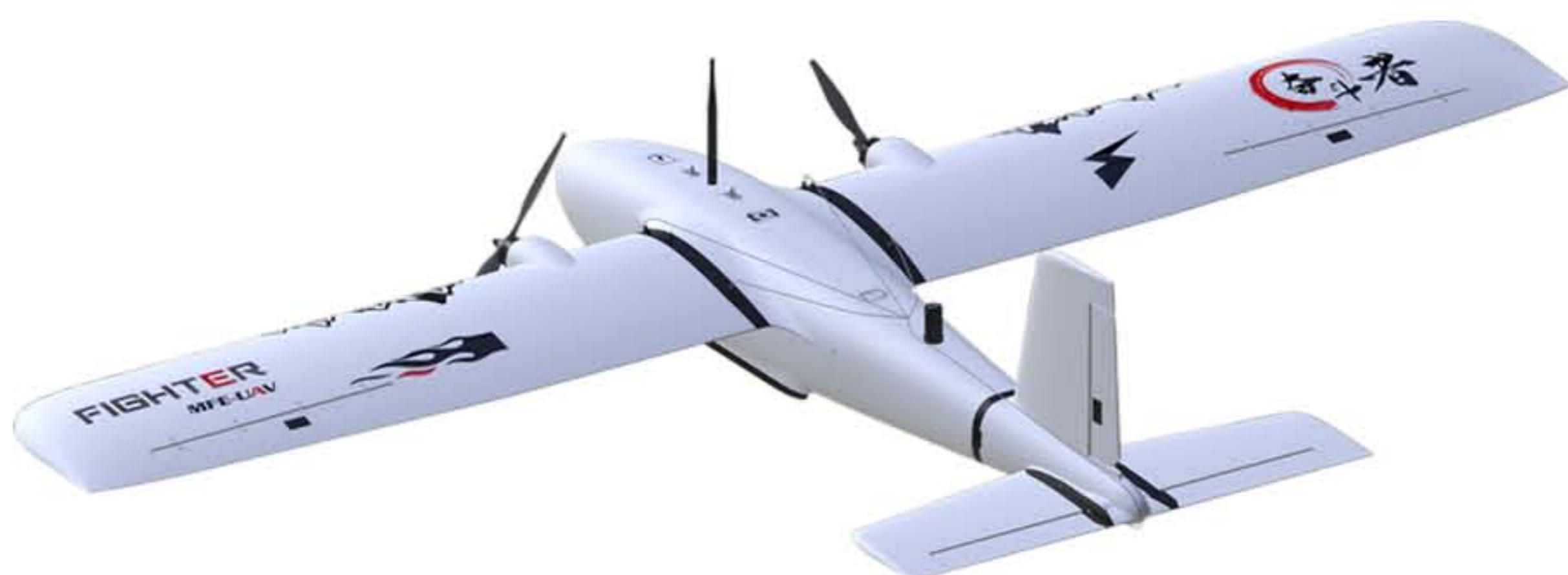


## Overview Description

The Fighter (hand version) is a conventional aerodynamic fixed-wing flight platform with large load, long endurance and easy operation



## Basic Parameters

Material: EPO,EVA,carbon fiber,PC,engineering plastics and etc.

Wing Span: 2430mm

Fuselage height: 180mm

Fuselage length: 1450mm

Wing area: 72.5dm<sup>2</sup>

Suggested flight speed: 17~20m/s

Stalling speed: 10m/s

Maximum payload: 1.5Kg

Payload cabin

size:280\*160\*110mm

Longest flight range: >250km (600g load)

Max take-off weight:11.5kg

Practical ceiling height: 4000m

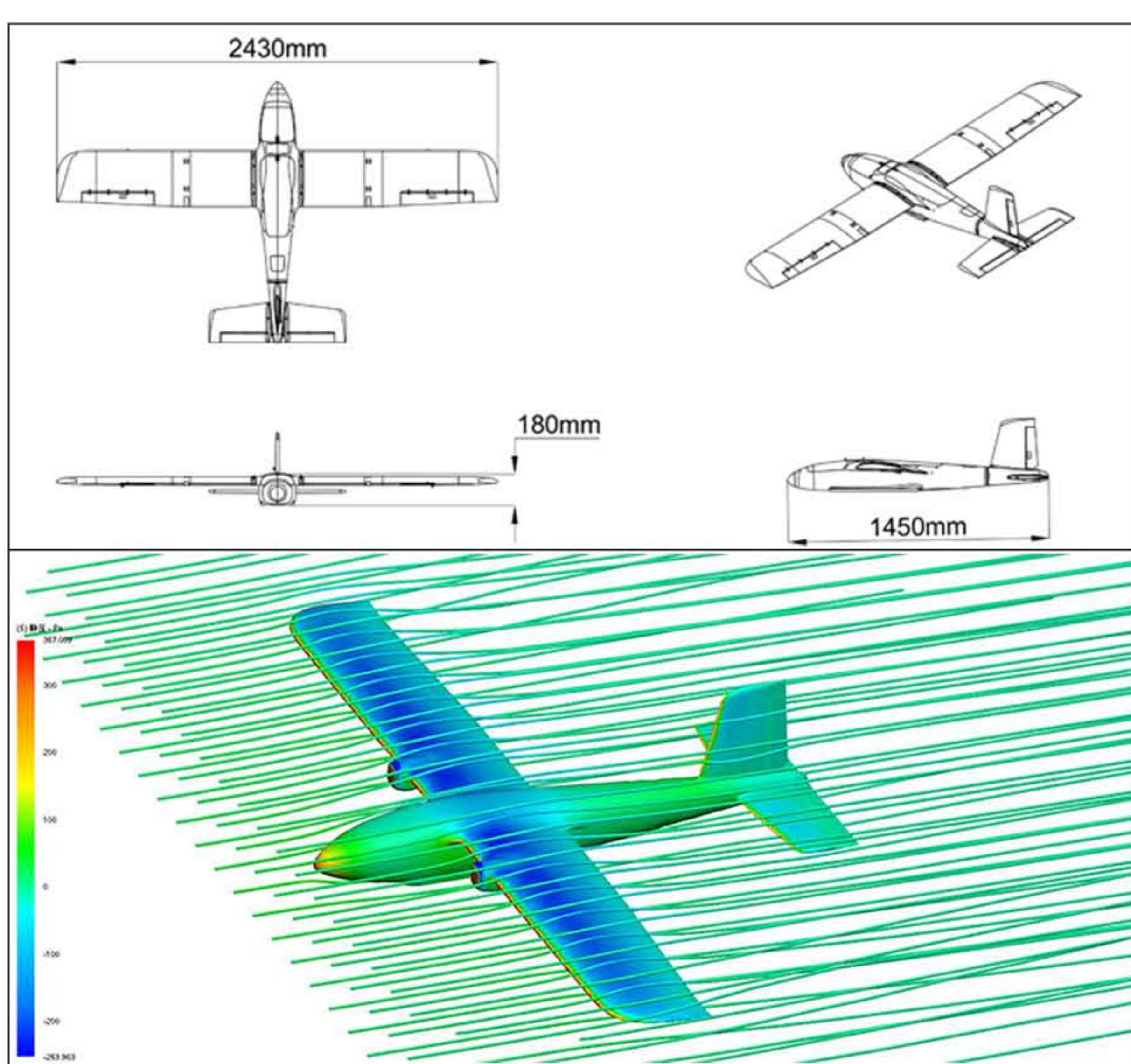
Wind resistance: 5

Take-off and landing approach: (Hand parachute/Glide landing)

