

C/ADDXFPV

C/ADDXFPV

www.caddxfpv.com

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Company Profile

Founded in 2017, CADDXFPV is a world-leading company in the research, design and manufacturing of FPV imaging products. CADDXFPV, the pioneer brand of FPV imaging systems, is dedicated to creating the ultimate immersive image experience for users and meeting the needs of consumers in various scenarios.

After 8 years of rapid development, CADDXFPV has developed more than 400 distributors around the world, with business scope spreading over the Americas, Europe, Asia, Oceania, and Africa, and its products serving more than 100 countries and regions.

CADDXFPV pays special special attention to research and development, and has set up a research and development team of more than 100 people in Shanghai, Shenzhen and

Xi'an, the industry's top R&D team. Meanwhile, CADDXFPV has set up its own manufacturing plant with more than 10,000 square meters in Shenzhen. CADDXFPV products are mainly FPV HD digital systems, FPV analog imaging systems, consumer imaging products, industry imaging products, FPV drones and other products such as accessories and so on.

Continuously breaking the shackles of thought, bold innovation, and breaking the bottleneck of the industry is our original intention of entrepreneurship, we will continue to provide users with the ultimate perfect visual experience in the field of FPV drones, FPV RC vehicles, fixed-wing, industry drones, drone education and so on.

Brand Values

Mission

· Advancing the FPV Industry

Vision

· Build FPV core brand enterprise

Value

· Integrity and pragmatism, customer success

Team



Research
&
Development



Marketing
&
Sales



Others

Research & Development

2022.



06. AVATAR HD 6S KIT
AVATAR HD GOGGLES



09. AVATAR HD MINI 1S KIT



11. AVATAR HD VRX



12. AVATAR HD MINI 1S LITE KIT



03. AVATAR HD 6S KIT V2/PRO



08. AVATAR HD NANO KIT V3

2023.



09. AVATAR HD 6S KIT V2/PRO (DUAL ANTENNAS)



12. AVATAR HD GOGGLES X

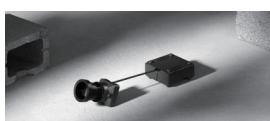


01. RATEL PRO



01. MOONLIGHT KIT

2024.



03. INFRA CAMERA



04. GOFILM 20



07. AVATAR GT KIT



04. AVATAR HD GOGGLES L

Future...

Business & Distribution

Our company has realized the layout of the whole industry chain from FPV digital image system, FPV analog image system, consumer image products, industry image products to FPV drones and related accessories. We have mastered the core technologies and production processes of the whole FPV industry chain, such as SOC image transmission chip R&D and design, integrated circuit design, image algorithm development, drone anti-shake algorithm, and system integration.

Consumer Products



FPV Digital Imaging System

FPV Goggles, FPV Digital Transmitter
FPV Camera, FPV Digital Receiver



FPV Drone

Photographic Drone, Voyage Drone
Beginner Drone, FPV Parts



FPV Gimble

Single-Axis, Dual-Axis, Tri-Axis



Industry Products

FPV Industry Imaging Products

Starlight Camera, Blacklight Camera, Lowlight Camera,
HD Thermal Camera, Analog Thermal Camera,
HD Dual Thermal Camera, Analog Dual Thermal Camera

FPV Analog Imaging System

FPV VTX, FPV Camera

AI Intelligent Recognition Product

FPV AI Intelligent Recognition Box

Extended Range Repeater

WALKSNAIL AVATAR HD

Global Distribution

Our distributors are located on five continents, covering major markets and strategic growth areas. Whether it is North America, Europe, Asia, or Africa and Latin America, our products reach our customers in a timely and efficient manner through our local distributors. This global presence ensures that we are able to remain competitive on a global scale and respond quickly to market changes.



FPV Drone Series

The Goflim FPV drone significantly reduces vibration during flight by adopting advanced anti-shake algorithms, thereby enhancing flight stability and the quality of video recording. The application of this technology enables the drone to perform excellently in various fields such as film and TV shooting, racing, entertainment, education, terrorism prevention and on-duty patrol.

This series of FPV drones come in different sizes, such as 2inch, 5inch, 7inch, 10inch, 13inch, 15inch and more.



GOFILM 20
Starlight 4K 2 Inch FPV Drone

GOFILM 20 FPV drone, designed for aerial photography enthusiasts, is equipped with a 4K starlight camera system that provides high-quality image recording in low-light environments. Its compact design combined with aerodynamic optimization ensures flight stability and efficiency.

With strong flight performance and versatility, this drone demonstrates excellent maneuverability and agility for both indoor flying and outdoor racing. Its compact size and flexible flight characteristics allow it to excel in extreme sports filming, obstacle traversal or aerobatics, providing aerial photography enthusiasts with a wide range of creative space and unlimited flight fun.

⚡ 4K60FPS
FOV 160°

⚡ Modular Installation
Design

⚡ Gyroflow support
Post-stabilization

⚡ Weight 115g
(Without Battery)

Model	GOFILM 20
FC	CADDXF4_AIO_ELRS
VTX	Moonlight Kit
Wheelbase	94mm
Motor	1303 6000KV
Propeller	HQprop T2×2×3
Flight time	4S 650mAh about 5.5min
Receiver	ELRS 2.4G
Battery interface	XT30
Size	133×123×39mm
Weight	115±5g

VTX Model	MOONLIGHT KIT
Sensor	Starlight Sensor
Lens	Max 160°/F2.1
ISO	100-25600
Recording	4K@30/60fps; 2.7K@30/60fps;
Resolution	1080p@100/60fps; 720p@60fps
Max Mbps	150Mbps
Video Format	MP4 (H.264)
Wide Power Input	7.4V-25.2V
Memory card type	U3 microSD, Max 256G
Size	Camare: 19.6mm×19mm×24mm VTX: 15.3mm×34.5mm×34.5mm



GOFILM 80 / 100

Large Foldable Filming FPV Drone

With its innovative foldable design for ultimate portability and flexible storage, the Gofilm 80/100 FPV drones are ideal for travel and outdoor photography. Equipped with the advanced Avatar HD system and analog mapping technology, it not only improves the clarity and stability of image transmission, but also enhances the real-time and interactive flight experience. Combined with the sunken motor design, this drone excels in aerodynamic performance, flight stability and operational safety, providing strong support for long-distance navigation, high-quality aerial photography and payload missions.

