
Photo resolution	1920×1080	Focal length of the lens	16mm
Video resolution	1920×1080@50fps		
Recognition	Urban low light: adult recognition ≥600m		
Laser	Value	Value	
Safety Requirements	Class 1 Laser	Ranging Accuracy	±1m
Laser Wavelength	905nm	Frequency	≤4Hz
Laser Ranging Range	10m—1200m		

Basic parameters

Parameter	Value	Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Weight/Al of gimbal	290g±5g/42g±2g
Frm / Ctrl Yaw	-110° ~ +110° /-90° ~ +90°	Gimbal Size	88.0mm×94.0mm×120.0mm
Frm / Ctrl Pitch	-140° ~ +95°/-90° ~ +30°	Video output	Internet, HDMI
Frm/Roll	-60° ~ +60°	Control	TTL serial port, Network,SBUS
Angle accuracy	2mrad	Storage	≤512G Micro SD card
Framework form	Three-axis	Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Target location	CEP 10M	Power	DC10.8V ~ 26.4V@3A,Steady≤12W

ZKGTX50A

Tactical Miniature Three-axis Electro-Optical Gimbal



ZKGTX50A is a tactical-level miniature three-axis dual-optical inertial stabilized gimbal, integrating a 2-megapixel starlight visible light camera, an infrared payload, and a gyro-stabilized platform. It has a relatively long observation distance for personnel and vehicles, enabling real-time video transmission of visible light and infrared. It is capable of all-weather and all-time target observation and detection, and also has the capabilities of target detection, recognition, locking, tracking, positioning and guidance.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Visible	Value		Value
Visible light sensor	1/2.8" CMOS	FOV	39.8°(H)×22.4°(V) (±5%)
Photo resolution	1920×1080	Focal length	8mm
Video resolution	1920×1080@50fps		
Recognition	Visibility ≥8km, adult recognition distance ≥ 300m		
Infrared	Value		Value
Detector band	8-14um, long-wave	Focal length	18mm
Pixel number	640×512	FOV	24.4°(H)×19.5°(V) (±5%)
Photoresolution	640×512	Video resolution	640×512@50fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥220m		

Basic parameters

Parameter	Value	Parameter	Value
Frm / Ctrl Yaw	-110° ~ +110° /-140° ~ +95°	Weight/AI of gimbal	185g±5g/42g±2g
Frm / Ctrl Pitch	-90° ~ +90°/-90° ~ +30°	Gimbal Size	64.0mm×85.0mm×82.0mm
Frm/Roll	-45° ~ +45°	Video output	LAN、 HDMI
Stabilization	≤0.02° (disturbance 0.5°@1Hz)	Control	TTL serial ports, network,SBUS
Recognition	Person or vehicle	Storage	≤512G Micro SD card
Angle accuracy	2mrad	Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Target location	CEP 10 M	Power	DC10.8V ~ 26.4V@3A,Steady≤7W

ZKGTX50B

Tactical Miniature Three-axis Electro-Optical Gimbal



ZKGTX50B is a tactical miniature three-axis dual-optical inertial stabilized pod, equipped with a 2-megapixel starlight telephoto visible light camera, a 2-megapixel starlight wide-angle visible light camera, and a gyro-stabilized platform. It has a long observation distance for personnel and vehicles, enables real-time visible light video transmission, and features all-weather day-and-night observation, target detection, and target positioning capabilities.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency disaster relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance, border patrol, military terrain reconnaissance and long-distance target reconnaissance, target guidance and strike.