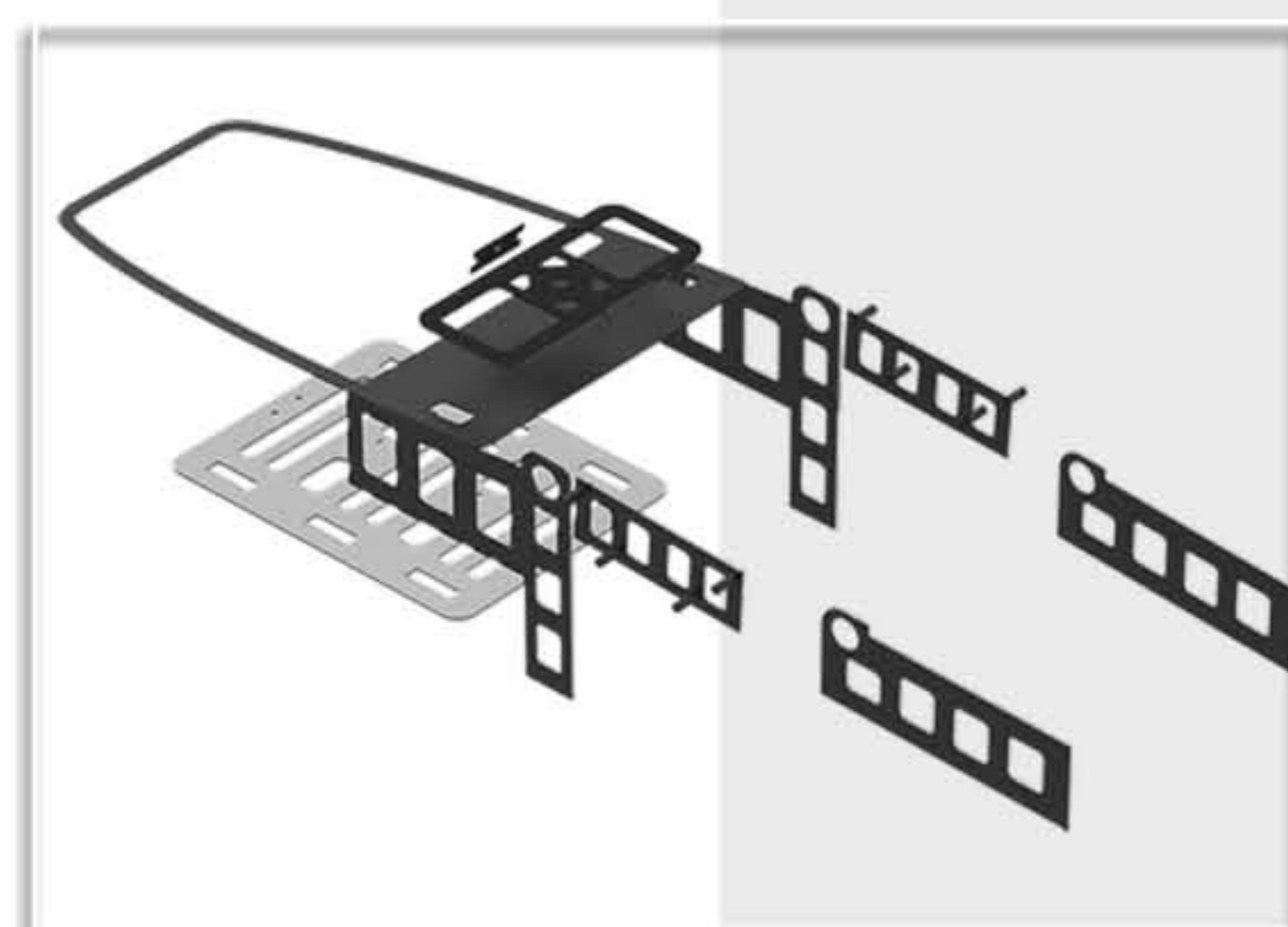
Dismounting way: tool-free

## Efficient Aerodynamics

On the basis of the conventional inverted T layout, the Fighter have optimized the aerodynamic figure and relative positions of the wings, horizontal tail, vertical tail, and fuselage

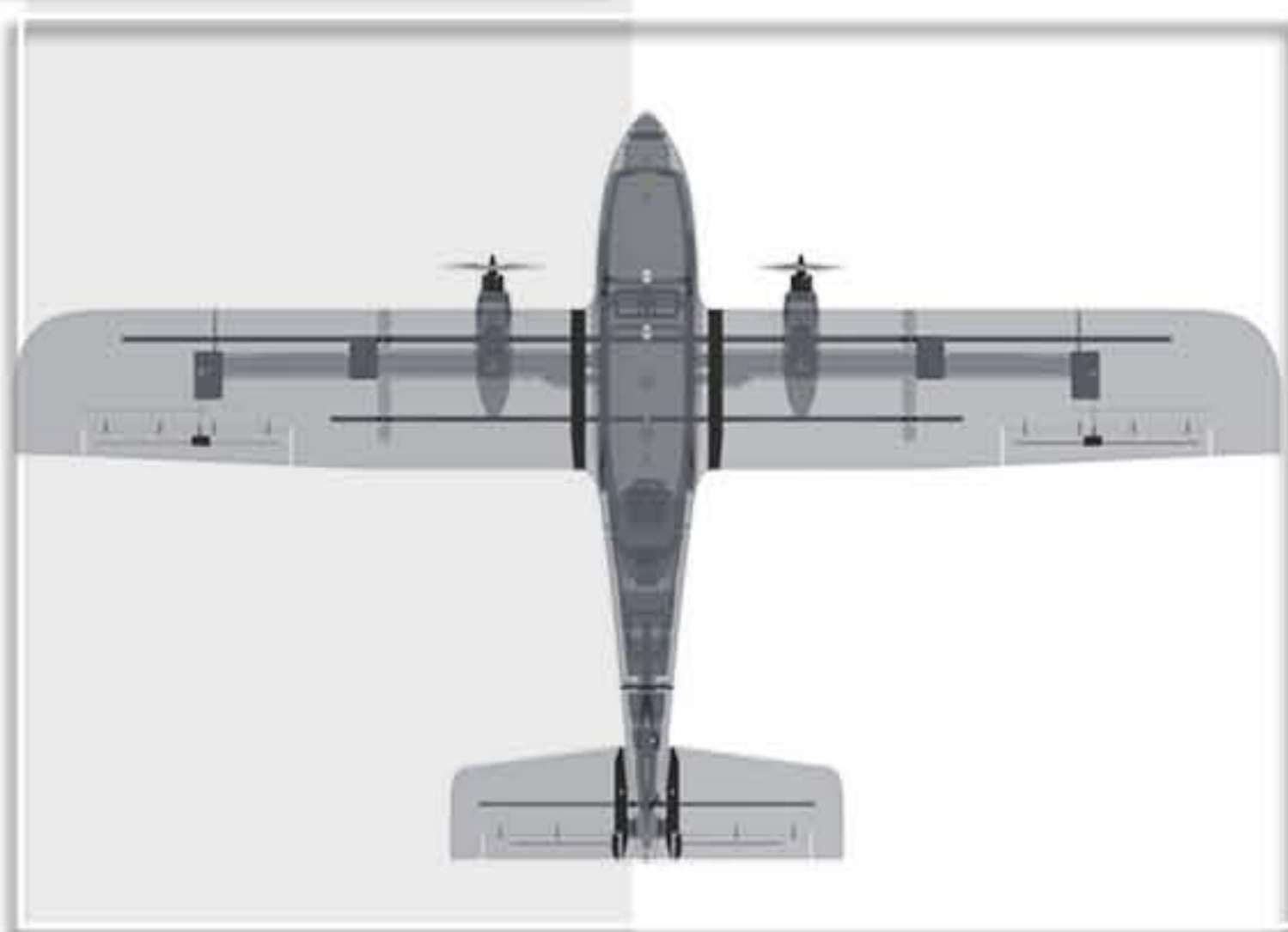


## Light but Stable



A large number of high-strength light PC boards are used in materials, and a large number of embedded box structures are used in figure to improve the structural strength and rigidity of the body in many ways

Based on the "Overload Test", according to the structure and load characteristics of the wing, tail and fuselage, the structure was optimized as "g" precision to minimize unnecessary weight



## Disassembly Quickly

The wing and tail adopt a toolless quick-release structure, which reduces the installation steps and shortens the disassembly and assembly time