⚡ Foldable Designs	⚡ Spraying Process	⚡ Sunken Motor Design	⚡ Strong Power
Model	GOFILM 80	GOFILM 100	
FC	Neuron F405	Neuron F405	
VTX	CADX-CADDXF4	CADX-CADDXF4	
Wheelbase	340mm	414mm	
Motor	2812 900KV	3115 900KV	
Flight Time	6S 5500mAh about 25min	6S 5500mAh about 25min	
Receiver	ELRS 2.4/915Mhz	ELRS 2.4/915Mhz	
Battery Interface	XT60	XT60	
Size	255x203x88mm	350x203x88mm	
Weight	860±5g	960±5g	
Support VTX	Avatar HD System / Analog VTX	Avatar HD system / Analog VTX	
Supported Devices	Single-Axis Gimbal / Eclipse Camera	Single-Axis Gimbal / Eclipse Camera	

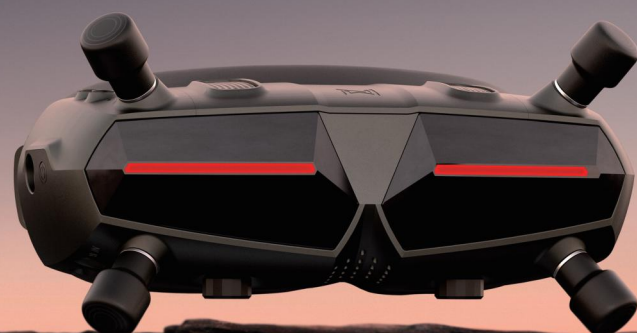
VTX Model	AVATAR GT	ESC Model	Neuron 70
Image Sensor	1/1.8-Inch Sony Starvis II Sensor	Protocols	BLHeliSuite16
Lens	F1.6/8Mp	Continuous Current	70A
Resolution	1080P@60/100fps; 720P@120/60fps	Maximum Current	80 A (Maximum 10s)
Recording	1080P/720P	Input Voltage	2S-6S
Wide Power Input	11.1V-25.2V	Current Ratio	160
Supported SD Cards	Micro SD (up to 256 GB)	Tuning Software	BLHeliSuite16.7.14.9.0.3
Latency	Average delay 22ms		

Digital HD System – Receiver

WALKSNAIL AVATAR HD Digital High Definition System, Glasses VRX Receiver is a digital video receiving device for FPV drones. It is one of the key components used by FPV drone users to receive real-time video signals from the drone.

Compared to traditional analog signals, digital signals provide clearer, low-latency image quality. Users can obtain a higher resolution video stream for a clearer view of the flight process. The WALKSNAIL AVATAR receiver supports multi-band operation, which effectively avoids interference and provides stable signal reception in different environments. The multi-band support allows users to choose the appropriate frequency band for flight according to local regulations and environmental conditions.





AVATAR HD GOGGLES X

All-in-one Modular FPV Goggles

Goggles X, groundbreakingly brings 1080p resolution into the realm of FPV eyewear, providing FPV drone enthusiasts with an unprecedented visual experience. With an OLED display, these glasses deliver detailed and smooth 1080p/100fps video output, ensuring a low-latency HD visual feast on every flight.

Designed to balance practicality and personalization, Goggles X is equipped with HDMI and AV inputs, as well as a convenient diopter adjustment function. Its modular construction not only supports DIY customization, but also provides a wide space for future technological upgrades, ensuring that users are always at the visual forefront of FPV flight.

⚡ Replaceable VRX ⚡ HDMI INPUT/OUTPUT ⚡ 1080P/100FPS ⚡ AV IN

Model	AVATAR HD GOGGLES X	Channel	8
Communication Frequency	5.725-5.850GHZ	Screen Resolution	1920*1080/100Hz
Transmitter Power(EIRP)	FCC:<30dBm; CE:<14dBm; SRRC:<20dBm; MIC:<25dBm	Screen Material	OLED
I/O Interface	HDMI Out/Input, 5Pin 3.5mm Plug, Dc5.5*2.1mm, Micro SD Card Slot	IPD Mechanical Range	57mm-72mm
Transmission Resolution	1080P/100FPS, 1080P/60FPS, 720P/100FPS, 720P/60FPS	Adjustable Focus Range	+ 2.0 to - 6.0 Diopter
Code Rate	Max 50Mbps	FOV	50°
Min. Latency	Average 22ms	Power Input	7-26V(2S-6S)
Average Gain	2dBi	SD card	Support 256G
Polarization	LHCP	System	AVATAR HD SYSTEM
Transmission Distance	>4km		



AVATAR HD GOGGLES L

First 4.5-inch Single-screen Digital HD FPV Goggles

Goggles L, the first affordable digital HD FPV goggles with integrated head tracking, allows pilots to control the viewing angle with simple head movements, enhancing the interactivity and immersion of the flight.

The 4.5-inch LCD HD display provides clear, bright image quality; a directional antenna design that optimizes signal reception and reduces interference; and robust compatibility that allows it to be adapted to a wide range of different devices and systems.

⚡ 4.5 inch 1080P HD Screen ⚡ Support Head Tracking ⚡ New Optical Technology

Model	AVATAR HD GOGGLES X	Channel	8
Communication Frequency	5.725-5.850GHZ	Screen Resolution	1920*1080/60Hz
Transmitter Power(EIRP)	FCC:<30dBm; CE:<14dBm; SRRC:<20dBm; MIC:<25dBm	Screen Material	LCD
I/O Interface	4Pin 3.5mm Plug, DC5.5*2.1mm, Micro SD Card Slot	Power Input	7-26V(2S-6S)
Gyro	Nine-Axis Gyroscope	SD Card	Support 256G
Transmission Resolution	1080p60fps, 720p60fps	System	AVATAR HD SYSTEM
Code Rate	Max 50 Mbps		
Average Gain	4.9dBi		
Polarization	LHCP		
Transmission Distance	>4km		



AVATAR FPV VRX

Realization of Analog to Digital HD Receivers

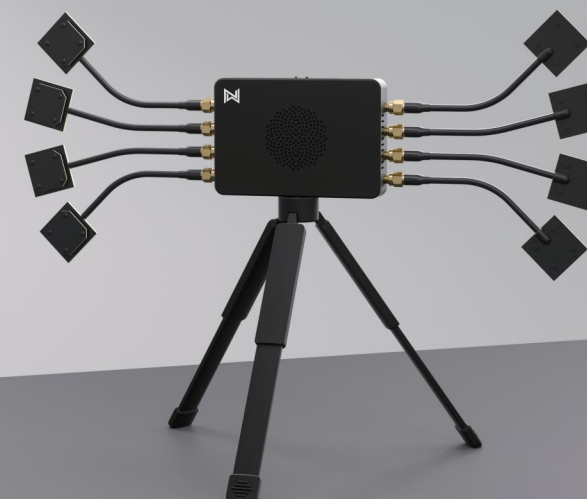
The AVATAR FPV VRX receiver is a high performance video receiver designed for FPV drone enthusiasts. Featuring a high performance and powerful video receiver, it provides a real-time video experience from analog to digital HD for analog FPV drone flights.