Camera Parameters

Parameter	2MP wide-angle	2MP starlight telephoto
Visible-light sensor	1/2.8" CMOS	1/2.8" CMOS
Focal length	8mm	25mm
FOV	39.8° (H) ×22.4° (V) (±5%)	12.7° (H) ×7.1° (V) (±5%)
Photo resolution	1920×1080	1920×1080
Video resolution	1920×1080@50fps	1920×1080@50fps
Distance	Visibility ≥8km, adult recognition distance ≥ 900m Urban low light: adult recognition ≥ 900m	

Basic parameters

Parameter	Value
Frm / Ctrl Yaw	-110°~+110°/-140° ~ +95°
Frm / Ctrl Pitch	-90° ~ +90°/ -90° ~ +30°
Frm Roll	-45° ~ +45°
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Recognition	Persong and vehicle
Angle accuracy	2mrad
Target location	CEP 10 M

Parameter	Value
Weight/Al of gimbal	175g±5g/42g±2g
Gimbal Size	64.0mm×85.0mm×82.0mm
Video output	LAN、 HDMI
Control	TTL serial ports, network, SBUS
Storage	≤512G Micro SD card
Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C
Power	DC10.8V ~ 26.4V@3A,Steady≤7W

ZKPDD075CW Single-Light AI Tracking Module



ZKPDD075CW Single-Light AI Tracking Module is equipped with a short-focus visible light CMOS sensor. The short-focus visible light camera can output analog visible light video with extremely low latency, and has the functions of autonomous recognition, locking, tracking and guidance for targets such as people, vehicles and windows.

Application scenarios: FPV drone vision module, anti-drone visual guidance module, AI tracking module.

Camera Parameters

Visible	Short-focus visible light
Visible Light Sensor	1/4" CMOS
Focal length	1.75mm
FOV	113.1° (H) ×63.6° (V) (±5%)
Photo resolution	1280×720
Video resolution	1280×720@100fps
Recognition	Under the condition that the daytime visibility is not less than 8 km, the target recognition distance for adults is more than 80 m.

Basic parameters

Parameter	Value
Recognition	Humans and vehicle
Power	DC10.8V ~ 26.4V@3A, Steady≤3W
Camera Module weight	10g±2g
AI weight	56±2g
Target location	CEP 10 M
Video output	Internet、 Analog video
Control	TTL serial ports, network
Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃

ZKPDD075CL Single-Light AI Tracking Module



ZKPDD075CL Single-Light AI Tracking Module is equipped with a long-focus visible light CMOS sensor. The long-focus visible light camera features autonomous recognition, locking, tracking, and guidance capabilities for targets such as people, vehicles, and windows.

Application scenarios: FPV drone vision module, anti-drone visual guidance module, AI tracking module.

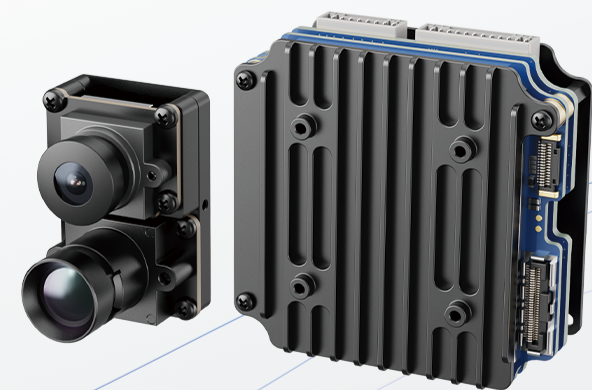
Camera Parameters

Visible	Telephoto visible light
Visible Light Sensor	1/3.52" CMOS
Focal length	16.26mm
FOV	14.8° (H) ×8.4° (V) (±5%)
Photo resolution	1920×1080
Video resolution	1920×1080@50fps
Recognition	Under the condition that the daytime visibility is not less than 8 km, the target recognition distance for adults is more than 600 m.

Basic parameters

Parameter	Value
Recognition	Humans and vehicle
Power	DC10.8V ~ 26.4V@3A, Steady≤3W
Camera Module weight	13±2g
AI weight	56±2g
Target location	CEP 10 M
Video output	Internet、 Analog video
Control	TTL serial ports, network
Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃

ZKPDD075CC Dual-Light AI Tracking Module



ZKPDD075CC Dual-Light AI Tracking Module is equipped with one long-focus visible light CMOS sensor and one short-focus visible light CMOS sensor. The short-focus visible light camera can output analog visible light video with extremely low latency, while the long-focus visible light camera features autonomous recognition, locking, tracking, and guidance capabilities for targets such as people, vehicles, and windows.