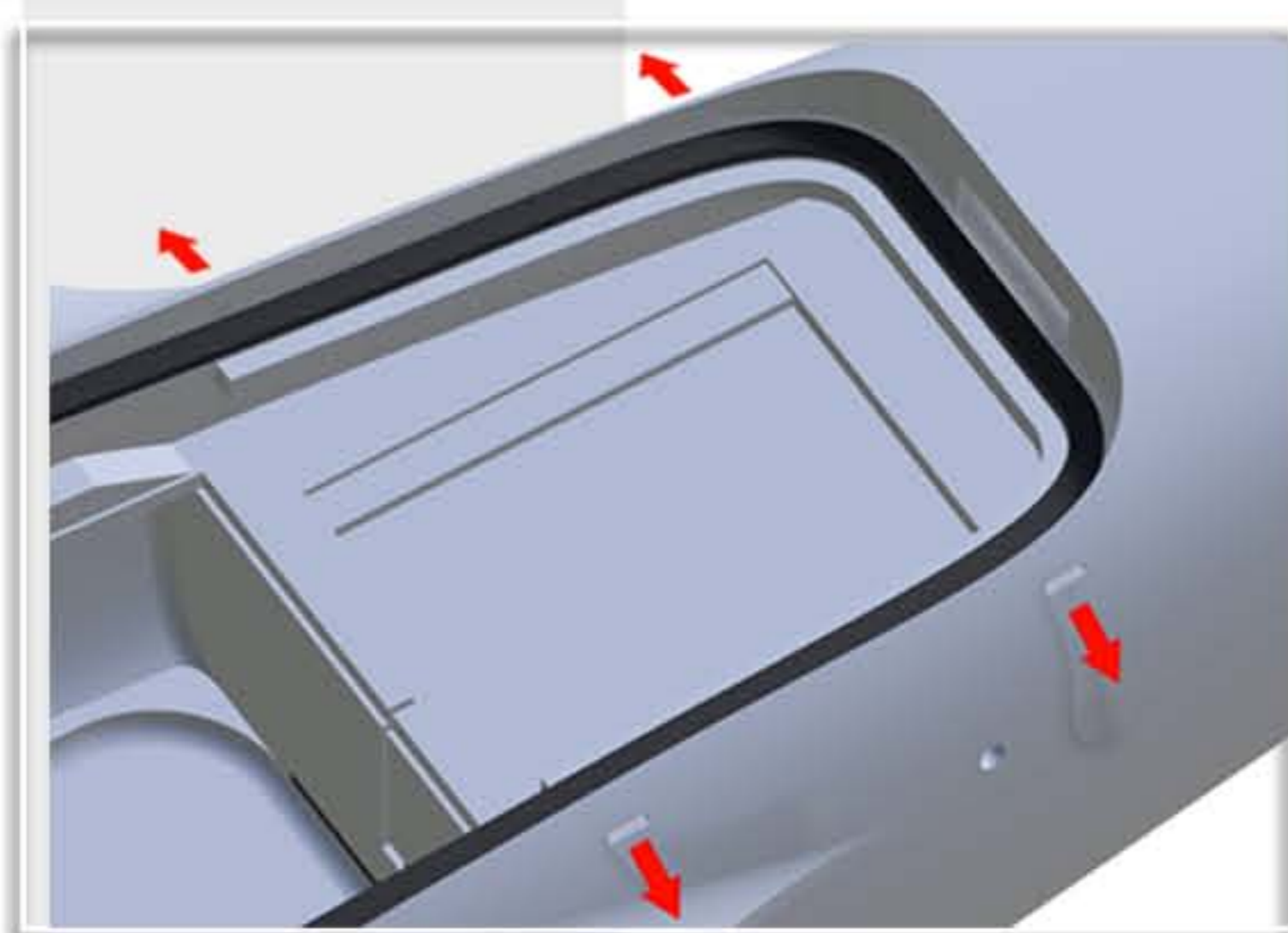


## IPX3 Waterproof Level



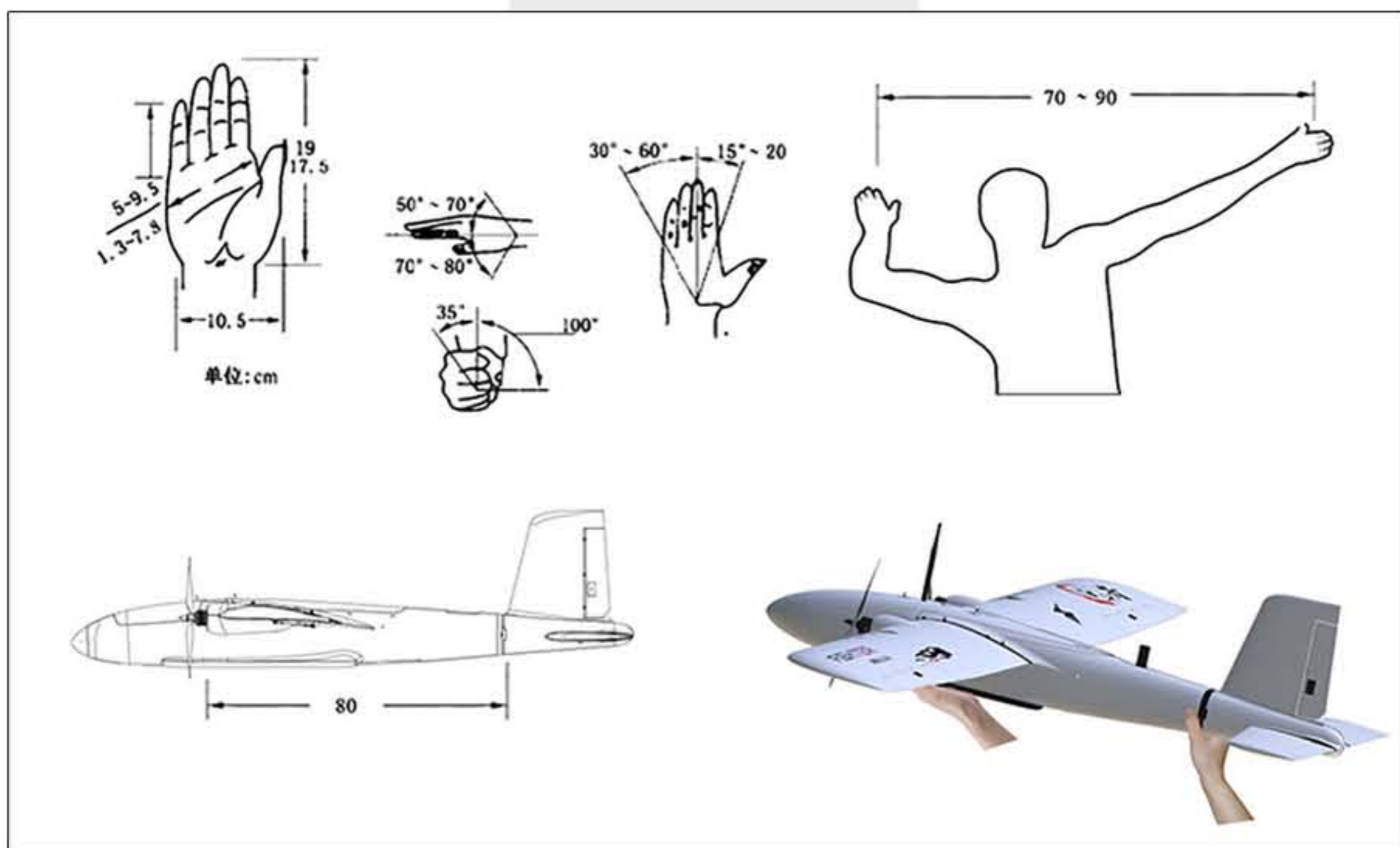
The head cabin cover adopts an integral umbrella structure to prevent rainwater from entering the cabin

The fuselage cabin cover is specially designed with a water channel and a water outlet to ensure that the aircraft has normal flight capabilities in little rain