High-resolution video transmission, low-latency response, flexible support for multiple frequency bands, robust device compatibility, and an efficient antenna design ensure signal stability and coverage. The easy-to-install feature of the AVATAR FPV VRX further simplifies the user's setup process, allowing pilots to get up and running quickly.

- Compatible with Analog Goggles
- Support HDMI Output
- 1080P Definition
- Lightweight

Model	AVATAR FPV VRX
Communication Frequency	5.725-5.850GHZ
Transmitter Power(EIRP)	FCC:<30dBm; CE:<14dBm; SRRC:<20dBm; MIC:<25dBm
I/O Interface	HDMI,micro SD card slot, DC5.5*2.1mm
HDMI Output	1080p@60fps, 720p@100/60fps
Power Input	7-25.2V(2S-6S)
SD Card	Support 256G
System	AVATAR HD SYSTEM
Weight	86.7g

Antenna Model	Red Bird
Polarization	LHCP
Bandwidth	5.6GHz- 6.0GHZ
Average Gain	1.9dBi
Radiation Efficiency	≥97%
VSWR	≤1.3
Cross-Polar Rejection	-15to-30dB
Connector	RP-SMA
Dimension	24.8*15.3mm
Weight	4.2g



AVATAR REPEATER

First FPV Digital Repeater

The Avatar Repeater is a repeater designed for FPV drones, designed to provide longer communication distance and more stable signal connection. It employs advanced technology to ensure smooth communication between the drone and the control center in a variety of environments. It is also compatible with the transmitter and receiver of the Walksnail Avatar HD system, supporting HD signal transmission, so that users can obtain clear and detailed real-time images in flight.

- Enhanced Communication Range
- Improved Signal Stability
- HD Signal Transmission

Model	AVATAR REPEATER
Communication Frequency	5.15GHz-5.30GHz; 5.50GHz-5.85GHz
Transmitter Power(EIRP)	FCC:<30dBm; CE:<14dBm; SRRC:<20dBm; MIC:<25dBm
5.2G Antenna	Frequency Range: 5.15GHz-5.30GHz Gain: 7dBi (AVG) Polarization: LHCP
5.8G Antenna	Frequency Range: 5.50GHz-6.00GHz Gain: 7dBi (AVG) Polarization: LHCP
System	Avatar HD system
Power Input	9V-26V

Dimensions	119.5*72*18.6mm
Weight	145g (Antenna not included)
I/O Interface	Type-C ,4Pin 1.0mm Port
Transmission Resolution	1080p/100fps, 1080p/60fps, 720p/100fps, 720p/60fps

HD Digital System – Transmitters

WALKSNAIL AVATAR DIGITAL HD SYSTEM, MAPPING KIT Transmitter is one of the core components in the FPV UAV system. It is responsible for converting the real-time video signal captured by the UAV camera into a digital signal and transmitting it to the ground receiving equipment.

The WALKSNAIL AVATAR mapping transmitter supports high-definition digital video transmission, usually providing high-resolution video output such as 720p and 1080p. Compared to traditional analog video transmission, digital transmission provides clearer and more stable video quality, reducing image blurring and signal interference.

The transmitter is usually compatible with a wide range of cameras and display devices from the WALKSNAIL series, allowing users to choose the right camera for installation as needed. In addition, the transmitter is compatible with a wide range of brands and models of FPV receiver equipment, providing great flexibility.



AVATAR GT KIT
Long-Range Maximum Power 2W HD Digital Transmitter Kit

The AVATAR GT KIT has a Sony Starvis II image sensor that supports 1080P /100fps video mode output, ensuring low latency and smooth flight footage.

The AVATAR GT KIT has a maximum power of 2W and an FOV of 160°. It provides the ultimate long-distance flight experience for UAV and FPV enthusiasts, ideal for long-distance flight and exploration.

-  1080P100FPS
FOV 160°
-  4K Compatibility
-  Micro SD Card
Slot Design
-  11.1V-25.2V

Model	AVATAR GT KIT
Image Sensor	1/1.8-Inch Sony Starvis II Sensor
Resolution	1080P/100fps; 1080P/60fps; 720P/100fps; 720P/60fps
Lens	F1.6/8Mp
Ratio	4/3; 16/9
FOV	160°
Min.Illumination	0.0001Lux
Communication Frequency	5.725-5.850GHz
Transmitter Power (EIRP)	FCC:<30dBm; CE:<14dBm; SRRC:<20dBm;MIC:<25dBm
I/O Interface	Micro SD card slot; 3T1.0*4(power cable)
Recording	1080P/720P
Operating Temperature	-10~40℃

Channels	8
Supported FC System	Betaflight; Inav; Fettec; Kiss; ArduPilot
OSD	Canvas mode
Latency	Average delay 22ms
Antenna	2(IPEX)
Wide Power Input	11.1V-25.2V
Supported SD Cards	Support 256G
Mounting Holes	25.5*25.5mm; 20*20mm
Weight	41.6g (Antenna included)



AVATAR HD MOONLIGHT KIT

4K HD Digital Transmitter Kit

The MOONLIGHT KIT is a 4K digital mapping transmitter with excellent night vision capabilities, equipped with a Starlight image sensor that captures clear color images in low-light conditions.

The kit supports 4K/60FPS video recording, modular design, built-in EIS and Gyroflow support to provide clear, stable image transmission for FPV drones.

