

# XTRAFLY

— FPV SYSTEM —

Email1:sales@xtrafly.co  
Email2:donald.tang@xtrafly.co  
Website:www.xtrafly.co  
Whatsapp:+853 6355 6723

YOUTUBE



WEBSITE



# XTRAFLY

— FPV SYSTEM —

**PRODUCT BROCHURE**

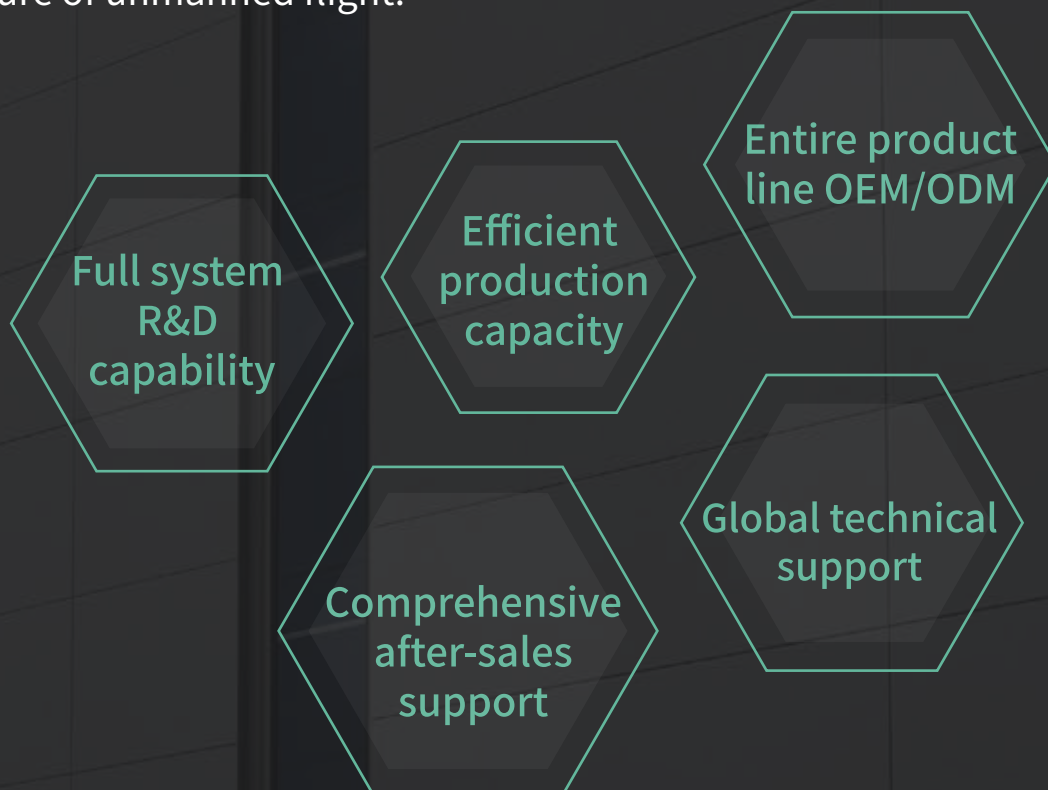
# COMPANY INTRODUCTION

**Founded** in 2020, XTRAFly is a technology-driven company specializing in the development of high-performance fiber optic systems and tactical UAVs. We deliver innovative, reliable, and efficient drone solutions to meet the growing demands of global clients across defense, industry, and media.

Our core offerings include fiber optic transmission systems, tactical and industrial drones, and compact FPV drones for cinematic use. We also design and produce key UAV components such as flight controllers, ESCs, motors, and AI tracking modules. From R&D to OEM/ODM services, we provide end-to-end support for both enterprise and consumer markets.

With a skilled R&D team and advanced manufacturing capabilities, we focus on precision, system integration, and continuous improvement. All products meet international quality standards and are engineered for stability, performance, and durability in real-world missions.

At XTRAFly, we value “innovation, quality, and service” . Our vision is to empower our partners with smarter, mission-ready UAV systems, backed by professional support and long-term commitment. Together, we aim to shape the future of unmanned flight.



# CONTENTS

<b>FIBER OPTIC DRONE SYSTEM</b> .....	<b>01</b>
FIBER OPTIC TRANSMISSION SYSTEM	
TACTICAL DRONE	
<b>TACTICAL DRONE</b> .....	<b>06</b>
FOLDABLE DRONE	
INDUSTRIAL DRONE	
<b>CINEWHOOP DRONE</b> .....	<b>20</b>
XF20 XF25	
XF30 XF35	
<b>ELECTRONIC CONTROL SERIES</b> .....	<b>22</b>
FLIGHT CNTROLLER	
ESC&PDB	
AI TRACKING MODULE	
<b>VTX SERIES</b> .....	<b>29</b>
ANALOG VTX	
VRX	
CAMERA	
<b>MOTOR SERIES</b> .....	<b>35</b>
SE MOTOR	
FREESTYLE &RACING MOTOR	
MICRO&CINE MOTOR	
<b>ANTENNA&amp;RECEIVER SERIES</b> .....	<b>38</b>
ANTENNA	
RECEIVER	



# **FIBER OPTIC DRONE SYSTEM**

## **FIBER OPTIC TRANSMISSION SYSTEM**

### **TACTICAL DRONE**

# FIBER OPTIC DRONE SYSTEM



**The** Fiber Optic Drone System by XTRAFly integrates a fiber optic transmission module with a tactical UAV platform, purpose-built for defense, special operations, and high-risk missions. Featuring dual-channel redundancy, the system automatically switches to wired fiber mode under electronic interference, ensuring nearly unbreakable communication. Paired with XTRAFly's versatile tactical drone lineup, it delivers robust, mission-critical performance even under extreme operational conditions.

## APPLICATION SCENARIOS



Electronic Warfare Environments



Tactical Reconnaissance Missions



Precision Strike Support



High-Security Surveillance

## FEATURE



Modular Design



Precision Navigation



Flexible Operations



High Anti-Interference



8kg Payload



High Speed



Rugged Construction



Secure LR Video Link

## FIBER OPTIC TRANSMISSION SYSTEM



**The Fiber Optic Transmission System** enables secure, real-time video feeds in high-interference environments, with transmission ranges from 3 to 30km—ideal for both close- and long-range operations. It consists of three main components: the fiber reel, air unit, and ground unit.



**The fiber reel** is lightweight and compact, built with high-tensile, durable optical fiber for minimal signal loss and maximum resilience.



XTRAFLY's fiber deployment system features advanced **inner-reel feed technology**, ensuring **smooth, tangle-free** transmission directly from the spool core. This design minimizes mechanical stress and prevents snags during flight, delivering superior **safety** and **stability** for aerial operations—even in complex terrains.



**The ground unit** supports plug-and-play use and can be directly connected to standard RC controllers for fast deployment.