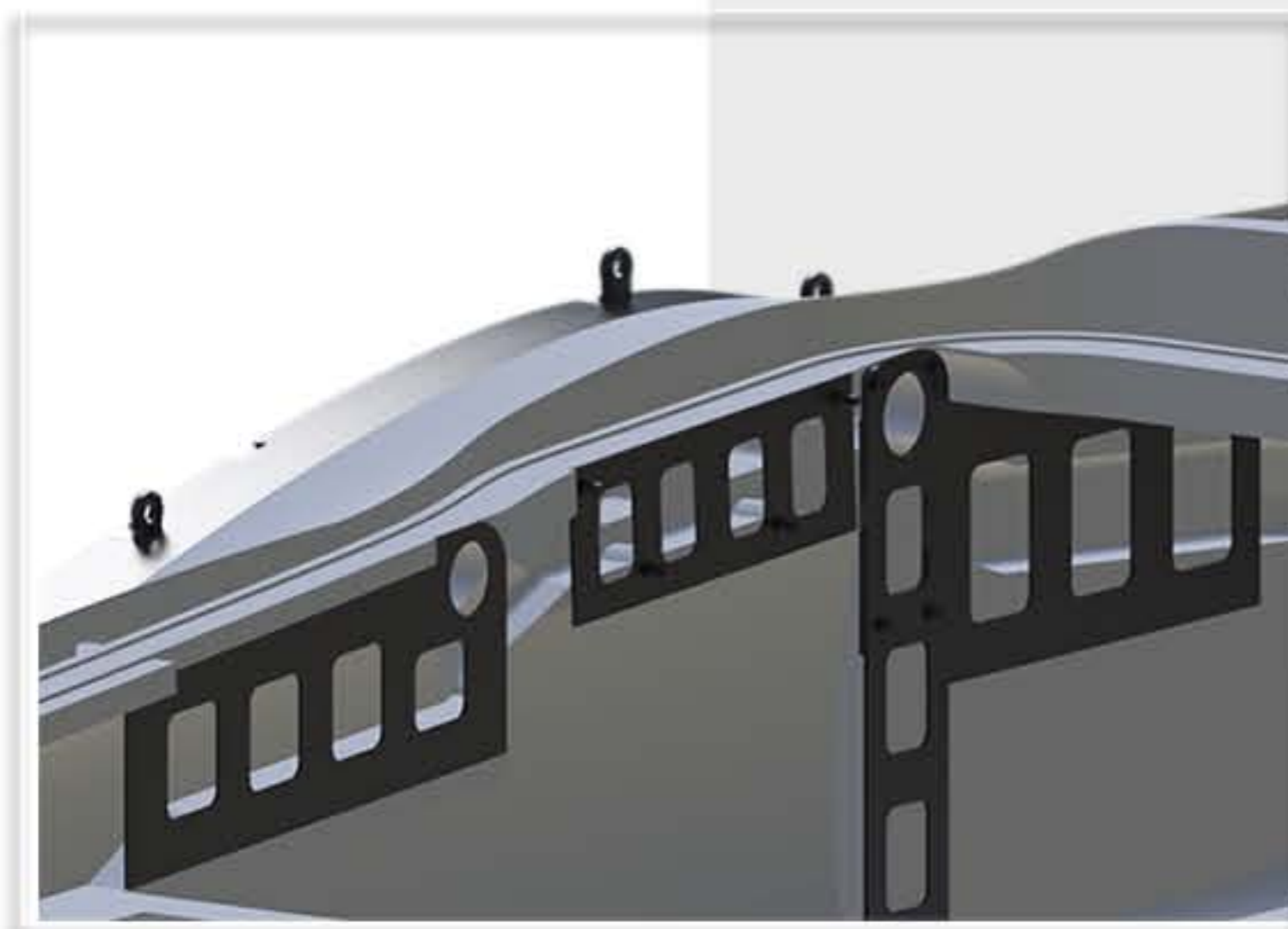
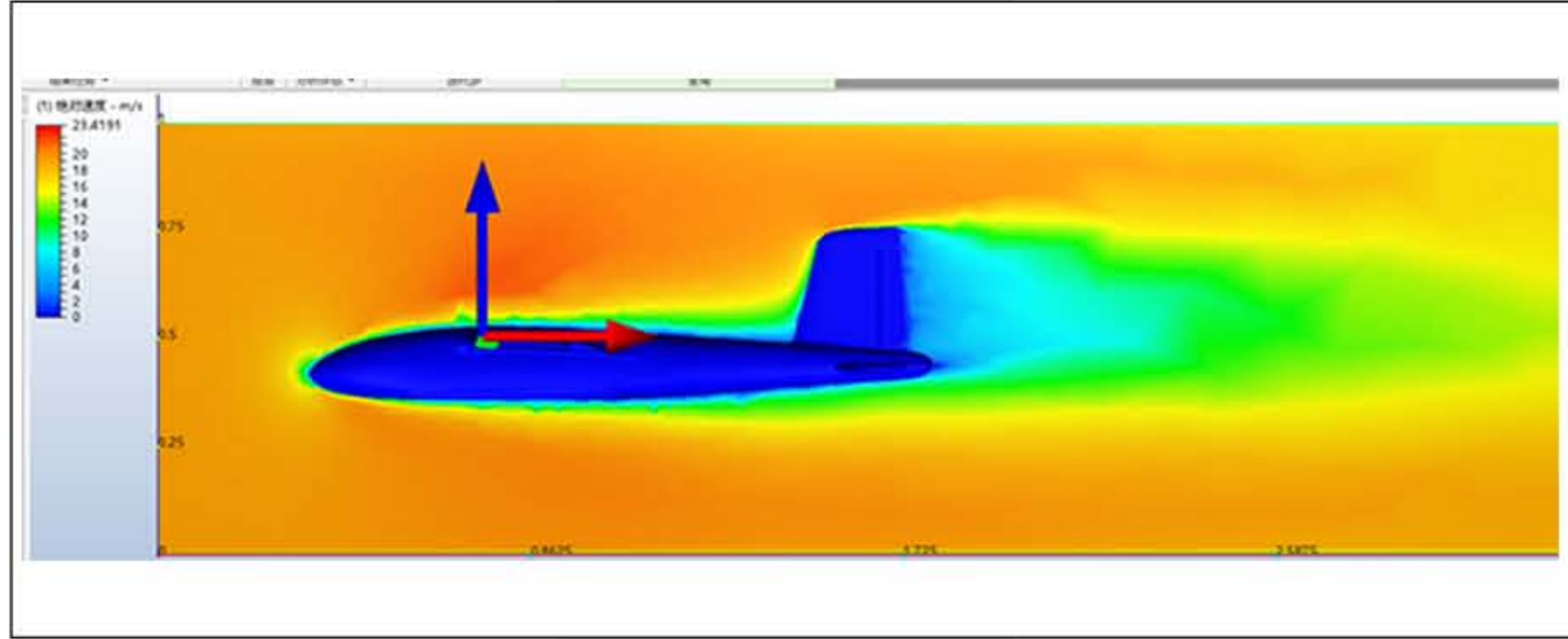
## Hand Throw Take Off

The size of the fuselage at the rear of the fuselage and the distance between the two hands to support the aircraft to achieve the best ergonomic size range, to achieve accurate force and smooth throw