- ⚡ 4K60FPS
- ⚡ Starlight Camera
- ⚡ Built-in EIS
- ⚡ FOV160°

Model	AVATAR HD MOONLIGHT KIT
Image Sensor	1/1.8-Inch Starlight Sensor
Recording	4K@30/60fps; 2.7K@30/60fps;
Resolution	1080p@100/60fps;720p@60fps
Lens	F2.1
ISO	100-25600
FOV	Max 160°
Communication	5.725-5.850GHz
Frequency	
Transmitter	FCC:<30dBm; CE:<14dBm;
Power (EIRP)	SRRC:<20dBm;MIC:<25dBm
I/O Interface	JST1.0*4(Power in)JST0.8*6(USB), Micro SD card Slot; IPEX-1
Max Mbps	150Mbps
Video format	MP4 (H.264)
3D DNR	Support

Gyroflow	Support
Built-in EIS	Support
Power Consumption	12V@1.4A, 8V@2.2A
Memory Card Type	U3 MicroSD, Max 256G
VTX Installation	20*20mm/25*25mm (M2)
hole distance	
OSD	Canvas Mode
Latency	Average delay 22ms
Antenna	2(IPEX)
Wide Power Input	7.4V-25.2V
Weight	38.5g



AVATAR HD PRO KIT

Night Vision Digital HD Transmitter Kit

The AVATAR HD PRO KIT is equipped with a Sony Starvis II image sensor and supports compatible 1080P /120fps video mode output, as well as additional connection of a 4K video board.

- ⚡ Sony Starvis II Sensor
- ⚡ Compatible 1080P120FPS
- ⚡ Support Gyroflow
- ⚡ FOV160°

Model	AVATAR HD PRO KIT
Image Sensor	1/1.8-Inch Sony Starvis II Sensor
Recording	1080P/60fps;720P@60/120fps;
Resolution	1080P/120fps Compatibility
LENS	F1.6/8Mp
Ratio	4/3; 16/9
FOV	160°
Min.Illumination	0.0001Lux
Communication	5.725-5.850GHz
Frequency	
Transmitter	FCC:<30dBm; CE:<14dBm;
Power (EIRP)	SRRC:<20dBm;MIC:<25dBm
I/O Interface	JST1.0*4(Power in)JST0.8*6(USB)
Recording	1080P/720P
Storage	32G

Operating Temperature	-20~40°C
Channels	8
Supported FC	Betaflight; Inav; Fettec; ArduPilot;
System	Kiss
OSD	Canvas mode
Latency	Average delay 22ms
Antenna	2(IPEX)
Wide Power Input	6V-25.2V
Mounting Holes	25.5*25.5mm; 20*20mm
Weight	28.9g



AVATAR HD KIT V2

Native 4:3 Digital HD Transmitter Kit

The AVATAR HD KIT V2 is equipped with a native 4:3 image sensor, providing an image ratio closer to the human eye's field of vision for enhanced immersion and visual experience. It is compatible with 1080p/120fps video mode output, and also supports the connection of an additional 4K video board.

- Native 4:3 Sensor
- 1080P 60FPS
- Built-in 32G Storage
- FOV160°

Model	AVATAR HD KIT V2	Operating	-20~40℃
Image Sensor	1/3.2-Inch 4Mp 4:3 Sensor	Temperature	
Recording	1080P/60fps;720P@60/120fps;	Channels	8
Resolution	1080P/120fps Compatibility	Supported FC	Betaflight; Inav; Fettec; ArduPilot;
LENS	F2.0/2.1mm	System	Kiss
Ratio	Native 4/3; 16/9	OSD	Canvas Mode
FOV	160°	Latency	Average delay 22ms
Min.Illumination	0.001Lux	Antenna	2(IPEX)
Communication	5.725-5.850GHz	Wide Power Input	6V-25.2V
Frequency		Mounting Holes	25.5*25.5mm; 20*20mm
Transmitter	FCC:<30dBm; CE:<14dBm;	Weight	26.7g
Power (EIRP)	SRRC:<20dBm;MIC:<25dBm		
I/O Interface	JST1.0*4(Power in)JST0.8*6(USB)		
Recording	1080P/720P		
Storage	32G		
Gyroflow	Support		



AVATAR HD NANO KIT V3

Free Style Racing Nano HD Digital Transmitter Kit

The AVATAR HD NANO KIT V3 is an FPV digital HD mapping kit designed for Freestyle and Racing flights. It utilizes a 14mm Nano camera with a 1/3 Inch 4Mp native 4:3 image sensor inside, providing a ratio of images closer to the human eye's field of view for enhanced immersion and visual experience.

AVATAR HD NANO KIT V3 has a 160° ultra-wide field of view, and the native 4:3 /16:8 ratio can be switched at will, stable, high-definition, low-latency video transmission, suitable for 2-inch small FPV drones.

- Native 4:3 Image Sensor
- 1080P/60FPS
- FOV160°
- Built-in 32G Storage

Model	AVATAR HD NANO KIT V3	Operating	-20~40℃
Image Sensor	1/3.2-Inch 4Mp 4:3 Sensor	Temperature	
Resolution	1080P/60fps;720P@60/120fps;	Channels	8
LENS	F2.0/2.1mm	Supported FC	Betaflight; Inav; Fettec; ArduPilot;
Ratio	Native 4/3; 16/9	System	Kiss
FOV	160°	OSD	Canvas Mode
Min.Illumination	0.001Lux	Latency	Average delay 22ms
Communication	5.725-5.850GHz	Wide Power Input	3.1V-13V
Frequency		Mounting Holes	25.5*25.5mm; 20*20mm
Transmitter	FCC:<27dBm; CE:<14dBm;	Weight	28.9g
Power (EIRP)	SRRC:<20dBm;MIC:<25dBm		
I/O Interface	JST1.0*4(Power in) JST0.8*4(USB)		
Recording	1080P/720P		
Storage	32G		



AVATAR HD MINI 1S /LITE KIT

Mini 1-inch Indoor Digital Transmitter Kit

The AVATAR HD MINI 1S /LITE KIT is a high definition digital mapping kit designed for small mini airplanes and indoor flying. The compact and lightweight design provides indoor flying enthusiasts with a high-definition, low-latency video transmission experience.

The AVATAR HD MINI 1S /LITE KIT is perfect for both indoor flight practice and small drone competitions.