## CONFIGURATION

### Fiber Optic Roll 20km

Fiber Diameter:	0.28mm
Product Name:	Fiber Optic Discharge Box
Sheath Material:	Resinous
Fiber Optic Cable Outer Diameter:	0.28mm ± 0.01
Length:	20km
Optical Type:	G657A2
Unit Weight:	80g/km
Working Temperature:	(-40~85) °C
Tight Packet Color:	Invisible Transparent
Optical Interface:	FC

### Air Unit

Product Name:	Air Unit
Power Supply:	5.5V~26V
Body Size:	63*37*23mm
Body Weight:	31±2g
Bus Signal:	CRSF
Video Signal:	Analog



### Ground Unit

Product Name:	Ground Unit
Power Supply Mode:	5.5V~26V
Body Size:	65*49*45mm
Body Weight:	56.4g
Fiber Optic Interface:	FC
Video Output Port:	RCA_8.4
RC Protocol:	CRSF



## TACTICAL DRONE SYSTEM:



**Tactical Drone System** is a high-performance unmanned aerial vehicle (UAV) designed for military or specialized operations. It is equipped with advanced sensors and technologies for surveillance, reconnaissance, target acquisition, and real-time data transmission, offering tactical advantages in challenging environments and combat scenarios.

### CONFIGURATION

#### XTRAFLY 15inch SE Version

Frame set:	XTRAFLY 15inch SE version
Weight:	2.85kg
Control distance:	20km
Recommended payload:	8kg
Max speed:	130km/h
Max rise speed:	15m/s
Max flight altitude:	6000m
Working temperature:	-20 °C to 45 °C
Max wind resistance:	15m/s



### OPTIONAL MODULES



Thermal Camera



AI Tracking Module



Special Frequency RX



Dual Frequency VTX

2  
XTRAFLY  
FPV SYSTEM

# TACTICAL DRONE

FOLDABLE DRONE

INDUSTRIAL DRONE

# FULCRUM FOLDABLE DRONE

**This** series of drones have an exquisite folding design, which greatly improves their portability and makes them a great choice for backpacking with multiple drones. To match different application scenarios, this series of drones is available in 3 sizes: 7inch, 8inch and 10inch.



Fulcrum 7inch Foldable Drone

## ◀ Fulcrum 7inch Foldable Drone

Frame: 7inch foldable frame  
FC: F405 ICM42688P  
ESC: 60A (burst 70A)  
VTX: 2.5W  
Motor: 2807-1300KV  
Receiver: ELRS 915MHz  
MAX Speed: 170km/h  
Payload: 1.5kg  
Flight time: 30min (without payload)  
11min (with payload)  
Working Temperature: -20°C~45°C (4°F~113°F)

## ◀ Fulcrum 8inch Foldable Drone

Frame: 8inch foldable frame  
FC: F405 ICM42688P  
ESC: 60A (burst 70A)  
VTX: 2.5W  
Motor: 2812-900KV  
Receiver: ELRS 915MHz  
MAX Speed: 160km/h  
Payload: 2kg  
Flight time: 35min (without payload)  
11min (with payload)  
Working Temperature: -20°C~45°C (4°F~113°F)



Fulcrum 8inch Foldable Drone

## ◀ Fulcrum 10inch Foldable Drone

Frame: 10inch foldable frame  
FC: F405 ICM42688P  
ESC: 60A (burst 70A)  
VTX: 3W  
Motor: 3115-900KV  
Receiver: ELRS 915MHz  
MAX Speed: 150km/h  
Payload: 3kg  
Flight time: 40min (without payload)  
12min (with payload)  
Working Temperature: -20°C~45°C (4°F~113°F)



Fulcrum 10inch Foldable Drone

# FULCRUM INDUSTRIAL DRONE

The industry level drone series has strong flight performance and ability to perform multiple tasks. Multiple types of modular pods provide comprehensive support for different task types. Whether it is for wildlife protection, environmental monitoring, industrial facility inspections, or police purposes, this type of aircraft is capable of handling.

## FULCRUM 13SE



Fulcrum 13SE Industrial Drone

**Fulcrum** 13-inch SE is a FPV platform developed for long distance and medium load. It uses T300 carbon fiber laminate as the frame, and is equipped with XTRAFLY's reliable universal FC and ESC system, making this model highly cost-effective.

## FEATURE



Modual Design



Precision Navigation



Flexible Operations



6KG Payload



High Speed



Durable Build

## PARAMETER

### Hardware List:

Frame set:	XTRAFLY 13 inch SE version
Flight control:	XTRAFLY STM32F405 ICM42688P FC
ESC:	XTRAFLY AM32 4-8S continuous 90A(burst 110A) 4IN1 ESC
Motor:	4214 660KV
Camera:	Ratel 2 night vision 1500TVL
VTX:	XTRAFLY 3.3-3.5Ghz 2.5W
Receiver:	ELRS 915Mhz Diversity
Antenna:	3.3Ghz RHCP SMA 150mm
Propeller:	1309-3 blades

### Electrical Data:

Max Input Voltage:	33.6V (8S)
Minimum Input Voltage:	16.8V(6S)
Suggested Input Voltage:	25.2V(6S)
Max Current(single motor):	79A
Max Power(single motor):	1990W

### Specifications:

FC firmware:	Betaflight 4.4.3	Recommended payload:	5kg
Top plate thickness:	3mm	Max payload:	6kg
Mid plate thickness:	3mm	Max speed:	150km/h
Bottom plate thickness:	3mm	Max rise speed:	15m/s
Arm material:	T300 carbon fiber	Max descend speed:	15m/s
Arm thickness:	8mm	Max flight altitude:	6000m
Wheelbase:	430mm	Working temperature:	-20°C to 45°C
Weight:	1960g	Max wind resistance:	15m/s
TX frequency:	915Mhz	Recommended battery:	8S 32000mah 10C
VTX frequency:	3.3Ghz		
Control distance:	30km		



## FULCRUM 13PRO



Fulcrum 13PRO Industrial Drone

**The** Fulcrum 13-inch Pro is a high-reliability drone platform developed for long-distance and medium loads. The ultra-high-strength carbon fiber square tubes are used as the arm component, making the entire fuselage have extremely high strength and pressure resistance. At the same time, high-performance electronic components are used in combination, giving it the possibility to perform complex tasks.