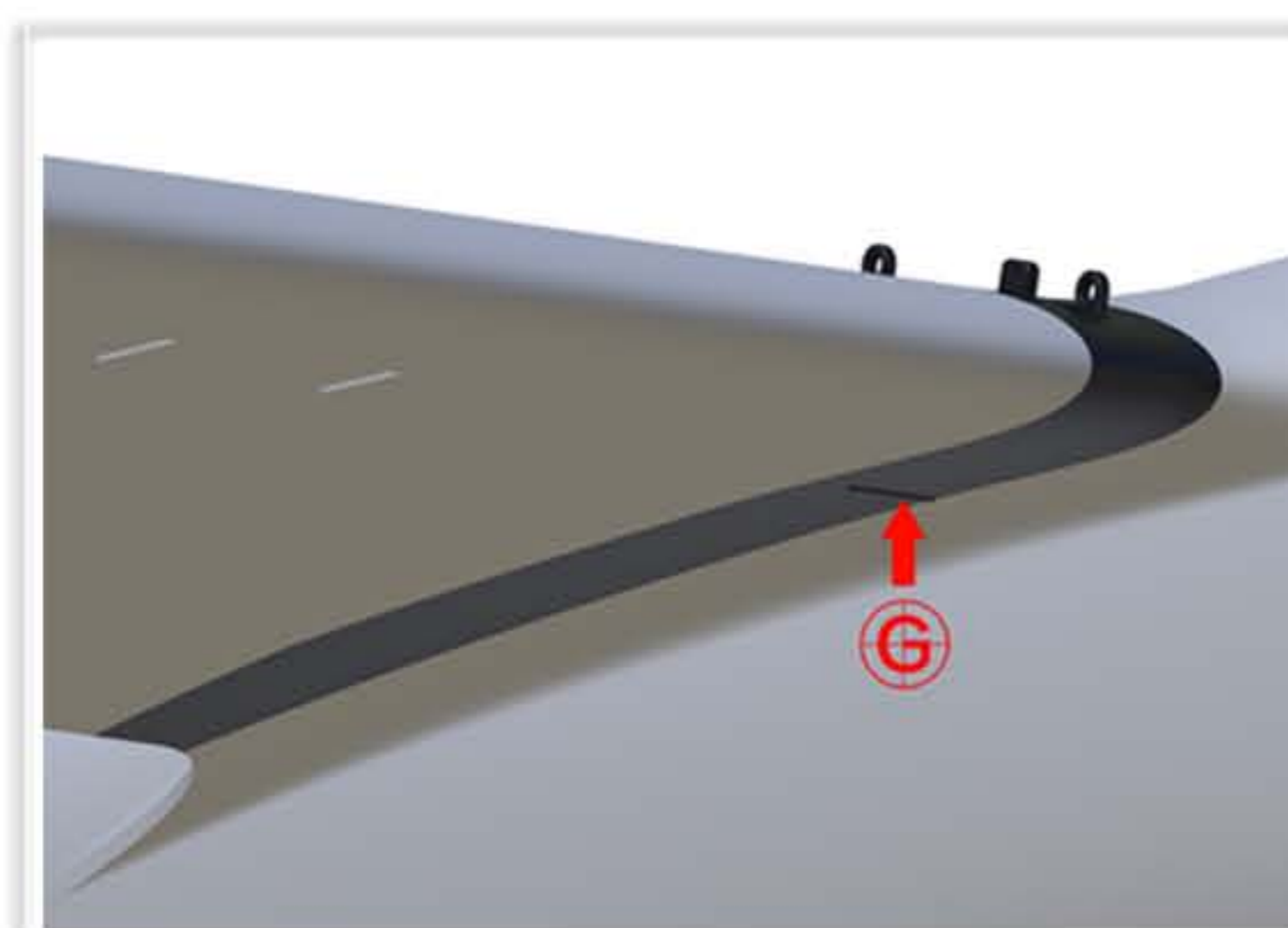
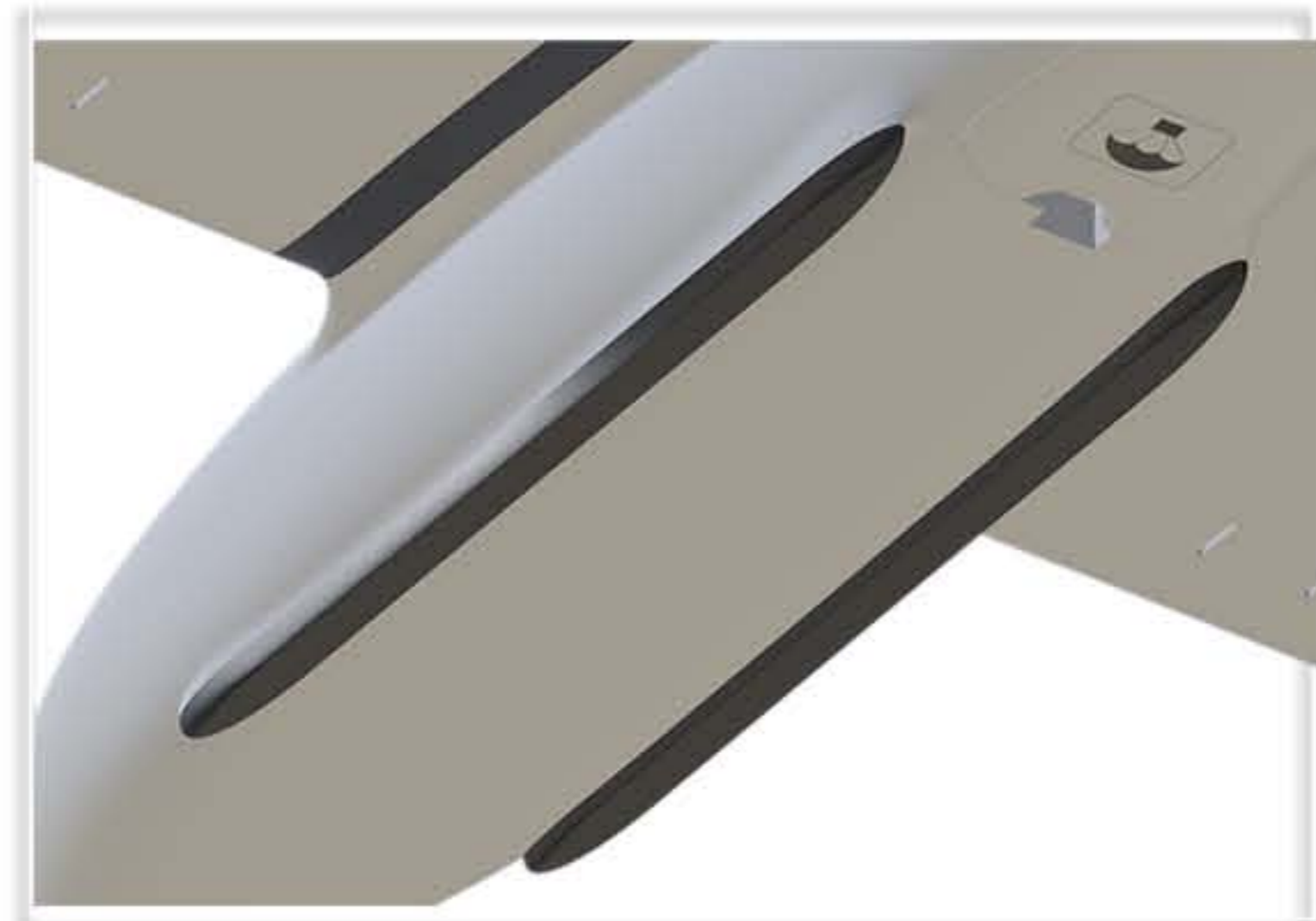
## Large Fuselage Cabin, Low Resistance

The fuselage adopts the overall streamline figure, and the flight resistance is reduced as much as possible while ensuring a large space



The inside of the fuselage is equipped with a wire groove and a removable baffle, which is matched with nylon braided sleeves to ensure simple and efficient wiring in the cabin

Streamlined EVA cushions are designed on both sides of the bottom of the fuselage, which does not block the camera hole, shock absorption and wear resistance, and improve the aircraft's course stability

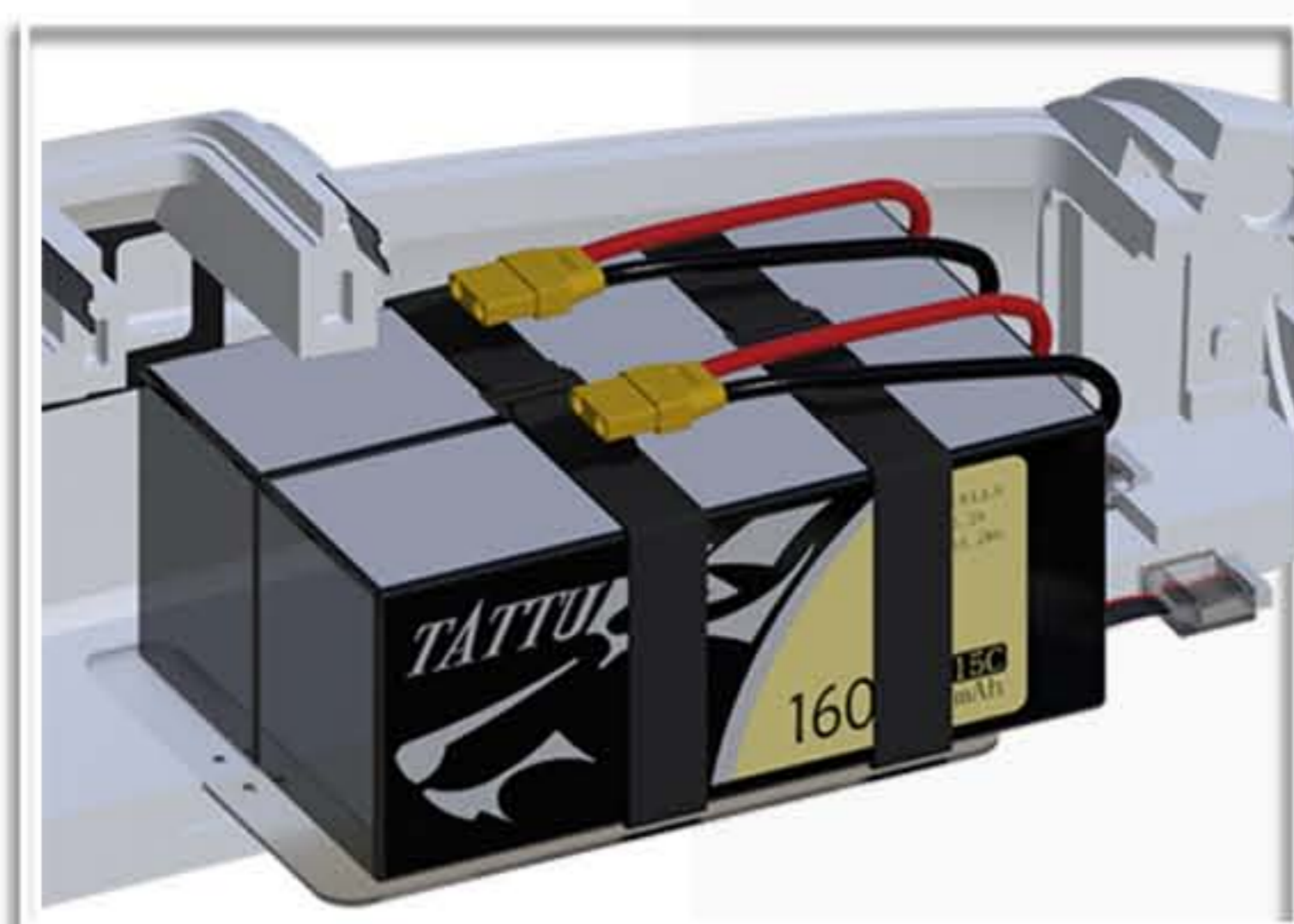


The center of gravity of the aircraft is under the raised position of fuselage hook and the wing root plastic (same position)