- ⚡ 1080P/60FPS
- ⚡ Canva Mode
- ⚡ Lightweight
- ⚡ 3.1V~13V

Model	AVATAR HD MINI 1S/LITE KIT
Image Sensor	1/2.7-Inch Sensor
Resolution	1080P/60fps;720P@60/120fps;
LENS	F2.0/2.1mm
Ratio	4/3; 16/9
FOV	160°
Min.Illumination	0.001Lux
Communication	5.725-5.850GHz
Frequency	
Transmitter	FCC:<27dBm; CE:<14dBm;
Power (EIRP)	SRRC:<20dBm;MIC:<25dBm
I/O Interface	JST1.0*4(Power in) JST0.8*4(USB)
Recording	1080P/720P
Storage	32G

Operating Temperature	-20~40℃
Channels	8
Supported FC System	Betaflight; Inav; Fettec; ArduPilot; Kiss
OSD	Canvas Mode
Latency	Average delay 22ms
Wide Power Input	3.1V-13V
Mounting Holes	25.5*25.5mm; 20*20mm

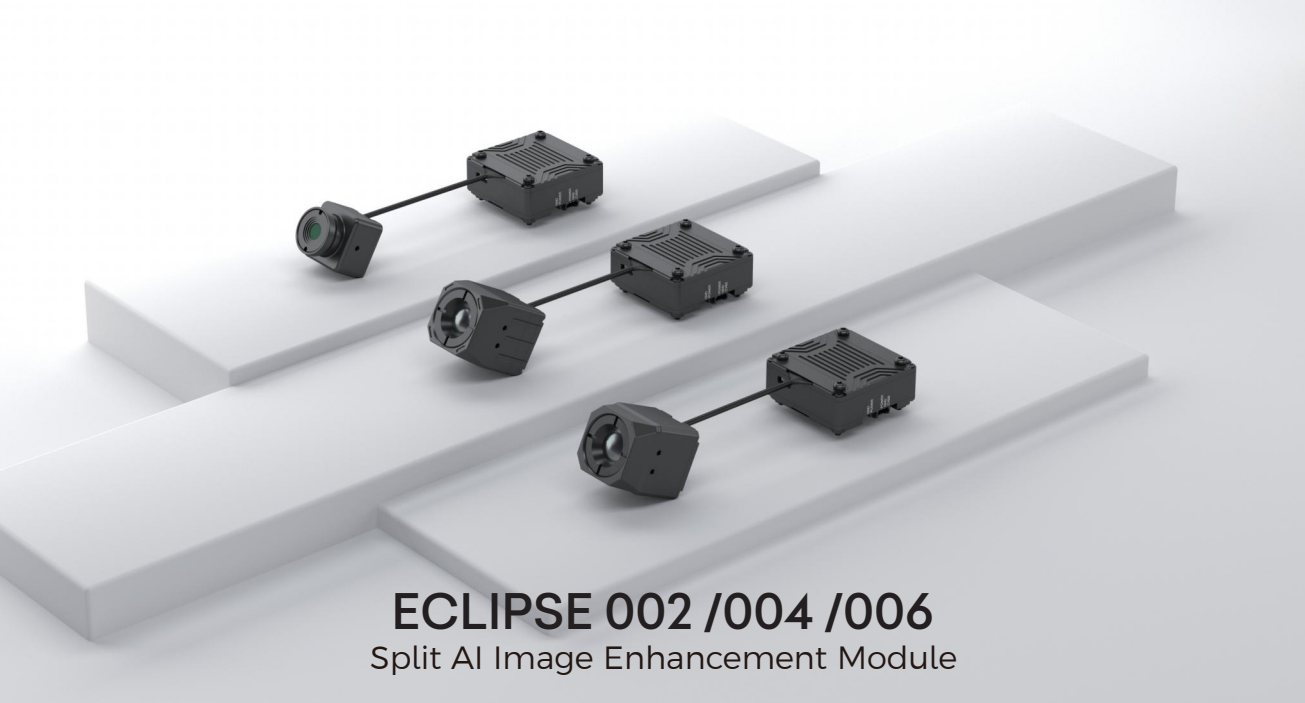
Thermal Camera Series

The Thermal Imaging Series utilizes advanced thermal imaging technology to provide clear viewing capabilities even in complete darkness. Its ability to penetrate darkness, glare, haze and smoke makes it a vital extension of human vision. This technology is used in an extremely wide range of scenarios, including disaster area rescue, on-duty inspections, construction surveys, fishpond and orchard monitoring, camping expeditions, and animal observation, providing strong support for observation and operations in a variety of environmental conditions.

In addition, the series is equipped with AI image quality enhancement function, which can significantly improve image quality and target recognition ability, ensuring that the shooting effect is not affected by environmental conditions. It supports MIPI-CSI and CVBS outputs and is compatible with Walksnail Avatar and most other analog transmission systems.

It supports MIPI-CSI and CVBS output and is compatible with Walksnail Avatar and most other analog mapping systems. By recognizing and calibrating the target, the target information can be transmitted to the flight control system in real time, enabling precise flight following. The high frame rate of 25/50FPS ensures a clear and smooth image, eliminating lags and shadows and providing users with an unprecedentedly smooth visual experience. Meanwhile, the low latency of 22ms on average further improves the real-time accuracy of shooting, ensuring the smoothness and excitement of the picture.





ECLIPSE 002 /004 /006
Split AI Image Enhancement Module

⚡ AI Image Enhancement ⚡ High Resolution ⚡ Low Latency ⚡ MIPI-CSI/CVBS Output Interface

Model	ECLIPSE 002	ECLIPSE 004	ECLIPSE 006SH /SL
Detector Type	Uncooled Vanadium Oxide	Uncooled Vanadium Oxide	Uncooled Vanadium Oxide
Resolution	256*192	480x360	640*512 /400*300
Wavelength Range	8~12μm	8~12μm	8~12μm
Lens	F1.0/4mm	F1.0/9.1mm	F1.0/9.1mm
FOV	50°(H)*37.2°(V)*62.3°(D)	48°(H)*34°(V)*59°(D)	48.3°(H)*38.6°(V)*66°(D)
Frame Rate	50 fps	50 fps	50 fps
Power Consumption	<1.5W	<1.5W	<1.5W
Output	PAL	PAL	PAL
Supply Voltage	9V~24V	9V~24V	9V~24V
Temperature	-20°C~60°C	-20°C~60°C	-20°C~60°C
Interface	CVBS	CVBS	CVBS
Latency	Average Latency 20ms	Average Latency 20ms	Average Latency 20ms
Image Quality	AI Image Enhancement	AI Image Enhancement	AI Image Enhancement



ECLIPSE 006HD
Split HD 2W AI Image Enhancement Module

⚡ AI Image Enhancement ⚡ Digital HD ⚡ High Resolution ⚡ Low Latency

Model	ECLIPSE 006SH /SL	Model	AVATAR GT VTX
Detector Type	Uncooled Vanadium Oxide	Communication	5.725-5.850 GHz
Resolution	640*512	Frequency	
Wavelength Range	8~12μm	Transmitter	FCC: <30dBm; CE: <14dBm;
Lens	F1.0/9.1mm	Power (EIRP)	SRRC: <20dBm; MIC: <25dBm
FOV	48.3°(H)*38.6°(V)*66°(D)	I/O Interface	Micro SD card slot; JST1.0*4(power cable)
Frame Rate	50 fps	Recording	1080p/720p
Power Consumption	<1.5W	Channels	8
Output	PAL	OSD	Canvas mode
Supply Voltage	9V~24V	Mounting Holes	25.5*25.5mm; 20*20mm
Temperature	-20°C~60°C	Dimensions	34*34*20mm
Interface	MIPI-CSI(Walksnail Avatar)		
Latency	Average Latency 20ms		
Image Quality	AI Image Enhancement		