## FEATURE



Modular Design



Precision Navigation



Flexible Operations



6KG Payload



High Speed



Durable Build

## OPTION LIST

### Thermal Camera

- 256\*192 Thermal Camera
- 640\*512 Thermal Camera

### Optic Fiber System

- 5/10km Optic Fiber System
- 15/20km Optic Fiber System
- 25/30km Optic Fiber System

### RX&VTX

- Special Frequency RX
- Dual Frequency VTX

## PARAMETER

### Standard Combo Specifications:

Frame set:	XTRAFLY 13inch Pro square carbon arm version
Flight control:	XTRAFLY F722 ICM42688P FC
ESC:	XTRAFLY AM32 4-8S continuous 90A(burst 110A) 4IN1 ESC
Motor:	4214 660KV(6S)
Camera:	Ratel 2 night vision 1500TVL
VTX:	XTRAFLY 4.9-6.2Ghz 3W
Receiver:	ELRS 915Mhz Diversity
Antenna:	4.9-6.2Ghz RHCP SMA 150mm
Propeller:	1310-3 blades

### Electrical Data:

Max Input Voltage:	33.6V(8S Lipo)
Minimum Input Voltage:	18V(6S Lipo)
Suggested Input Voltage:	25.2V(6S Lipo)
Max current(single motor):	79A
Max Power(single motor):	1990W

### FC Specifications:

MCU:	STM32F722 32-bit processor, 216Mhz	I2C:	1x (for compass)
IMU:	ICM42688-P(SPI)	Input Voltage:	3~8S Lipo
Barometer:	BMP280	Onboard BEC:	12V/2A, 5V/3A
Analog OSD:	AT7456E	Connector:	Type-C
Blackbox:	Onboard 128MB	Mounting Holes:	30.5mm standard
PWM(dshot) output:	8 channels		
UART:	5x		

### Machanical Data:

Dimension:	490*490*120mm
Weight:	1.75kg
Operating Temp:	-20~45°C
Flight Time(no payload):	39 mins
Flight Time(5kg payload):	13 mins
Maximum flight distance(no payload):	35km
Maximum flight distance(5kg payload):	12km
Control distance:	30km(open space)
Maximum Speed:	160km/h



## FULCRUM 15SE



Fulcrum 15SE Industrial Drone

**Fulcrum** 15-inch SE is a FPV platform developed for long distance and heavy load. It uses T300 carbon fiber laminate as the frame, and is equipped with XTRAFLY's reliable universal FC and ESC system, making this model highly cost-effective.

## FEATURE



Modular Design



Precision Navigation



Flexible Operations



9KG Payload



High Speed



Durable Build

## OPTION LIST

### Thermal Camera

- 256\*192 Thermal Camera
- 640\*512 Thermal Camera

### Optic Fiber System

- 5/10km Optic Fiber System
- 15/20km Optic Fiber System
- 25/30km Optic Fiber System

### RX&VTX

- Special Frequency RX
- Dual Frequency VTX

## PARAMETER

### Hardware List:

Frame set:	XTRAFLY 15 inch SE version
Flight control:	XTRAFLY STM32F405 ICM42688P FC
ESC:	XTRAFLY BLS 4-8S continuous 120A(burst 150A) 4IN1 ESC
Motor:	4720 480KV
Camera:	Ratel 2 night vision 1500TVL
VTX:	XTRAFLY 3.3-3.5Ghz 2.5W
Receiver:	ELRS 915Mhz Diversity
Antenna:	3.3Ghz RHCP SMA 150mm
Propeller:	1507-3 blades

### Electrical Data:

Max Input Voltage:	33.6V
Minimum Input Voltage:	18V
Suggested Input Voltage:	33.6V
Max current(single motor):	90A
Max Power(single motor):	3020W
Max Thrust(single motor)	8050g

### Specifications:

FC firmware:	Betaflight 4.4.3	Recommended payload:	8kg
Top plate thickness:	3mm	Max payload:	10kg
Mid plate thickness:	4mm	Max speed:	130km/h
Bottom plate thickness:	4mm	Max rise speed:	15m/s
Arm material:	T300 carbon fiber	Max descend speed:	15m/s
Arm thickness:	9mm	Max flight altitude:	6000m
Wheelbase:	650mm	Working temperature:	-20°C to 45°C
Weight:	2850g	Max wind resistance:	15m/s
TX frequency:	915Mhz	Recommended battery:	8S 32000mah 10C
VTX frequency:	3.3Ghz		
Control distance:	30km		

## FULCRUM 15PRO



Fulcrum 15PRO Industrial Drone

**The** Fulcrum 15 Pro is a high-reliability drone developed for heavy-load missions. The high-strength fuselage structure can effectively reduce unnecessary shaking and resonance during flight. The high-thrust motors, combined with the latest 100A four-in-one ESC, which can provide powerful power output.

## FEATURE



Modual Design



Precision Navigation



Flexible Operations



9KG Payload



High Speed



Durable Build

## OPTION LIST

### Thermal Camera

- 256\*192 Thermal Camera
- 640\*512 Thermal Camera

### Optic Fiber System

- 5/10km Optic Fiber System
- 15/20km Optic Fiber System
- 25/30km Optic Fiber System

### RX&VTX

- Special Frequency RX
- Dual Frequency VTX

## PARAMETER

### Standard Combo Specifications:

Frame set:	XTRAFLY 15inch Pro square carbon arm version
Flight control:	XTRAFLY F722 ICM42688P FC
ESC:	XTRAFLY BLS 100A(burst 120A) 4IN1 ESC
Motor:	4720 480KV(8S)
Camera:	Ratel 2 night vision 1500TVL
VTX:	XTRAFLY 4.9-6.2Ghz 3W
Receiver:	ELRS 915Mhz Diversity
Antenna:	4.9-6.2Ghz RHCP SMA 150mm
Propeller:	1507-3 blades

### Electrical Data:

Max Input Voltage:	33.6V(8S Lipo)
Minimum Input Voltage:	18V(6S Lipo)
Suggested Input Voltage:	33.6V(8S Lipo)
Max current(single motor):	90A
Max Power(single motor):	3020W

### FC Specifications:

MCU:	STM32F722 32-bit processor, 216Mhz	I2C:	1x (for compass)
IMU:	ICM42688-P(SPI)	Input Voltage:	3~8S Lipo
Barometer:	BMP280	Onboard BEC:	12V/2A, 5V/3A
Analog OSD:	AT7456E	Connector:	Type-C
Blackbox:	Onboard 128MB	Mounting Holes:	30.5mm standard
PWM(dshot) output:	8 channels		
UART:	5x		

### Machanical Data:

Dimension:	520*520*120mm
Weight:	2.55kg
Operating Temp:	-20~45°C
Flight Time(no payload):	50 mins
Flight Time(7kg payload):	25 mins
Maximum flight distance(no payload):	45km
Maximum flight distance(5kg payload):	20km
Control distance:	30km(open space)
Maximum Speed:	140km/h

## FULCRUM 17PRO



Fulcrum 17PRO Industrial Drone

**The** Fulcrum 17 Pro is a high-reliability drone developed for heavy-load missions. The high-strength fuselage structure can effectively reduce unnecessary shaking and resonance during flight. The high-thrust motors, combined with the latest 100A four-in-one ESC, which can provide powerful power output.