Application scenarios: FPV drone vision module, anti-drone visual guidance module, AI tracking module.

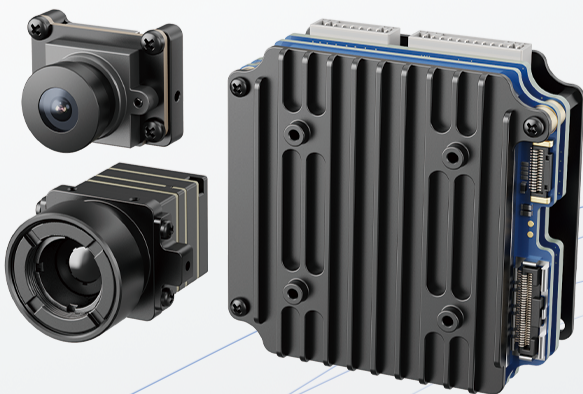
Camera Parameters

Visible	Telephoto visible light		Short-focus visible light	
Visible Light Sensor	1/3.52" CMOS		Visible Light Sensor	1/4" CMOS
Focal length	16.26mm		Focal length	1.75mm
FOV	14.8° (H) ×8.4° (V) (±5%)		FOV	113.1° (H) ×63.6° (V) (±5%)
Photo resolution	1920×1080		Photo resolution	1280×720
Video resolution	1920×1080@50fps		Video resolution	1280×720@100fps
Recognition	Under the condition that the daytime visibility is not less than 8 km, the target recognition distance of telephoto cameras for adults is more than 600 m,while that of Short-focus cameras for adults is morn than 80 m.			

Basic parameters

Parameter	Value
Recognition	Humans and vehicle
Power	DC10.8V ~ 26.4V@3A, Steady≤5W
Camera Module weight	20±2g
AI weight	56±2g
Target location	CEP 10 M
Video output	Internet、 Analog video
Control	TTL serial ports, network
Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃

ZKPDD075CWT Dual-Light AI Tracking Module



ZKPDD075CWT Dual-Light AI Tracking Module is equipped with one short-focus visible light CMOS sensor and one long-wave uncooled infrared camera. The short-focus visible light camera can output analog visible light video with extremely low latency, and has autonomous recognition, locking, tracking, and guidance capabilities for targets such as humans, vehicles, and windows. The infrared camera provides the capability to perform tasks in all weather and at all times.

Application scenarios: FPV drone vision module, anti-drone visual guidance module, AI tracking module.

Camera Parameters

Visible	Value		Value	
Visible light sensor	1/4" CMOS	FOV	113.1° (H) ×63.6° (V) (±5%)	
Photo resolution	1280×720	Focal length	1.75mm	
Video resolution	1280×720@100fps			
Recognition	Under the condition that the daytime visibility is not less than 8 km, the target recognition distance for adults is > 80 m			
Infrared	Value		Value	
Detector band	8-14um, long-wave	Focal length	10mm	
Pixel number	384×288	FOV	16.9° (H) ×12.8° (V) (±5%)	
Photo resolution	384×288	Video resolution	1920×1080@50fps	
Recognition	Under the condition of low light in urban areas at night, the target recognition distance for adults is > 100 m			

Basic parameters

Parameter	Value
Recognition	Humans and vehicle
Power	DC10.8V ~ 26.4V@3A, Steady≤5W
Camera Module weight	32±2g
AI weight	56±2g
Target location	CEP 10 M
Video output	Internet、 Analog video
Control	TTL serial ports, network
Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃

ZKPDD075CLT Dual-Light AI Tracking Module



ZKPDD075CLT Dual-Light AI Tracking Module is equipped with one long-focus visible light CMOS sensor and one long-wave uncooled infrared camera. The long-focus visible light camera has autonomous recognition, locking, tracking, and guidance functions for targets such as people, vehicles, and windows, while the infrared camera provides the capability to perform tasks in all weather and at all times.