ECLIPSE 002 /004 /006 DUAL
Split Dual-Light Camera AI Image Enhancement Module

⚡ AI Image Enhancement ⚡ Low Latency ⚡ High Resolution ⚡ Thermal Analog Dual-Light Camera

Model	ECLIPSE 002	ECLIPSE 004	ECLIPSE 006
Detector Type	Uncooled Vanadium Oxide	Uncooled Vanadium Oxide	Uncooled Vanadium Oxide
Resolution	256*192	480x360	640*512
Wavelength Range	8-12μm	8-12μm	8-12μm
Lens	F1.0/4mm	F1.0/9.1mm	F1.0/9.1mm
FOV	50°(H)*37.2°(V)*62.3°(D)	48°(H)*34°(V)*59°(D)	48.3°(H)*38.6°(V)*66°(D)
Frame Rate	50 fps	50 fps	50 fps
Power Consumption	<1.5W	<1.5W	<1.5W
Output	PAL	PAL	PAL
Supply Voltage	9V-24V	9V-24V	9V-24V
Temperature	-20°C-60°C	-20°C-60°C	-20°C-60°C
Interface	CVBS	CVBS	CVBS
Latency	Average Latency 20ms	Average Latency 20ms	Average Latency 20ms
Image Quality	AI Image Enhancement	AI Image Enhancement	AI Image Enhancement

Model	RATEL ULTRA
Image sensor	1/1.8-Inch Sensor
Lens	6mm
FOV	36.86°(H)*29.14°(V)
Video Output	PAL
Control Output	Mavlink
Supply Voltage	9V-24V



ECLIPSE 002 /006 HD DUAL
Split HD 2W Dual Light Camera AI Image Enhancement Module

⚡ AI Image Enhancement ⚡ Low Latency ⚡ Digital HD ⚡ Thermal Analog Dual-Light Camera

Model	ECLIPSE 002	ECLIPSE 006
Detector Type	Uncooled Vanadium Oxide	Uncooled Vanadium Oxide
Resolution	256*192	640*512
Wavelength Range	8-12μm	8-12μm
Lens	F1.0/4mm	F1.0/9.1mm
FOV	50°(H)*37.2°(V)*62.3°(D)	48.3°(H)*38.6°(V)*66°(D)
Frame Rate	50 fps	50 fps
Power Consumption	<1.5W	<1.5W
Output	PAL	PAL
Supply Voltage	9V-24V	9V-24V
Temperature	-20°C-60°C	-20°C-60°C
Interface	MIPI-CSI(Walksnail Avatar)	MIPI-CSI(Walksnail Avatar)
Latency	Average Latency 20ms	Average Latency 20ms
Image Quality	AI Image Enhancement	AI Image Enhancement

Model	AVATAR GT VTX
Communication	5.725-5.850 GHz
Frequency	
Transmitter	FCC: <30dBm; CE: <14dBm;
Power (EIRP)	SRRC: <20dBm; MIC: <25dBm
I/O Interface	Micro SD card slot; JST1.0*4(power cable)
Recording	1080p/720p
Channels	8
OSD	Canvas mode
Mounting Holes	25.5*25.5mm; 20*20mm
Dimensions	34*34*20mm

Model	RATEL ULTRA
Image sensor	1/1.8-Inch Sensor
Lens	6mm
FOV	36.86°(H)*29.14°(V)
Video Output	PAL
Control Output	Mavlink
Supply Voltage	9V-24V



IRC 003 /006CA

All-In-One Integration

⚡ AI Image Enhancement ⚡ High Resolution ⚡ Low Latency ⚡ Simple Design

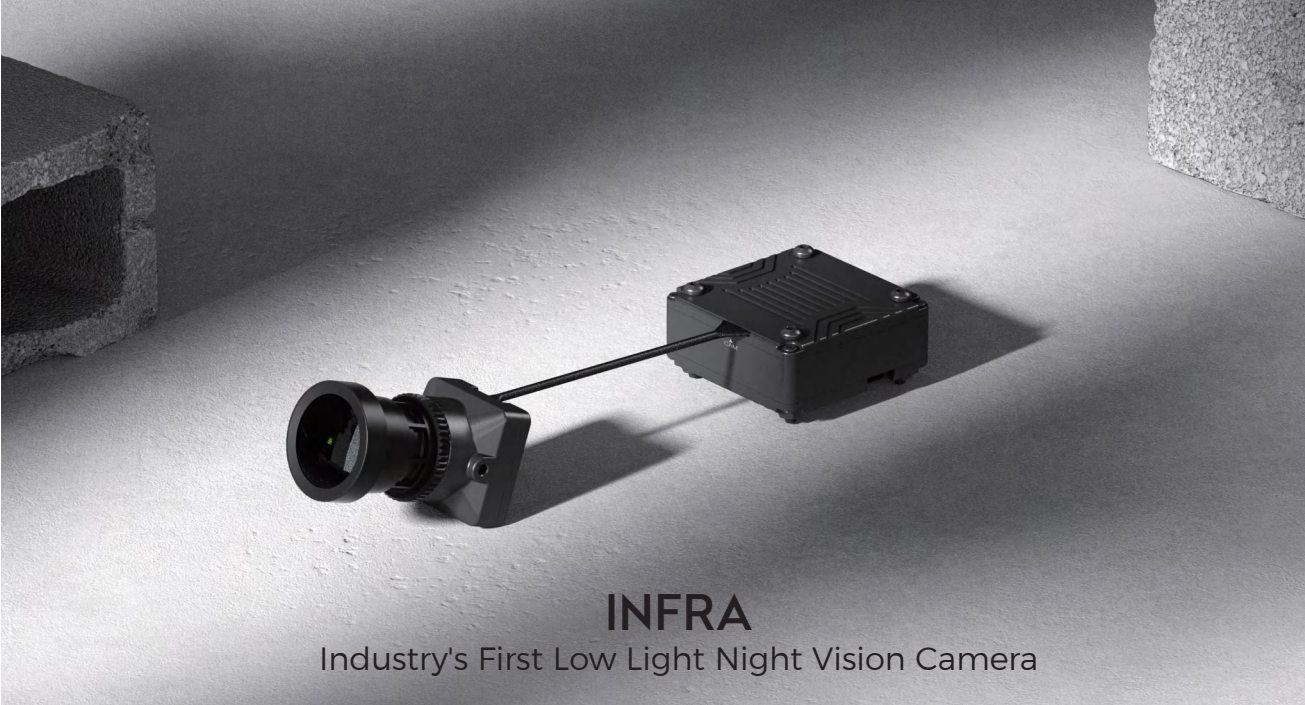
Model	IRC-003CA	IRC-006CA
Detector Type	Uncooled Vanadium Oxide	Uncooled Vanadium Oxide
Resolution	384*288	640*512
Wavelength Range	8~12μm	8~14μm
Lens	F1.0/4mm	F1.0/9.1mm
FOV	65.5°(H) 49.0°(V) 115°(D)	48.0°(H) 38.4°(V) 64.9°(D)
Frame Rate	50 fps	25/50 fps
Power Consumption	<1.5W	<1.5W
Output	PAL	PAL
Supply Voltage	9V~24V	9V~24V
Temperature	-20°C~60°C	-20°C~60°C
Weight	74g	61g