## FEATURE



Modular Design



Precision Navigation



Flexible Operations



12KG Payload



High Speed



Durable Build

## OPTION LIST

### Thermal Camera

- 256\*192 Thermal Camera
- 640\*512 Thermal Camera

### Optic Fiber System

- 5/10km Optic Fiber System
- 15/20km Optic Fiber System
- 25/30km Optic Fiber System

### RX&VTX

- Special Frequency RX
- Dual Frequency VTX

## PARAMETER

### Standard Combo Specifications:

Frame set:	XTRAFLY 17inch Pro square carbon tube version	Max Input Voltage:	54V(12S LiHV)
Flight control:	XTRAFLY H743 ICM42688P FC	Minimum Input Voltage:	28.8V(8S Lipo)
ESC:	XTRAFLY 12S 100A SINGLE ESC	Suggested Input Voltage:	54V(12S LiHV)
Motor:	5330 280KV(8S)	Max current(single motor):	90A
Camera:	Ratel 2 night vision 1500TVL	Max Power(single motor):	3020W
VTX:	XTRAFLY 4.9-5.8Ghz 3W		
Receiver:	ELRS 915Mhz Diversity		
Antenna:	4.9-6.2Ghz RHCP SMA 150mm		
Propeller:	HQ17		

### Electrical Data:

### FC Specifications:

MCU:	STM32H743VIH6,480MHz	I2C:	2x (for compass)
IMU:	ICM42688-P(SPI)	Input Voltage:	2~8S
Barometer:	Infineon DPS310 (I2C2)	Detected Voltage	4-12S, 12-60V
Analog OSD:	AT7456E	Onboard BEC:	5V/2A, 12V/2A
Blackbox:	MicroSD card socket (SDIO)	Connector:	Type-C
PWM(dshot) output:	12 channels	Mounting Holes:	30.5mm standard
UART:	7x		

### Machanical Data:

Dimension:	600*600*120mm
Weight:	4.60kg
Operating Temp:	-20~45℃
Flight Time(no payload):	50 mins
Flight Time(full payload):	17 mins
Maximum flight distance(no payload):	42km
Maximum flight distance(12kg payload):	15km
Control distance:	30km(open space)
Maximum Speed:	130km/h

## FULCRUM 10INCH HEX DRONE



Fulcrum 10inch Hex Drone

**10INCH** HEX DRONE is designed for versatility and stability across complex environments. Its modular configurations support various missions, including industrial transport, emergency rescue, and material delivery. With high payload capacity, long endurance, precise flight control, and advanced real-time data transmission, XTRAFLY offers a reliable, flexible, and powerful solution for industrial applications.

### FEATURE



Modual Design



Precision Navigation



Flexible Operations



6KG Payload



High Speed



Durable Build

### OPTION LIST

#### Thermal Camera

- 256\*192 Thermal Camera
- 640\*512 Thermal Camera

#### Optic Fiber System

- 5/10km Optic Fiber System
- 15/20km Optic Fiber System
- 25/30km Optic Fiber System

#### RX&VTX

- Special Frequency RX
- Dual Frequency VTX



## PARAMETER

### Hardware List:

Frame set:	XTRAFLY 10 inch hexacopter frame
Flight control:	XTRAFLY STM32F405 ICM42688P FC
ESC:	XTRAFLY BLS 3-6S continous 65A(burst 75A) 6IN1 ESC
Motor:	3115 900KV
Camera:	Ratel 2 night vision 1500TVL
VTX:	XTRAFLY 3.3-3.5Ghz 2.5W
Recveiver:	ELRS 915Mhz Diversity
Antenna:	3.3Ghz RHCP SMA 150mm
Propeller:	1050-3 blades

### Electrical Data:

Max Input Voltage:	25.2V(6S)
Minimum Input Voltage:	14V(4S)
Suggested Input Voltage:	25.2V(6S)
Max current(single motor):	60A
Max Power(single motor):	1500W
Max Thrust(single motor):	4200g

### Specifications:

FC firmware:	Betaflight/INAV	Max rise speed:	20m/s
Top plate thickness:	2mm	Max decend speed:	20m/s
Bottom plate thickness:	2mm	Max flight altitude:	7000m
Arm material:	T300 carbon fiber	Working temperature:	-20°C to 45°C
Arm diameter:	25mm	Max wind resistance:	15m/s
Wheelbase:	650mm	Recommended battery:	6S 20000mah 10C
Weight:	1850g	TX frequency:	915Mhz
Recommended payload:	5kg	VTX frequency:	3.3Ghz
Max payload:	6kg	Control distance:	30km
Max speed:	160km/h		



# CINEWHOOP DRONE

XF20、XF25  
XF30、XF35



## XF CINEWHOOP



XF20 Pro



XF25 Pro



XF30 Pro



XF35 Pro

### ◀ Xtrafly XF20 Pro Cinewhoop

Frame: XTRAFly XF20 Pro 2inch frame  
FC/ESC: XTRAFly F722 40A AIO  
VTX: 1W Analog VTX / DJI O3 Air Unit  
Motor: Spinnybois 1205-5500KV  
Prop: GEMFAN D51-4  
Camera: Runcam Nano2 / DJI O3 camera  
Antenna: Rush cherry / DJI O3 antenna  
Receiver: PNP / ELRS 2.4G / ELRS 915MHz / TBS  
Recommended Battery: 4S 650mAh~850mAh

### ◀ Xtrafly XF25 Pro Cinewhoop

Frame: XTRAFly XF25 Pro 2.5inch frame  
FC/ESC: XTRAFly F722 40A AIO  
VTX: 1.3W Analog VTX / Vista / DJI O3 Air Unit  
Motor: Spinnybois 1405-3200KV / 4800KV  
Prop: HQProp DT63-3  
Camera: Ratel2 / WASP / DJI O3 camera  
Antenna: Rush cherry / DJI O3 antenna  
Receiver: PNP / ELRS 2.4G / ELRS 915MHz / TBS  
Recommended Battery: 4S 650mAh~1150mAh /  
6S 650mah~850mah

### ◀ Xtrafly XF30 Pro Cinewhoop

Frame: XTRAFly XF30 Pro 3inch frame  
FC/ESC: XTRAFly F722 40A AIO  
VTX: 1.3W Analog VTX / Vista / DJI O3 Air Unit  
Motor: Spinnybois 2004-2650KV  
Prop: HQProp DT76-4  
Camera: Ratel2 / WASP / DJI O3 camera  
Antenna: Rush cherry / DJI O3 Chip antenna  
Receiver: PNP / ELRS 2.4G / ELRS 915MHz / TBS  
Recommended Battery: 6S 850mAh~1100mAh

### ◀ Xtrafly XF35 Pro Cinewhoop

Frame: XTRAFly XF35 Pro 3.5inch frame  
FC/ESC: XTRAFly F722 40A AIO  
VTX: 1.3W Analog VTX / Vista / DJI O3 Air Unit  
Motor: Spinnybois 2006-2150KV  
Prop: Gemfan D90S-3  
Camera: Ratel2 / WASP / DJI O3 camera  
Antenna: Rush cherry / DJI O3 Chip antenna  
Receiver: PNP / ELRS 2.4G / ELRS 915MHz / TBS  
Recommended Battery: 6S 850mAh~1350mAh



# **ELECTRONIC CONTROL SERIES**

**FLIGHT CNTROLLER**

**ESC&PDB**

**AI TRACKING MODULE**



# FC STACK

**Flight** control systems are the brain and heart of drones. With advanced R&D and testing capabilities, the hardware team of XTRAFLY is committed to providing diverse and highly reliable control and power systems for unmanned systems.