The center of gravity of the hand-held lanyard during heavy load, and the center of gravity of the hand-lifted wing during light load



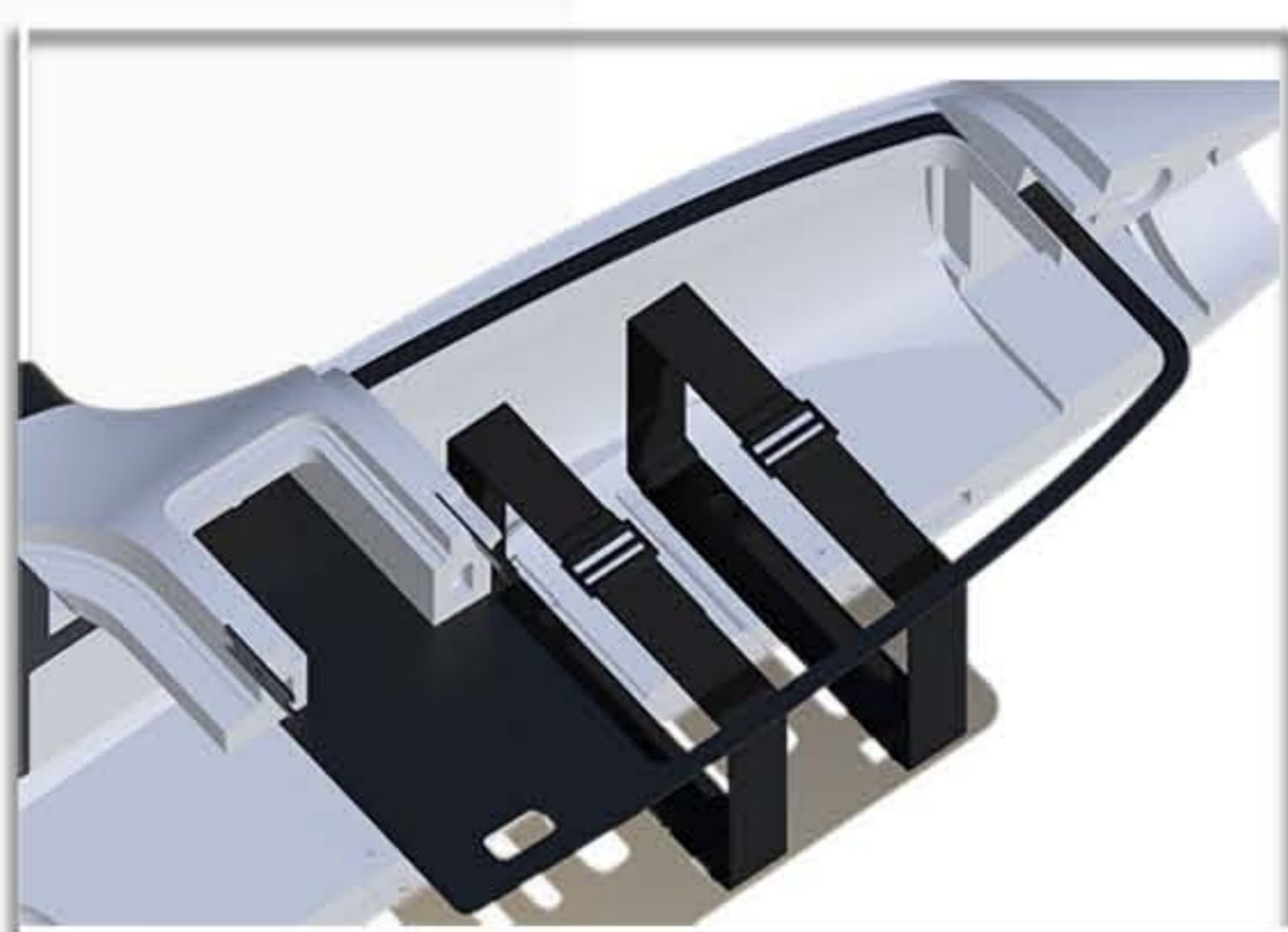
## Battery Cabin



Battery cabin supports 2 6S@16000 / 22000mAh(Li-Po) which provides strong power for long endurance

The battery fixed seat is made of PC board and CNC machined, with light weight and good impact resistance

The dual battery cable tie has a reasonable layout, which effectively avoids entanglement



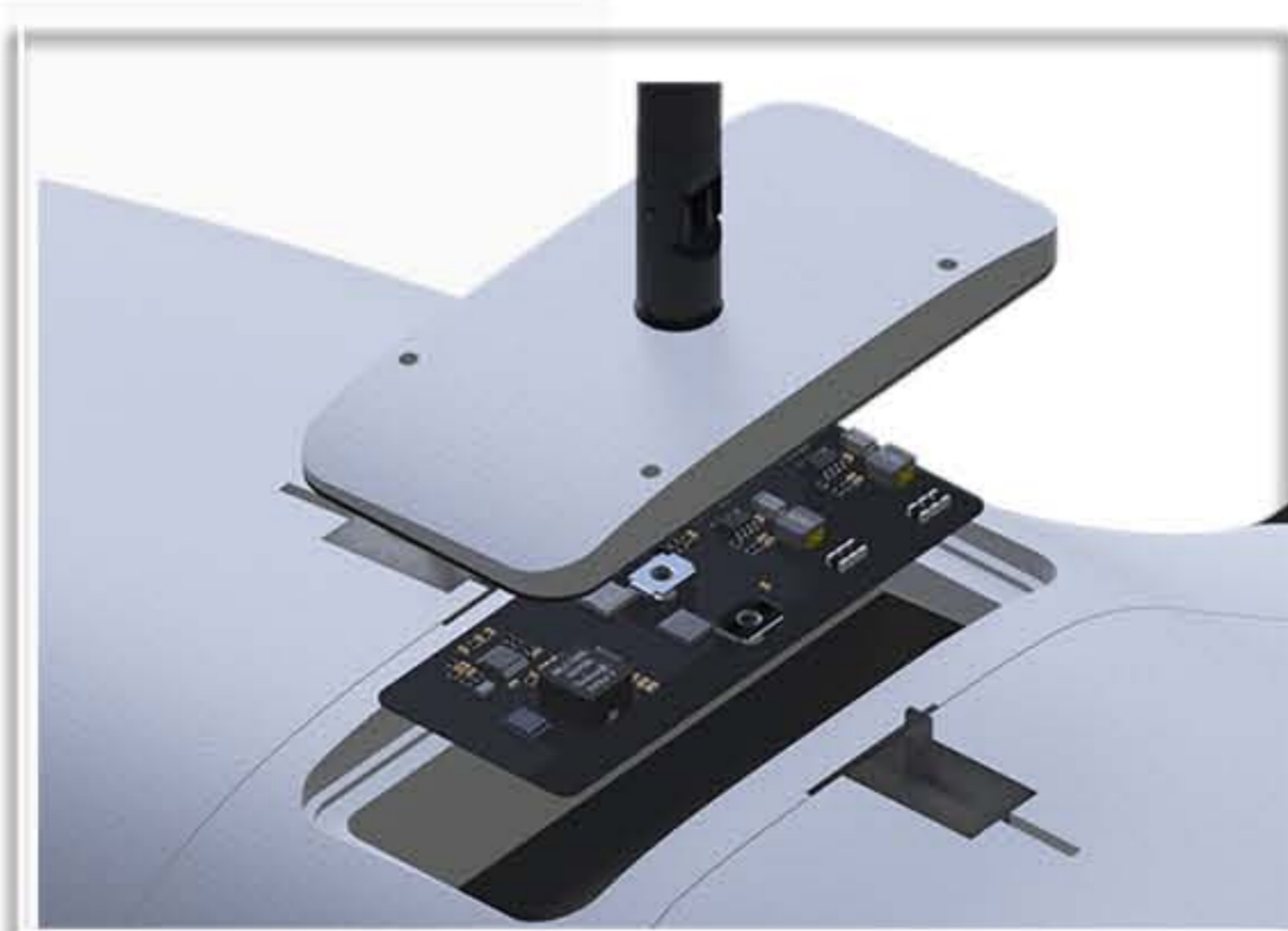
## Distribution Cabin



The distribution cabin cover is reserved with data transmission antenna holes, which is convenient for the assembly and disassembly of the antenna