Application scenarios: FPV drone vision module, anti-drone visual guidance module, AI tracking module.

Camera Parameters

Visible	Value		Value	
Visible light sensor	1/3.52" CMOS	FOV	14.8° (H) ×8.4° (V) (±5%)	
Photo resolution	1920×1080	Focal length	16.26mm	
Video resolution	1920×1080@50fps			
Recognition	Under the condition that the daytime visibility is not less than 8 km, the target recognition distance for adults is > 600 m			
Infrared	Value		Value	
Detector band	8-14um, long-wave	Focal length	10mm	
Pixel number	384×288	FOV	16.9° (H) ×12.8° (V) (±5%)	
Photo resolution	384×288	Video resolution	1920×1080@50fps	
Recognition	Under the condition of low light in urban areas at night, the target recognition distance for adults is > 100 m			

Basic parameters

Parameter	Value
Recognition	Humans and vehicle
Power	DC10.8V ~ 26.4V@3A, Steady≤5W
Camera Module weight	35±2g
AI weight	56±2g
Target location	CEP 10 M
Video output	Internet、 Analog video
Control	TTL serial ports, network
Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃

ZKPDD075CCT Three-Light AI Tracking Module



ZKPDD075CCT Three-Light AI Tracking Module is equipped with one long-focus visible light CMOS sensor, one short-focus visible light CMOS sensor, and one long-wave uncooled infrared camera. The short-focus visible light camera can output analog visible light video with extremely low latency; the long-focus visible light camera features autonomous recognition, locking, tracking, and guidance capabilities for targets such as people, vehicles, and windows; and the infrared camera provides the capability to perform tasks in all weather and at all times.

Application scenarios: FPV drone vision module, anti-drone visual guidance module, AI tracking module.

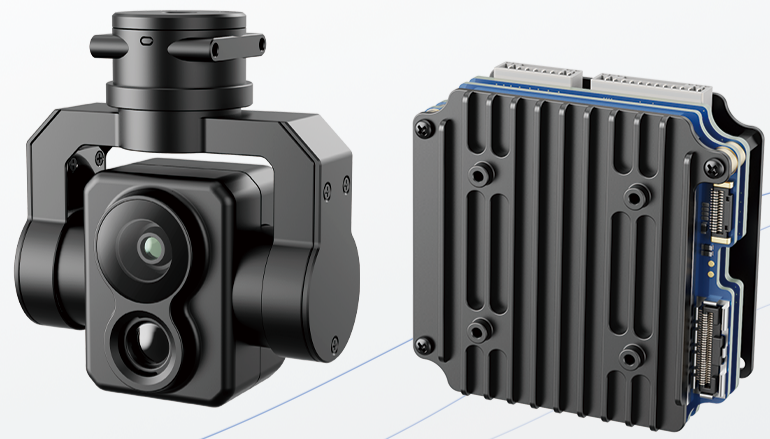
Camera Parameters

Visible	Telephoto visible light		Short-focus visible light	
Visible light sensor	1/3.52" CMOS		Visible Light Sensor	1/4" CMOS
Focal length	16.26mm		Focal length	1.75mm
FOV	14.8° (H) ×8.4° (V) (±5%)		FOV	113.1° (H) ×63.6° (V) (±5%)
Photo resolution	1920×1080		Photo resolution	1280×720
Video resolution	1920×1080@50fps		Video resolution	1280×720@100fps
Recognition	Under the condition that the daytime visibility is not less than 8 km, the target recognition distance of telephoto cameras for adults is > 600 m,while that of Short-focus cameras for adults is > 80 m			
Infrared	Value		Value	
Wavelength	8-14 um, long wave		FOV	16.9° (H) ×12.8° (V) (±5%)
Focal number	384×288		Focal length	10mm
Photo resolution	384×288		Video resolution	1920×1080@50fps
Recognition	Under the condition of low light in urban areas at night, the target recognition distance for adults is > 100 m			