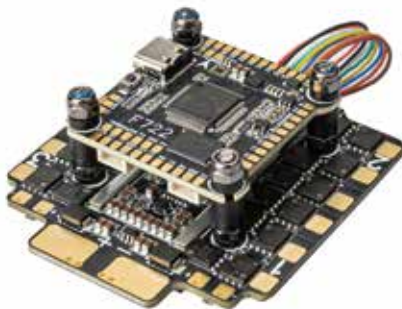
## ◀ F405 BLS 60A STACK



FC Parameter  
 MCU:STM32F405  
 GYRO:ICM42688P  
 OSD:AT7456E  
 Barometer:SPL06  
 Blackbox:16M Memory  
 Uarts:5 Set  
 ESC Signal:8 Set  
 BEC 5V:2.2A  
 BEC 12V:2.2A  
 TVS Protection:Yes  
 Input:3~8S  
 Firmware:Betaflight/INAV  
 Mounting:30.5\*30.5mm/M3  
 Size:37\*37mm

ESC Parameter  
 Current meter:Yes  
 Continuous Current:60A  
 Peak Current:70A  
 Input:3~6S  
 Firmware:BLHeLi\_S/Bluejay  
 Protocol:PWM/Oneshot/DSHOT 150/  
 300/600/MultiShot  
 Mounting:30.5\*30.5mm/M3  
 Size:43\*43.8mm  
**Suitable models:7~10inch**

## ◀ F722 BLS 90A STACK



FC Parameter  
 MCU:STM32F722  
 GYRO:ICM42688P  
 OSD:AT7456E  
 Barometer:SPL06  
 Blackbox:128M Memory  
 Uarts:5 Set  
 ESC Signal:8 Set  
 BEC 5V:2.2A  
 BEC 12V:2.2A  
 TVS Protection:Yes  
 Input:3~8S  
 Firmware:Betaflight/INAV  
 Mounting:30.5\*30.5mm/M3  
 Size:37\*37mm

ESC Parameter  
 Current meter:Yes  
 Continuous Current:80A  
 Peak Current:100A  
 Input:3~8S  
 Firmware:BLHeLi\_S/Bluejay  
 Protocol:PWM/Oneshot/DSHOT 150/  
 300/600/MultiShot  
 Mounting:30.5\*30.5mm/M3  
 Size:63\*57mm  
**Suitable models:13~15inch**

## ◀ H743 BLS 100A STACK



### FC Parameter

MCU: STM32H743VIH6

GYRO:ICM42688P

OSD:AT7456E

Barometer:Infineon DPS310

Blackbox:MicroSD card socket(SDIO)

Uarts:7 set

ESC Signal:8 set

BEC 5V:3A

BEC 12V:3A

TVS Protection:Yes

Input:3~8S

Firmware:MATEKH743

Mounting:30.5\*30.5mm

Size:37\*38mm



### ESC Parameter

Product Name:BLS 100A 12S SINGLE ESC

Firmware:Bluejay/JH-30

Input Voltage: 4-12S

Constant current: 60-100A

Burst current: 120A

Peak power: 5000W

Supports:dshot300/dshot600

PCB board:6layer/2oz

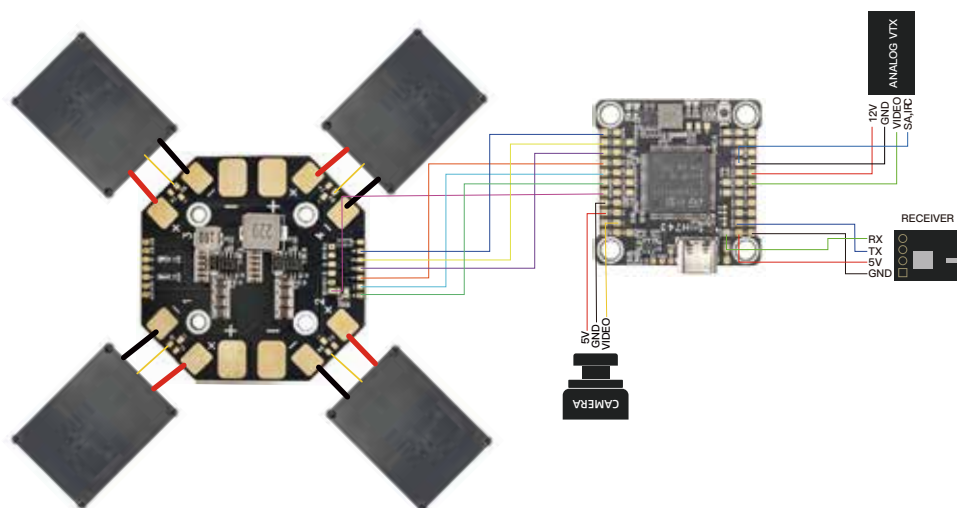
Size: 48.3\*66.6

Supports:DSHOT DSHOT150/300/600/

MultiShot/ OneShot etc.

**Suitable models:17inch**

## ◀ WIRING DIAGRAM



# FLIGHT CONTROLLER



## ◀ F405 Flight Control

MCU: STM32F405  
 GYRO: ICM42688P  
 OSD: AT7456E  
 Barometer: SPL06  
 Blackbox: 16M Memory  
 Uarts: 5 Set  
 ESC Signal: 8 Set  
 BEC 5V: 2.2A  
 BEC 12V: 2.2A  
 TVS Protection: Yes  
 Input: 3~8S  
 Firmware: Betaflight  
 Mounting: 30.5\*30.5mm/M3  
 Size: 37\*37mm

**Suitable models: 7~15 inch universal**



## ◀ F722 Flight Control

MCU: STM32F722  
 GYRO: ICM42688P  
 OSD: AT7456E  
 Barometer: SPL06  
 Blackbox: 128M Memory  
 Uarts: 5 Set  
 ESC Signal: 8 Set  
 BEC 5V: 2.2A  
 BEC 12V: 2.2A  
 TVS Protection: Yes  
 Input: 3~8S  
 Firmware: Betaflight  
 Mounting: 30.5\*30.5mm/M3  
 Size: 37\*37mm

**Suitable models: 7~15 inch universal**



## ◀ H743 WING Flight Control

MCU: STM32H743VIH6  
 GYRO: ICM42688P  
 OSD: AT7456E  
 Barometer: Infineon DPS310  
 Blackbox: MicroSD card slot (SDIO)  
 Uarts: 7 set  
 ESC Signal: 8 set  
 BEC 5V: 2A  
 BEC 12V: 2A  
 TVS Protection: Yes  
 Input: 3~8S  
 Firmware: MATEKH743  
 Mounting: 30.5\*30.5mm  
 Size: 54\*36\*13mm