The design of the distribution cabin shortens the wire path and improves the electromagnetic environment of the aircraft

With the power distribution board, the power system of the fuselage can be quickly replaced

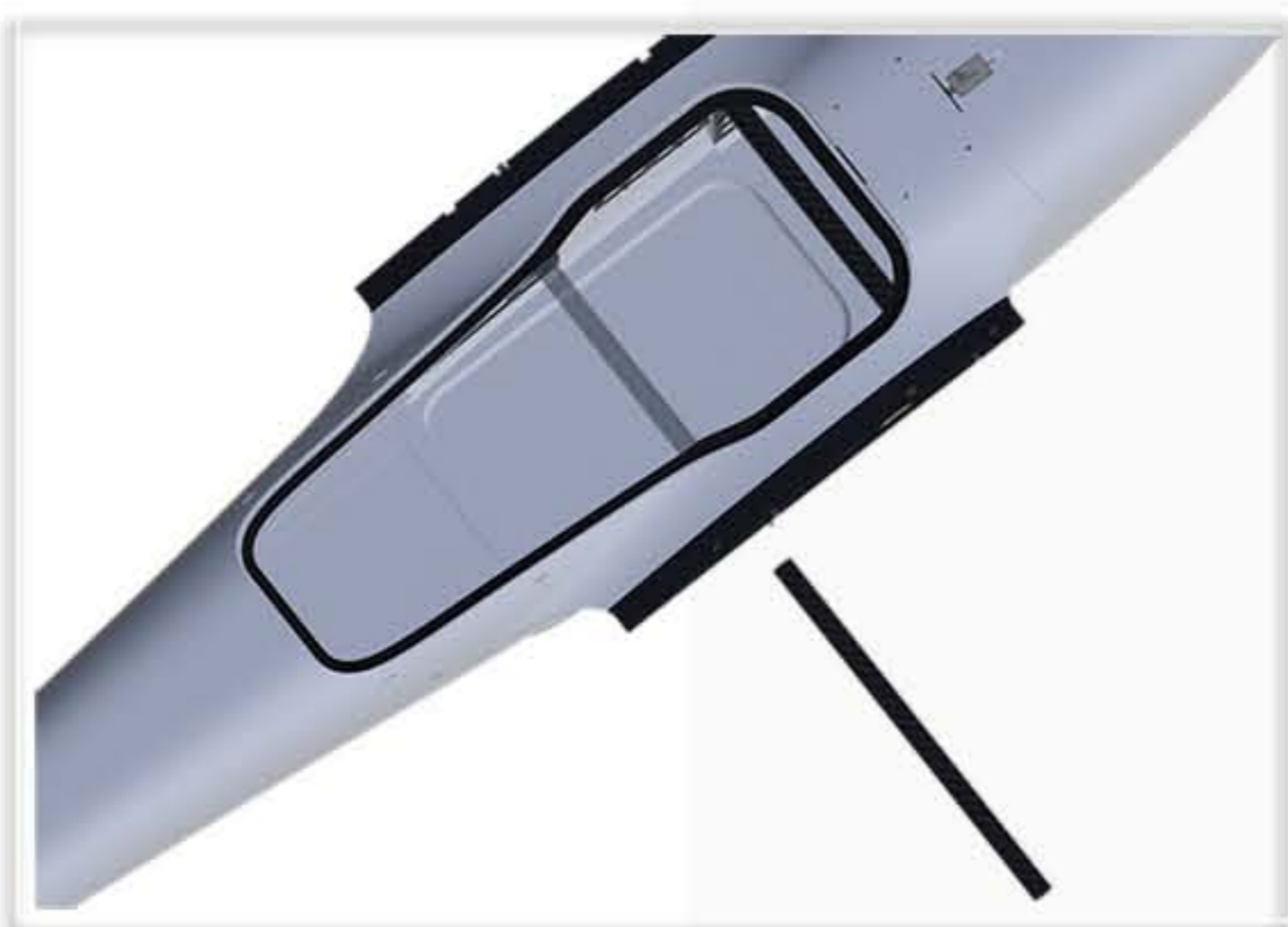
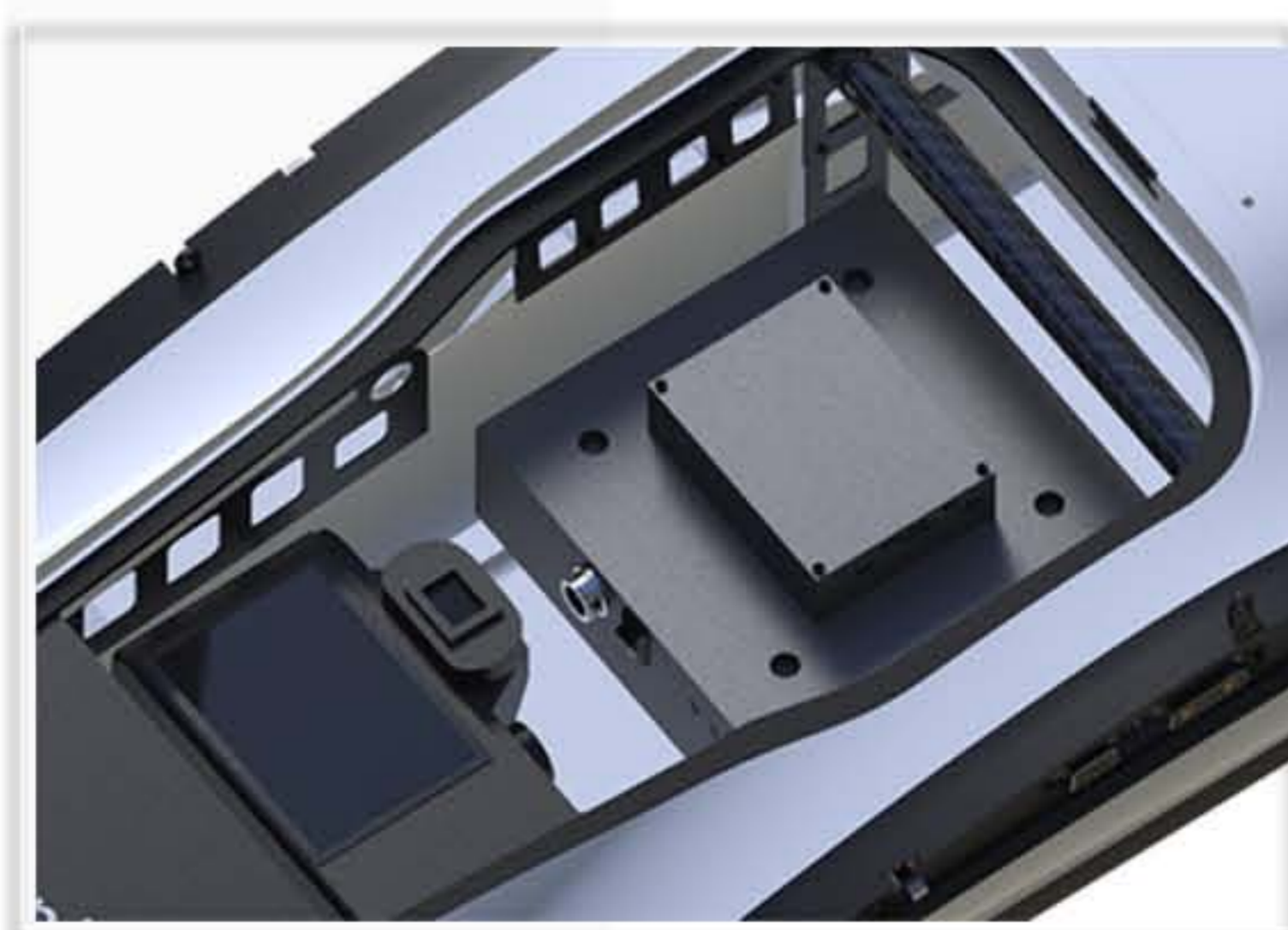


## Load Cabin



Load cabin size:  
280×160×110mm

A7R / A7R2, five-lens half-frame tilt camera can be placed in the main cabin



The auxiliary carbon tube adopts a toolless quick-release design. After disassembly, it can open the main and auxiliary cabin. It can be equipped with a five-lens full-frame tilt camera or a 1.5kg lightweight lidar

## Flight control Cabin



The open platform design of the flight control cabin facilitates the installation of open source /commercial flight control installation

Cooperating with the center board can make full use of the space layout, greatly optimizing the line sequence and direction