Basic parameters

Parameter	Value
Recognition	Humans and vehicle
Power	DC10.8V ~ 26.4V@3A, Steady≤7W
Camera Module weight	43±2g
AI weight	56±2g
Target location	CEP 10 M
Video output	Internet、 Analog video
Control	TTL serial ports, network
Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃

ZKPDD075G Mini Two-Axis Dual-Light AI Tracking Module



ZKPDD075G Mini Two-Axis Dual-Light AI Tracking Module adopts two-frame gyro stabilization control and a built-in gimbal wiring design. It is equipped with one long-focus visible light CMOS sensor and one short-focus visible light CMOS sensor. The short-focus visible light camera can output analog visible light video with extremely low latency, while the long-focus visible light camera features autonomous recognition, locking, tracking, and guidance capabilities for targets such as people, vehicles, and windows.

Application scenarios: FPV drone vision module, anti-drone visual guidance module, AI tracking module.

Camera Parameters

Visible	Telephoto visible light		Short-focus visible light	
Visible Light Sensor	1/3.52" CMOS		Visible Light Sensor	1/4" CMOS
Focal length	16.26mm		Focal length	1.75mm
FOV	14.8° (H) ×8.4° (V) (±5%)		FOV	113.1° (H) ×63.6° (V) (±5%)
Photo resolution	1920×1080		Photo resolution	1280×720
Video resolution	1920×1080@50fps		Video resolution	1280×720@100fps
Recognition	Under the condition that the daytime visibility is not less than 8 km, the target recognition distance of telephoto cameras for adults is > 600 m,while that of Short-focus cameras for adults is > 80 m.			

Basic parameters

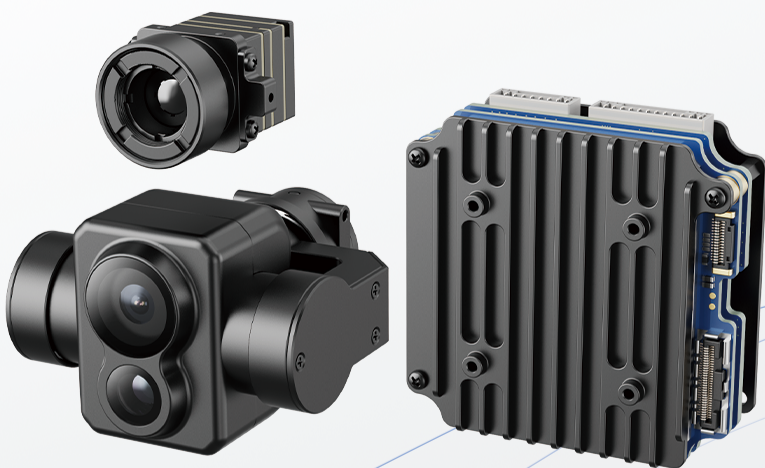
Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Frame Form	Two-axis
Frame Design Scope	-140° ~ +95°/-70° ~ +70°
Angular accuracy	0.1°
Rotation Range	Pitch: -90° ~ +60°
Recognition	Humans and vehicle
Power	DC10.8V ~ 26.4V@3A, Steady≤9W

Parameter	Value
Gimbal weight	80g±5g
Gimbal Size	58.0mm×63.0 mm×40.0mm
AI weight	56±2g
Target location	CEP 10 M
Video output	Internet、 Analog video
Control	TTL serial ports, network
Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C

ZKPDD075GT

Mini Two-Axis Three-Light

AI Tracking Module



ZKPDD075GT Mini Two-Axis Three-Light AI Tracking Module adopts two-frame gyro stabilization control and a built-in gimbal wiring design. It is equipped with one long-focus visible light CMOS sensor, one short-focus visible light CMOS sensor, and one long-wave uncooled infrared camera. The short-focus visible light camera can output analog visible light video with extremely low latency; the long-focus visible light camera features autonomous recognition, locking, tracking, and guidance capabilities for targets such as people, vehicles, and windows; and the infrared camera provides the capability to perform tasks in all weather and at all times.