**Suitable models: Fixed wing**



## ◀ H743 SLIM Flight Control

MCU: STM32H743VIH6  
 GYRO: ICM42688P  
 OSD: AT7456E  
 Barometer: Infineon DPS310  
 Blackbox: MicroSD card socket (SDIO)  
 Uarts: 7 set  
 ESC Signal: 8 set  
 BEC 5V: 3A  
 BEC 12V: 3A  
 TVS Protection: Yes  
 Input: 3~8S  
 Firmware: MATEKH743  
 Mounting: 30.5\*30.5mm  
 Size: 37\*38mm

**Suitable models: 7~17 inch universal**



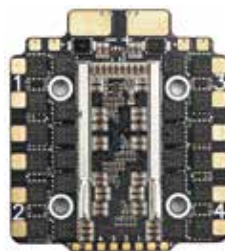
# ESC & AIO

## ◀ BLS 60A 4in1 ESC



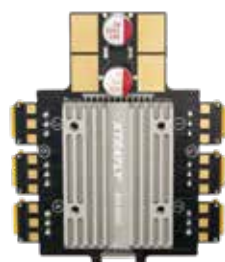
Current meter: Yes  
Continuous Current: 60A  
Peak Current: 70A  
Input: 3~6S  
Firmware: BLHeLi\_S/Bluejay  
Protocol: PWM/Oneshot/DSHOT  
150/300/600/MultiShot  
Mounting: 30.5\*30.5mm/M3  
Size: 43\*48.8mm  
**Suitable models: 7~10 inch**

## ◀ AM32 90A 4in1 ESC



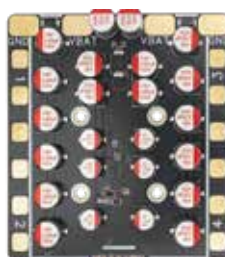
Current meter: Yes  
Telemetry: Yes  
Continuous Current: 80A  
Peak Current: 100A  
Input: 3~8S Lipo  
Firmware: AM32  
Protocol: PWM/DSHOT 300/600  
Mounting: 30.5\*30.5mm/M3  
Size: 63\*57mm  
**Suitable models: 13~15inch**

## ◀ BLS 65A 6in1 ESC



Current meter: Yes  
Continuous Current: 65A  
Peak Current: 75A  
Input: 3~8S  
Firmware: BLHeLi\_S/Bluejay  
Protocol: PWM/Oneshot/DSHOT  
150/300/600/MultiShot  
Mounting: 30.5\*30.5mm/M3  
Size: 74\*92.8mm  
**Suitable models: 10inch, 11-inch six-axis**

## ◀ BLS 100A 4in1 ESC



Current meter: Yes  
Continuous Current: 100A  
Peak Current: 120A  
Input: 3~8S  
Firmware: BLHeLi\_S/Bluejay  
Protocol: PWM/Oneshot/DSHOT  
150/300/600/MultiShot  
Mounting: 30.5\*30.5mm/M3  
Size: 89\*100mm  
**Suitable models: 13~15inch**

## ◀ VESC 12S 100A SINGLE ESC



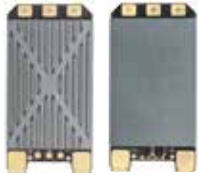
Firmware: VESC\_mk5/HD60  
input Voltage: 4-12S  
Constant current: 60-100A  
Burst current: 150A  
Peak power: 5000W  
Current sensor: INA240  
Telemetry: UART/CAN  
Supports: PPM/Analog(ADC)/UART  
/CAN/USB  
PCB board: 6layer/2oz  
Size: 48.3\*66.6mm  
**Suitable models: unmanned car**

## ◀ 12S 100A SINGLE ESC



Firmware: Bluejay/JH-30  
Input Voltage: 4-12S  
Constant current: 60-100A  
Burst current: 120A  
Peak power: 5000W  
Supports: dshot300/dshot600  
PCB board: 6layer/2oz  
Size: 48.3\*66.6  
Supports: DSHOT DSHOT150/300/600/  
MultiShot/ OneShot etc.  
**Suitable models: 17inch**

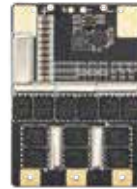
## ◀ AM32 100A SINGLE ESC



Current meter: Yes  
 Continuous Current: 100A  
 Peak Current: 120A  
 Input: 4~8S/4~12S Lipo  
 Firmware: AM32  
 Protocol: PWM/DSHOT 300/600  
 Variable PWM frequency: Yes  
 Mounting: None  
 Size: 32\*45mm

**Suitable models: 13~15inch**

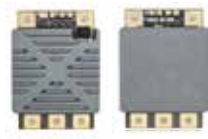
## ◀ BLS 120A SINGLE ESC



Current meter: Yes  
 Continuous Current: 120A  
 Peak Current: 140A  
 Input: 3~8S  
 Firmware: BLHeLi\_S/Bluejay  
 Protocol: PWM/Oneshot/DSHOT  
 150/300/600/MultiShot  
 Mounting: None  
 Size: 28\*58mm

**Suitable models: 13~15inch**

## ◀ AM32 80A SINGLE ESC



Current meter: Yes  
 Telemetry: Yes  
 Continuous Current: 80A  
 Peak Current: 100A  
 Input: 4~8S Lipo  
 Firmware: AM32/HF32  
 Protocol: PWM/DSHOT 300/600  
 Variable PWM frequency: Yes  
 Mounting: None  
 Size: 24\*37mm

**Suitable models: 10~13inch**

## ◀ F722 40A AIO



Firmware: Betaflight  
 MCU: STM32F722  
 GYRO: ICM42688P  
 Uart: 5  
 Barometer: Supported  
 ESC Firmware: Bluejay  
 Input Voltage: 4~6S  
 Continuous Current: 40A  
 Max Current: 50A  
 Weight: 8.8g  
 Size: 36\*36\*4.4mm  
 Mounting: 25.5mm/26.5mm M2

**Suitable models: 2~3.5inch**

## ◀ F405 BLS 65A AIO



Firmware: Betaflight  
 MCU: STM32F405  
 GYRO: ICM42688P  
 Uart: 5 set  
 Barometer: SPL06  
 ESC Firmware: BLHeLi\_S/Bluejay  
 Input Voltage: 3~8S  
 Continuous Current: 60A  
 Max Current: 70A  
 Weight: 50g  
 Size: 100\*78mm  
 Mounting: 30.5\*30.5mm

**Suitable models: 7~10inch**

# AI VISUAL RECOGNITION AND TRACKING MODULE



AI Image Tracking Module

**The** AI Image Tracking Module is a high-precision visual device that supports real-time target recognition and tracking. It is ideal for applications in smart security, autonomous driving, and industrial inspection, delivering fast and stable tracking performance.