Analog Series

The Analog Series covers a wide range of light-sensitive performance from low-light to black-light to starlight level, ensuring that high-quality images can be captured in any lighting condition. Whether in dim indoor environments or starlit nights, these cameras utilize their advanced light-sensing technology to deliver crisp, clear image output.

The durability and stability of these cameras have also been specially designed to withstand vibrations and shocks during high-speed flights, ensuring continuity and clarity of image transmission. Whether outdoors in bright light or indoors in low-light conditions, our analog cameras deliver consistent high performance, helping flyers have an immersive flying experience and stay ahead of the curve during intense and exciting maneuvers.





INFRA

Industry's First Low Light Night Vision Camera

The INFRA camera is a comprehensive solution that combines advanced AI technology with traditional analog camera technology. Designed for high-quality video capture and processing in low or no-light conditions, it is suitable for a wide range of application scenarios such as night-vision surveillance, security systems and industrial monitoring. With the AI Picture Quality Enhancement Box, the system is able to provide clear images in 0LUX (completely lightless) environments, significantly improving video quality.

- AI Image Enhancement
- 0 Lux
- Black&White Sensor
- High Resolution

Model	INFRA
Image Sensor	Black&White Sensor
Horizontal Resolution	1500TVL
FOV	120°
Min.Illumination	0 Lux
WDR	Super WDR
LENS	M16/F1.0/2.8mm
Frame Rate	50/60 fps
Power Consumption	<1.5W
Output	PAL
Supply Voltage	9V~24V
Analog Interface	CVBS
Latency	Average Latency 20ms
Image Quality	AllImage Enhancement



RATEL PRO /2 /BABY

Starlight Camera

The RATEL PRO is an analog camera for FPV drones used in night vision and low light environments. Equipped with an advanced black light sensor, combined with Night Vision Enhancement Technology and Wide Dynamic Range (WDR), it guarantees clear images in all kinds of low light conditions.

RATEL 2 /BABY High-performance camera designed for FPV drones. Equipped with a Starlight image sensor and an ultra-wide field of view (FOV 165°), and supporting Wide Dynamic Range (WDR) imaging technology, it delivers clear, detailed images even in low light and complex lighting conditions.

- Aluminum Shell
- 1/1.8 Inch Image Sensor
- Screen Ratio 16:9 /4:3
- WDR

Model	RATEL PRO	RATEL 2	BABY RATEL 2
Image Sensor	1/1.8" Inch Sensor	1/1.8" Inch Starlight Sensor	1/1.8" Inch Starlight Sensor
Horizontal Resolution	1500 TVL	1200 TVL	1200 TVL
TV System	NTSC & PAL (Changeable)	NTSC & PAL (Changeable)	NTSC & PAL (Changeable)
IMAGE	16:9 & 4:3 (Changeable)	16:9 & 4:3 (Changeable)	16:9 & 4:3 (Changeable)
WDR	Super WDR	Super WDR	Super WDR
Min. Illumination	0.00001 Lux	0.0001 Lux	0.0001 Lux
Lens	5Mega/FOV125°	2.1mm/FOV165°	1.8mm/FOV165°
Electronic Shutter	PAL: 1/50~100,000; NTSC: 1/60~100,000	PAL: 1/50~100,000; NTSC: 1/60~100,000	PAL: 1/50~100,000; NTSC: 1/60~100,000
Video Output	CVBS	CVBS	CVBS
OSD Manual	Support	Support	Support
DNR	3-DNR	3-DNR	3-DNR
Day/Night	Auto/Color/B&W/EXT	Auto/Color/B&W/EXT	Auto/Color/B&W/EXT
Dimensions	19*19mm	19*19mm	14*14mm
Wide Power Input	DC 4.5~27V	DC 4.5~27V	DC 4.5~27V
Weight	9.5g	9.5g	3.4g



ANT /LITE
Lightweight Camera

The ANT camera is a high-performance camera with a 1/3 inch CMOS image sensor and an ultra-wide field of view (FOV) of 165°, making it ideal for FPV racing and Freestyle flying. With a 1/3 inch CMOS image sensor and an ultra-wide field of view (FOV) of 165°, the clear, detailed image quality and wide field of view are ideal for FPV racing and Freestyle flying.

- 1/3 Inch CMOS Image Sensor
- FOV165°
- WDR
- Lightweight

Model	ANT	ANT LITE
Image Sensor	1/3" Inch CMOS Sensor	1/3" Inch CMOS Sensor
Horizontal Resolution	1200 TVL	1200 TVL
TV System	NTSC & PAL (Changeable)	NTSC & PAL (Changeable)
IMAGE	16:9 & 4:3 (Changeable)	16:9 & 4:3 (Changeable)
WDR	Global WDR	Global WDR
Min. Illumination	0.001 Lux	0.001 Lux
Lens	F1.2/1.8mm	F2.5/1.8mm
FOV	165°	165°
Electronic Shutter	PAL: 1/50-100,000; NTSC: 1/60-100,000	PAL: 1/50-100,000; NTSC: 1/60-100,000
Video Output	CVBS	CVBS
OSD Manual	Support	Support
DNR	3-DNR	3-DNR
Dimensions	14*14mm	14*14mm
Wide Power Input	DC 5-25V	DC 5-25V
Weight	2g	1.7g