Application scenarios: FPV drone vision module, anti-drone visual guidance module, AI tracking module.

Camera Parameters

Visible	Telephoto visible light		Short-focus visible light	
Visible light sensor	1/3.52" CMOS		Visible Light Sensor	1/4" CMOS
Focal length	16.26mm		Focal length	1.75mm
FOV	14.8° (H) ×8.4° (V) (±5%)		FOV	113.1° (H) ×63.6° (V) (±5%)
Photo resolution	1920×1080		Photo resolution	1280×720
Video resolution	1920×1080@50fps		Video resolution	1280×720@100fps
Recognition	Under the condition that the daytime visibility is not less than 8 km, the target recognition distance of telephoto cameras for adults is > 600 m,while that of Short-focus cameras for adults is > 80 m			
Infrared	Value		Value	
Wavelength	8-14 um, long wave		FOV	16.9° (H) ×12.8° (V) (±5%)
Focal number	384×288		Focal length	10mm
Photo resolution	384×288		Video resolution	1920×1080@50fps
Recognition	Under the condition of low light in urban areas at night, the target recognition distance for adults is more than 100 m			

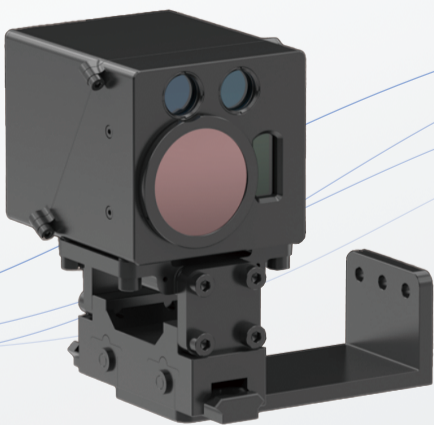
Basic parameters

Parameter	Value
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Frame Form	Two-axis
Frame Design Scope	-140° ~ +95°/-70° ~ +70°
Angular accuracy	0.1°
Rotation Range	Pitch: -90° ~ +60°
Recognition	Humans and vehicle
Power	DC10.8V ~ 26.4V@3A, Steady≤9W

Parameter	Value
Gimbal weight	90g±5g
Gimbal Size	58.0mm×63.0 mm×40.0mm
AI weight	56±2g
Target location	CEP 10 M
Video output	Internet、 Analog video
Control	TTL serial ports, network
Operating/Storage T°	-20°C ~ +55°C/-45°C ~ +60°C

ZKCPDF01

Four-optical camera platform



ZKCPDF01 four-optical camera platform is mainly composed of optoelectronic components, image processing boards, and other parts. The optoelectronic components mainly include long-focus and short-focus visible light payloads, infrared payloads, and laser rangefinders; the image processing includes functions such as visible light imaging, infrared imaging, AI target detection, tracking, and encoding. The product features multiple installation interface modes and has a certain anti-shock capability.

Application scenarios: All-weather urban security and anti-terrorism monitoring, emergency relief and disaster response, industrial and infrastructure inspection, power and energy facility maintenance border, patrol, military terrain reconnaissance and long-range target reconnaissance, target guidance and strike.

Camera Parameters

Infrared		Value	
Wavelength	8-14um, long-wave	Focal length	35mm
Pixel number	640×512	FOV	12.5° (H) ×10.0° (V) (±5%)
Photo resolution	640×512	Video resolution	640×512@60fps
Recognition	Night visibility ≥8km, 60% RH, ΔT=5K: adult recognition distance ≥ 400m.		
Visible		Value	
2MP Starlight Short-focus		2MP Starlight Long-focus	
Visible light sensor	1/2.8" COMS, 2MP effective pixels	Visible light sensor	1/2.8" COMS, 2MP effective pixels
Focal length	8mm	Focal length	25mm
FOV	39.8° (H) ×22.4° (V) (±5%,1080P)	FOV	12.7° (H) ×7.1° (V) (±5%)
Photo resolution	1920×1080	Photo resolution	1920×1080
Video resolution	1920×1080@50fps	Video resolution	1920×1080@50fps
Recognition	Visibility ≥8km, adult recognition distance ≥900m		
Laser		Value	
Wavelength	905nm	Range	10-1200m
Accuracy	±1m	Measuring frequency	≤4Hz