## PRODUCT PARAMETER

Weight:	55g
Size:	38*38*40mm
Power Consumption:	Less than or equal to 6W
Operating voltage:	16-30V(4S-6S)
Interface:	CVBS/UART/RJ45/USB/SBUS/CRSF/MIPI

## PRODUCT FEATURES



High Performance Tracking Module



Muti-mode Compatibility



Strong Scalability



Customisation

XTRAFLY  
— FPV SYSTEM —

5

# VTX SERIES

ANALOG VTX

VRX

CAMERA

# ANALOG VTX

The wireless video transmission system can transmit real-time images of drone cameras over long distances with low latency.

## ◀ Xtrafly 4.9~5.8G 2.5W VTX



Frequency: 5.8GHz (4990~5945)  
Band: A/B/E/F/R/L/X  
Power: 2.5W (25mw/800mw/  
1.6W/2.5W)  
Size: 41\*30\*13mm  
Mounting: 20\*20mm/M1.6  
Antenna Interface: MMCX  
DC In: 7~36V  
RF Impedance: 50Ω  
Protocol: TBS SmartAudio  
Video System: NTSC/PAL

## ◀ Xtrafly 4.9~5.8G 3W VTX



Frequency: 4.9~5.8GHz (4990~5945)  
Band: A/B/E/F/R/L/X/V  
Power: 3W (25mw/400mw/  
800mw/1.5W/3W)  
Size: 53.8\*27.8\*13.5mm  
Mounting: 20\*20mm/M2  
Antenna Interface: MMCX  
DC In: 7~28V  
RF Impedance: 50Ω  
Protocol: IRC Tramp  
Video System: NTSC/PAL

## ◀ Xtrafly 4.9~5.8G 5W VTX



Frequency: 5.8GHz (4990~5945)  
Band: A/B/E/F/R/L/X  
Power: 5W (25mw/800mw/  
1.6W/2.5W/5W)  
Size: 41\*30\*13mm  
Mounting: 20\*20mm/M1.6  
Antenna Interface: MMCX  
DC In: 7~36V  
RF Impedance: 50Ω  
Protocol: TBS SmartAudio  
Video System: NTSC/PAL

## ◀ Xtrafly 3.3G 5W VTX



Frequency: 3.3~3.5GHz (3200~3500)  
Band: A/B  
Power: 5W (25mw/400mw/1W/ 5W)  
Size: 42.15\*35\*14.5mm  
Mounting: 30.5\*30.5mm/M2  
Antenna Interface: MMCX  
DC In: 7~26V  
RF Impedance: 50Ω  
Protocol: IRC Tramp  
Video System: NTSC/PAL

## ◀ Xtrafly 3.3G 3W VTX



Frequency: 3.3~3.5GHz (3200~3500)  
Band: A/B  
Power: 3W (25mw/400mw/1W/3W)  
Size: 42.15\*35\*14.5mm  
Mounting: 30.5\*30.5mm/M2  
Antenna Interface: MMCX  
DC In: 7~26V  
RF Impedance: 50Ω  
Protocol: IRC Tramp  
Video System: NTSC/PAL

## ◀ Xtrafly 1.2G 3W VTX



Frequency: 1.2GHz (1080~1360)  
Band: A  
Power: 3W (25mw/400mw/1W/ 3W)  
Size: 42.15\*35\*14.5mm  
Mounting: 30.5\*30.5mm/M2  
Antenna Interface: MMCX  
DC In: 7~26V  
RF Impedance: 50Ω  
Protocol: IRC Tramp  
Video System: NTSC/PAL



## ◀ Xtrafly 1.2G 5W VTX



Frequency: 1.2GHz (1080~1360)  
 Band: A  
 Power: 5W (25mw/400mw/1W/5W)  
 Size: 42.15\*35\*14.5mm  
 Mounting: 30.5\*30.5mm/M2  
 Antenna Interface: MMCX  
 DC In: 7~26V  
 RF Impedance: 50Ω  
 Protocol: IRC Tramp  
 Video System: NTSC/PAL

## VRX

### ◀ Xtrafly 1.2G VRX



Frequency: 1.2GHz (1080~1360)  
 Band: A  
 Size: 85\*40\*11mm  
 Mounting: M6  
 Antenna Interface: SMA  
 DC In: 7~28V  
 RF Impedance: 50Ω  
 Video System: NTSC/PAL  
 Video Output Impedance: 75Ω  
 Video Output Level: CVBS 1.0~1.4VP-P  
 Receiving Sensitivity: -95dBm  
 Working Temp: -10~60°C

### ◀ Xtrafly 3.3~3.5G VRX



Frequency: 3.3~3.5GHz (3200~3500)  
 Band: A/B  
 Size: 85\*40\*11mm  
 Mounting: M6  
 Antenna Interface: SMA  
 DC In: 7~28V  
 RF Impedance: 50Ω  
 Video System: NTSC/PAL  
 Video Output Impedance: 75Ω  
 Video Output Level: CVBS 1.0~1.4VP-P  
 Receiving Sensitivity: -95dBm  
 Working Temp: -10~60°C

### ◀ Xtrafly 4.9~5.8G VRX



Frequency: 4.9~5.8GHz (4990~5945)  
 Band: A/B/E/F/R/L/X  
 Size: 85\*40\*11mm  
 Mounting: M6  
 Antenna Interface: SMA  
 DC In: 7~28V  
 RF Impedance: 50Ω  
 Video System: NTSC/PAL  
 Video Output Impedance: 75Ω  
 Video Output Level: CVBS 1.0~1.4VP-P  
 Receiving Sensitivity: -95dBm  
 Working Temp: -10~60°C

We offer custom dual VTX solutions, allowing you to choose any two frequency combinations from **1.2G + 3.3G**, **1.2G + 5.8G**, or **3.3G + 5.8G** to suit your specific needs.

# CAMERA SERIES

## ◀ 256/384/640 THERMAL CAMERA



Thermal Camera

<b>Sensor type:</b>	Vanadium oxide microcalorimeter
<b>Maximum Image Size:</b>	256*192/384*288/640*512
<b>Pixel size:</b>	12μm
<b>Response wave band:</b>	8~14 μm
<b>NETD:</b>	≤40mK(@25 °C,F#1.0)
<b>Viewing angle:</b>	26.46°(H)x19.81°(V),33.19°(D) /48.3°(H)x38.6°(V),62.4°(D)
<b>Lens:</b>	9.7mm
<b>Storage temperature:</b>	-45 °C~+75°C
<b>Storage humidity:</b>	<90% RH
<b>Operation temperature:</b>	-40 °C~60 °C
<b>Operation Humidity:</b>	<90% RH
<b>Weight:</b>	23g
<b>Dimension:</b>	21mm*21mm*38mm
<b>Power:</b>	≤0.8W
<b>DC in:</b>	5~12V