SABLE

- 1/3 Inch CMOS Image Sensor
- Versatile FOV130° /165°
Screen ratio 4:3 /16:9
- WDR
- Lightweight

Model	SABLE
Image Sensor	1/3" Inch Starlight Sensor
Horizontal Resolution	1200 TVL
TV System	NTSC & PAL (Changeable)
IMAGE	16:9 & 4:3 (Changeable)
WDR	Super WDR
Min. Illumination	0.001 Lux
Lens	2.1mm
FOV	130°(4:3) /165°(16:9)

Electronic Shutter	PAL: 1/50-100,000; NTSC: 1/60-100,000
Video Output	CVBS
OSD Manual	Support
DNR	3-DNR
Day/Night	Auto/Color/B&W/EXT
Dimensions	19*19*20mm
Wide Power Input	DC 5-27V
Weight	6.3g



H1

- 1/3 Inch CMOS Image Sensor
- WDR
- FOV165°
- Lightweight

Model	H1
Image Sensor	1/3" Inch CMOS Sensor
Horizontal Resolution	1200 TVL
TV System	NTSC & PAL (Changeable)
IMAGE	16:9 /4:3
WDR	Global WDR
Min. Illumination	0.001 Lux
Lens	2.1mm/F2.4
FOV	165°

Electronic Shutter	PAL: 1/50-100,000; NTSC: 1/60-100,000
Video Output	CVBS
OSD Manual	Support
DNR	3-DNR
Day/Night	Auto/Color/B&W/EXT
Dimensions	19*19mm
Wide Power Input	DC 5-27V
Weight	6.2g

Other Parts

We offer a wide range of well-designed FPV drone accessories, including precision gimbals, advanced flight control systems, and efficient motors and other key components. These high-quality accessories not only satisfy FPV drone enthusiasts' pursuit of high-performance equipment, but also allow them to freely assemble and customize their own drones according to different usage scenarios and personalized needs. Whether it's racing, aerial photography or exploring the unknown, our accessories ensure that FPV drones show excellent performance.



GM 1/ 2/ 3 Head Tracking Enhanced FPV Experience

The GM Head Series is a camera stabilization system for drones that provides a HD stabilized video shooting experience. It reduces in-flight jitter and vibration by stabilizing the camera's attitude, enabling the flyer to get smooth real-time video transmission and precise flight control. Each model of GM head series has its own characteristics in performance and function.

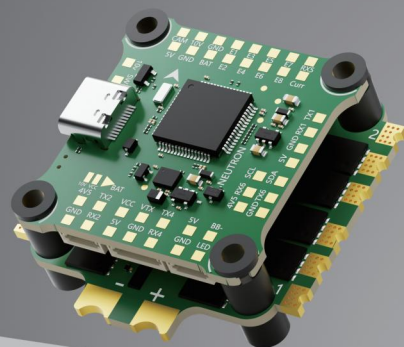
Application Scenario: FPV drone, fixed wing, RC car, aerial photography, etc.

⚡ Head tracking function

⚡ Quick Assembly

⚡ High Compatibility

Model	GM1	GM2	GM3
Camera Compatibility	19mm FPV Camera	19mm FPV Camera	19mm FPV Camera
Image Stabilization	±0.005°	±0.005°	±0.005°
Max Controllable Speed	±1500°/s	±1500°/s	±1500°/s
Max Controlled Rotational Range	Pitch:±120°	Pitch:±120° Roll:±60°	Pitch:±120° Roll:±60° Yaw:±160°
Control Mode	PWM/UART	PWM/UART	PWM/UART
Head Tracking Control	Support	Support	Support
Voltage	7~26V	7~26V	7~26V
Static Power Dissipation	1.0W	1.2W	1.5W
Size	33.8*38*20.5mm	46.7*41.2*26.5mm	46.8*46.4*53.4mm
Weight	17g	30g	46g



NEURON 55 /70A F4

Four-in-one FPV Drone Flying Tower

The Neuron F4 fly tower integrates several functional modules such as FC, ESC, PDB, etc. It is widely used in various FPV flight activities such as racing, free flight, aerial photography and so on.

Model	NEURON 55AF4	NEURON 70AF4
Processor	STM32F405	STM32F405
Tourbillon	ICM42688	ICM42688
BEC	5V/3A ; 10V/2.5A	5V/3A ; 10V/2.5A
Memory	16MB	16MB
Firmware	CADX-CADDXF4	CADX-CADDXF4
Tuning Software	Betaflight10.10.0	Betaflight10.10.0
Driver Signal Support	PWM, Oneshot125, Oneshot42, Multishot, Dshot150, Dshot300, Dshot600	PWM, Oneshot125, Oneshot42, Multishot, Dshot150, Dshot300, Dshot600
Uart Serial Ports	5	5
LED Display Light	4	4
Protocols	BLHeliSuite16	BLHeliSuite16
Continuous Current	55A	70A
Maximum Current	60A (Maximum10s)	80A (Maximum10s)
Input Voltage	2S-6S	2S-6S
Current Ratio	160	160
Fixed Hole	20/30.5mm Φ 4mm	20/30.5mm Φ 4mm
Weight	24g	24g



SILENCE7 /8 /10

7 /8 /10 inch FPV Drone Brushless Motor

The SILENCE7, SILENCE8 and SILENCE10 motors offer drone enthusiasts a choice of applications from entry-level to professional with their light weight, moderate power and weight, and maximum power and efficiency, respectively. All models are compatible with 4-6S Lipo batteries and feature standardized output diameters for easy installation and maintenance, while internal resistance is optimized to ensure efficient operation.

Model	SILENCE7	SILENCE8	SILENCE10
KV	2807 1300KV	2812 900KV	3115 900KV
Number of Slot Poles	12N14P	12N14P	12N14P
Stator Diameter	28mm	28mm	31mm
Stator Height	7mm	12mm	15mm
Output Shaft Diameter	Φ 5.0/M5.0	Φ 5.0/M5.0	Φ 5.0/M5.0
Motor Dimension	Φ 33.8*36mm	Φ 33.8*41mm	Φ 36.8*44.5mm
Idle Current	1.42@10V	1.5@10V	1.6@10V
No.of Cells	4~6S	4~6S	4~6S
Max Continuous Power	1100W	1200W	1700W
Internal Resistance	68.5m Ω	68.5m Ω	47.5m Ω
Max Current	55.5A	50A	70A
Max.Efficiency Current	2~6A	2~6A	3~8A
Weight	56g	78g	106g