Basic parameters

Parameter	Value	Parameter	Value
Recognition	Person or vehicle	Video output	LAN、HDMI
Accuracy	≥85%	Control	UartTTL、Network
camera weight	920g	Storage	SD card
Bracket weight	340g	Operating/Storage T°	-20℃ ~ +55℃/-45℃ ~ +60℃
Camera volume	83.0mm×105.0mm×132.0mm	Power	DC12V ~ DC16.8V@3A, Stead≤12W

ZKPTA490 GX-Port Stabilize Gimbal



ZKPTA490 GX-Port is a GREAT stable PTZ that can adapt to DJI M300 and M350, providing greater load weight and volume envelope, carrying a payload of 500g-1500g. It supports the development of PSDK and can quickly integrate user products into DJI's ecosystem. This Produce is applied in various types of optoelectronic imaging equipment or optoelectronic scanning equipment.

Basic parameters

Parameter	Value
Yaw	-170° ~ +170°
Pitch	-120° ~ +90°
Roll	-90° ~ +90°
Stabilization	≤0.02° (disturbance 0.5°@1Hz)
Azimuth	-170° ~ +170°
Pitch	-120° ~ +90°
Mechanical interface	Flange

Parameter	Value
Weight of ginbal	About 490g
Weight of payload	≤1500g
Electrical interface	LAN、 UartTTI
Operating Temp	-20℃ ~ +55℃
Storage Temp	-45℃ ~ +60℃
Power	DC12V ~ 17.6V@2.5A
DJI interface	SkyPort V2

ZKSX350

Handheld Control Terminal



The ZKSX350B Handheld Control Terminal runs on the Android operating system and is compatible with the QGC Ground Control Station. Equipped with a built-in battery, it supports charging and discharging via an extended cable, and can also be charged by connecting an external lithium battery pack or a Type-C charger. The terminal features 4 physical shortcut keys for selecting drones by ID, 1 one-key AI shortcut key (confirm/cancel strike), 1 customizable shortcut key for functions such as one-key landing, as well as two programmable physical keys (Key A and Key B). It is equipped with 4 physical control sticks for drone attitude (roll, pitch, yaw), 2 physical keys for gimbal camera control, and 2 physical keys for photo and video capture, and supports multi-touch interaction. It supports external display for split-screen output via a mini HDMI port, allows connection of an external digital network transmission module while providing power and a 100M Ethernet interface, and map data can be updated via file copying through the USB-C port.

Hardware parameters

Parameter	Value
CPU	4-core ARM Cortex A55, 2.0GHz
GPU	ARM Mail-G52 2EE
NPU	1TOPs, supports INT8/INT16/FP16 hybrid
Encoding	Supports H.264/H.265, 1080P/60fps

Parameter	Value
Decoding	Supports H.264/H.265, 1080P/60fps
Serial port	1 channel
Receiver supports	SBUS
Interface types	TYPE-C, Mini-HDMI, network port

Basic parameters

Parameter	Value	Parameter	Value
Battery life	≥4h (at room temperature)	Portability	Easy to carry
Transmission	≥25Km (Open-field Surface-to-air)	Operating T°	-20°C ~ +50°C
Weight	≤1kg (handheld control terminal main unit)	Antenna configuration	Four-antenna configuration, foldable
Boot to desktop	≤35s	Power	5V@3A
Display	≥5 inches, 1920×1080, 1000nits, multi-touch support		
Max dimensions	≤230×120×50mm (joystick height excluded)		
Testability	TYPE-C for debugging/updating ground station software		