Real Shot Image





X1 Camera

## ◀ X1 CAMERA

<b>Sensor:</b>	Sony 1/3" CMOS Sensor
<b>Horizontal Resolution :</b>	1800TVL
<b>Pixel Dot Size :</b>	3.75um
<b>Picture Ratio :</b>	16:9 4:3 Optional
<b>Video Format :</b>	PAL/NTSC Switchable
<b>Field of View :</b>	FOV : H 100° V70°
<b>Electronic Shutter :</b>	Auto
<b>Low Illumination:</b>	F1.2/0.01Lux
<b>White Balance:</b>	Auto
<b>Operating Voltage:</b>	5V-40V
<b>Noise Reduction:</b>	3D
<b>Day/Night:</b>	COLOR
<b>Menu:</b>	NO
<b>Input Voltage:</b>	5V-40V
<b>Operating Temperature:</b>	-20°C-70C
<b>Overall Dimension:</b>	19mm*19mm
<b>Operating Current:</b>	130mA@12V

## ◀ NIGHT EAGLE



Night Eagle

<b>Type:</b>	Night Eagle
<b>CCD type:</b>	1/2.8" CMOS Sensor
<b>Resolution:</b>	1500TVL
<b>Standard:</b>	PAL/NTSC selectable
<b>angle:</b>	FOVD: 125° H: 105° V: 55°
<b>Minimum illuminance:</b>	Black and white: 0.000001 Lux (F1.6, 50IRE, AGCON)
<b>Lens:</b>	M12
<b>Signal-to-noise ratio:</b>	>50dB
<b>Wide dynamic range:</b>	Supports
<b>White balance:</b>	automatic white balance
<b>Image:</b>	Color/black and white selectable
<b>Menu:</b>	Supports
<b>Video output:</b>	CVBS (customizable BT1120 output, connects to HD image transmission)
<b>Power supply:</b>	DC5V-30V
<b>Working temperature:</b>	-10C to 50°C
<b>Working humidity:</b>	Relative humidity below 90%
<b>Size:</b>	19*19mm

## DUAL CAMEAR MODULE

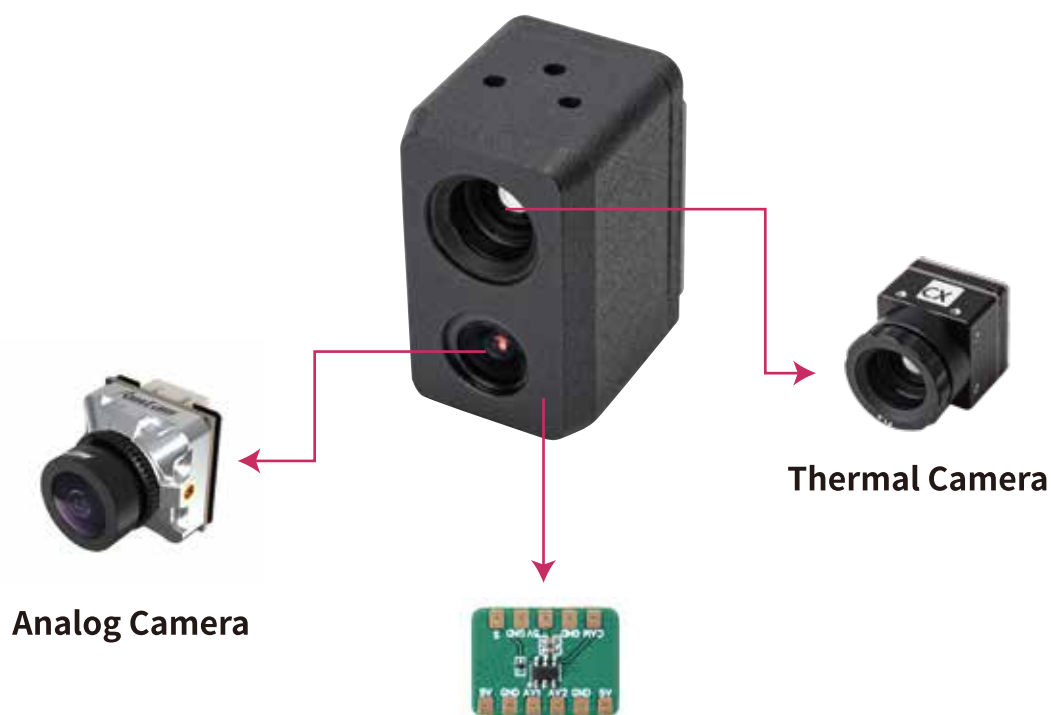
- FPV analog camera + Thermal camera (256/384/640)
- Can be switched through remote control
- Support Betaflight, INAV
- Customizable servo gimbal system
- Provide excellent nighttime visuals
- 5V Input



Dual Camera Module

## COMPONENT

### DUAL CAMERA MODULE



Analog Camera

Thermal Camera

### Dual Camera Control Board

5V Input

Switched through remote control

Provide screen switching functions for your drone

6  
XTRAFLY  
FCV SYSTEM

# MOTOR SERIES

SE MOTOR  
FREESTYLE & RACING MOTOR  
MICRO & CINE MOTOR

# SE SERIES MOTOR

The SE Series is developed specifically for industrial applications, offering stability, reliability, and cost-effectiveness.



## SE 28 SERIES

(suitable for 7~8inch)

2806.5	2807	2808
2810	2812	2814



## SE 31-35 SERIES

(suitable for 10inch)

3115	3116	3210
3214	3517	



## SE 40-47 SERIES

(suitable for 13~15inch)

4016	4026	4214
4215	4218	4720

# FREESTYLE & RACING MOTOR

The Freestyle & Racing Series delivers exceptional power and a variety of design options, catering to the needs of professional players.



**22-25 SERIES**  
(suitable for 5inch)

2203	2204	2205
2206	2207	2207.5
2208	2306	2306.5
2406	2407	2408
2505.5		

# MICRO & CINE MOTOR

The Cine Motor Series is designed for cinematic shooting, providing powerful thrust and outstanding flight stability, making it the ideal choice for aerial filming.



**12 SERIES**  
(suitable for 2inch)

1202	1203	1204
1205	1206	



**14 SERIES**  
(suitable for 2.5inch)

1403	1404	1405
1406	1407	1408



**20 SERIES**  
(suitable for 3~5inch)

2004	2005	2006
------	------	------

XTRAFLY  
— FPV SYSTEM —

7

# ANTENNA & RECEIVER SERIES

ANTENNA  
RECEIVER



# ANTENNA SERIES

	
1.28G Antennas	3.3G Antennas
	
4.9G Antennas	5.8G Antennas
	
500MHz~1000MHz Antennas	Pach Antennas

Antenna List

# RECEIVER SERIES

	
<b>ELRS 915MHz Receiver</b>	<b>ELRS 2.4G Receiver</b>
	
<b>ELRS 370-550MHz Receiver</b>	<b>ELRS 550-700MHz Receiver</b>
	
<b>ELRS 700-980MHz Receiver</b>	<b>ELRS 915MHz Diversity Receiver</b>

Receiver List