The double-sided round holes ensure the accurate height measurement of the flight control barometer and also facilitate the installation and use of safety switches



Cooperate with the flight control protective cover to prevent foreign matter from falling, beautiful and dustproof

## RTK/GPS/Parachute Cabin



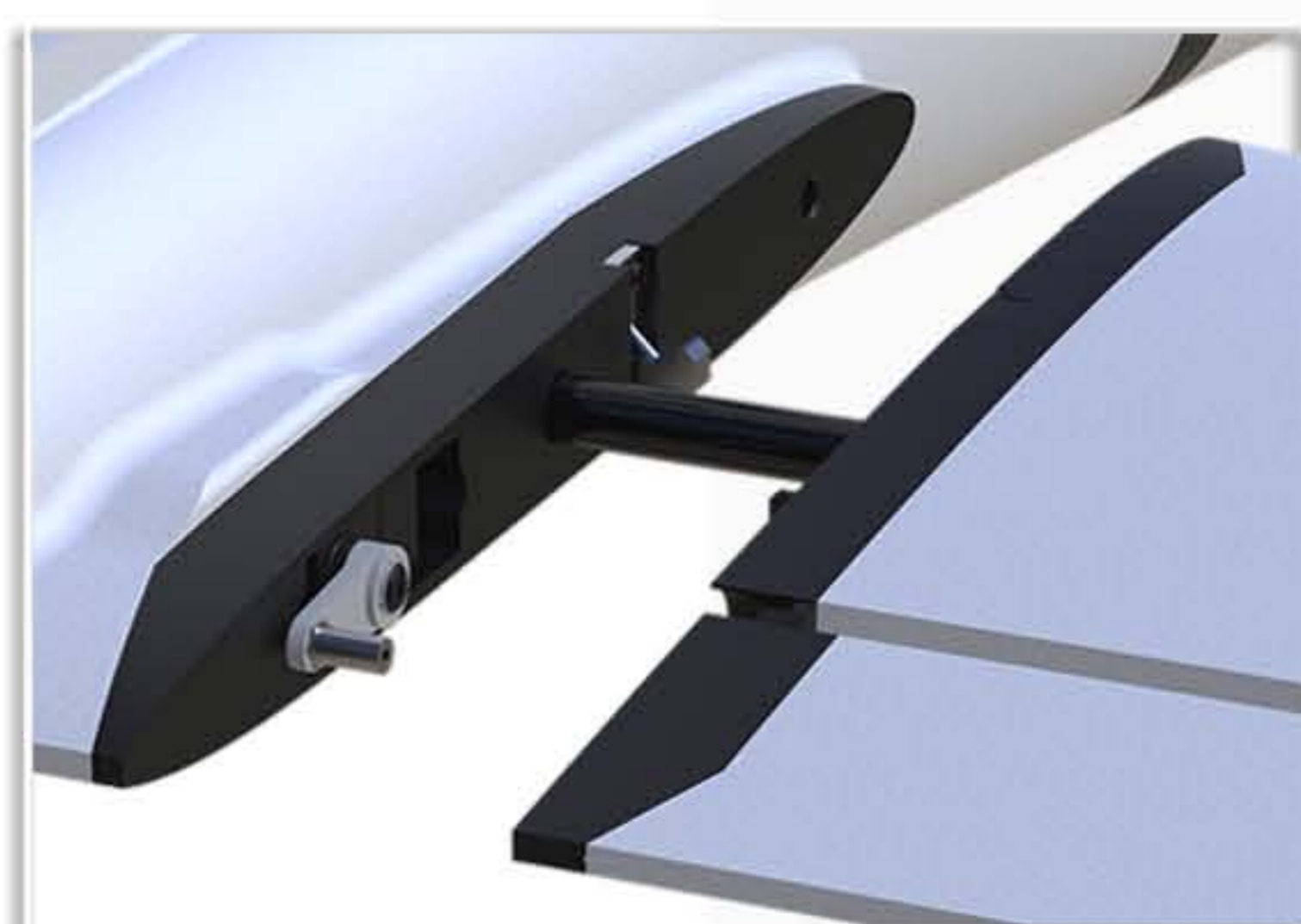
The RTK / PPK antenna position is reserved at the rear of the flight control cabin, and with the RTK / PPK module, it can improve the POS data accuracy

The GPS module is located at the rear of the fuselage, with a size of 69 × 63 × 18mm, which can accommodate flight control GPS and compass modules. The electromagnetic environment is clean



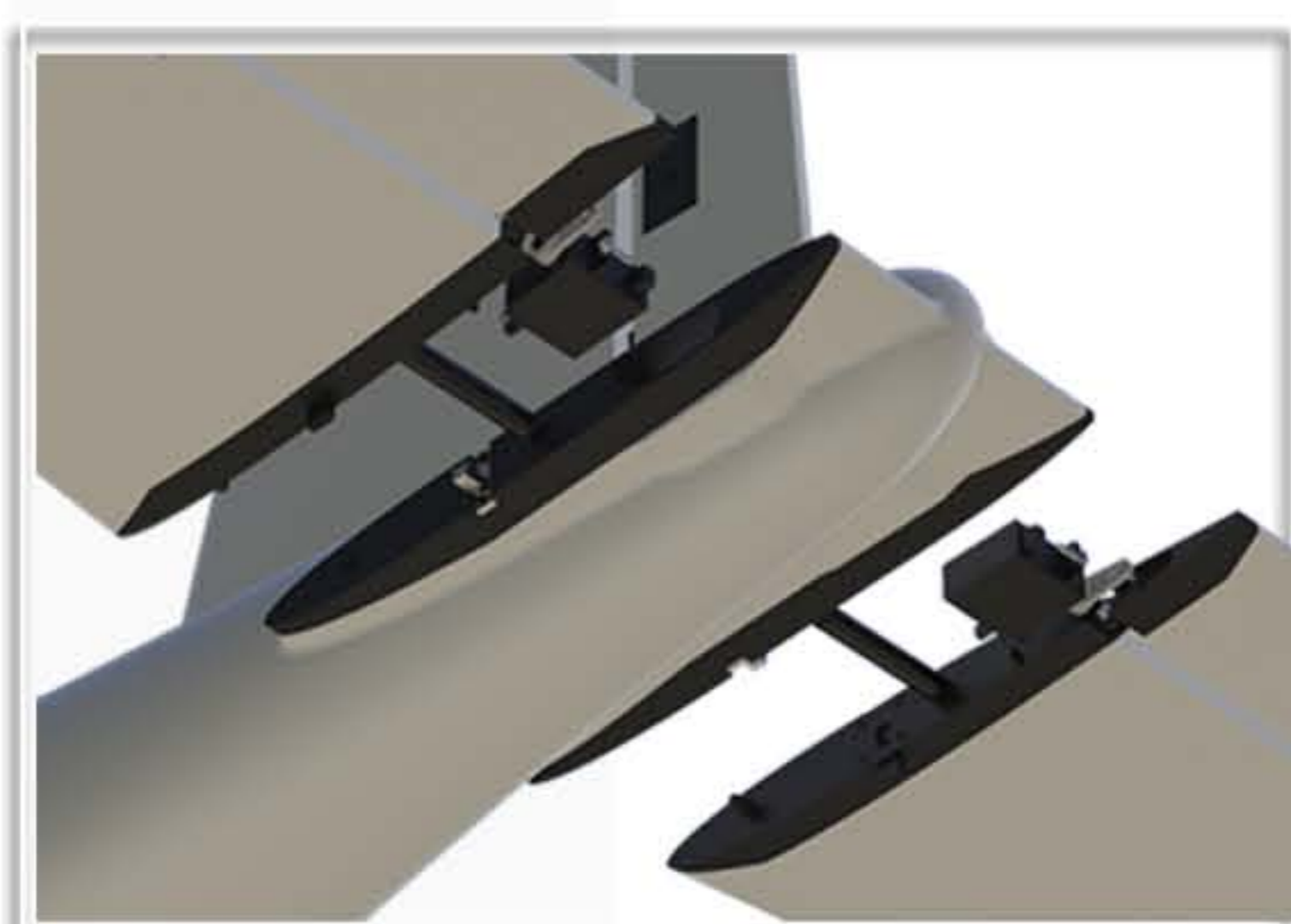
The size of the parachute cabin is 172 × 113 × 52mm, which can easily place 6-8kg parachute

## Horizontal Tail



The horizontal tail adopts a tool-less quick-release structure, which is automatically locked when it is pushed and pulled out immediately when pressed

The left and right horizontal tails are designed with independent control of dual servo. Even if one side fails, the aircraft can return, which improves the safety of the aircraft

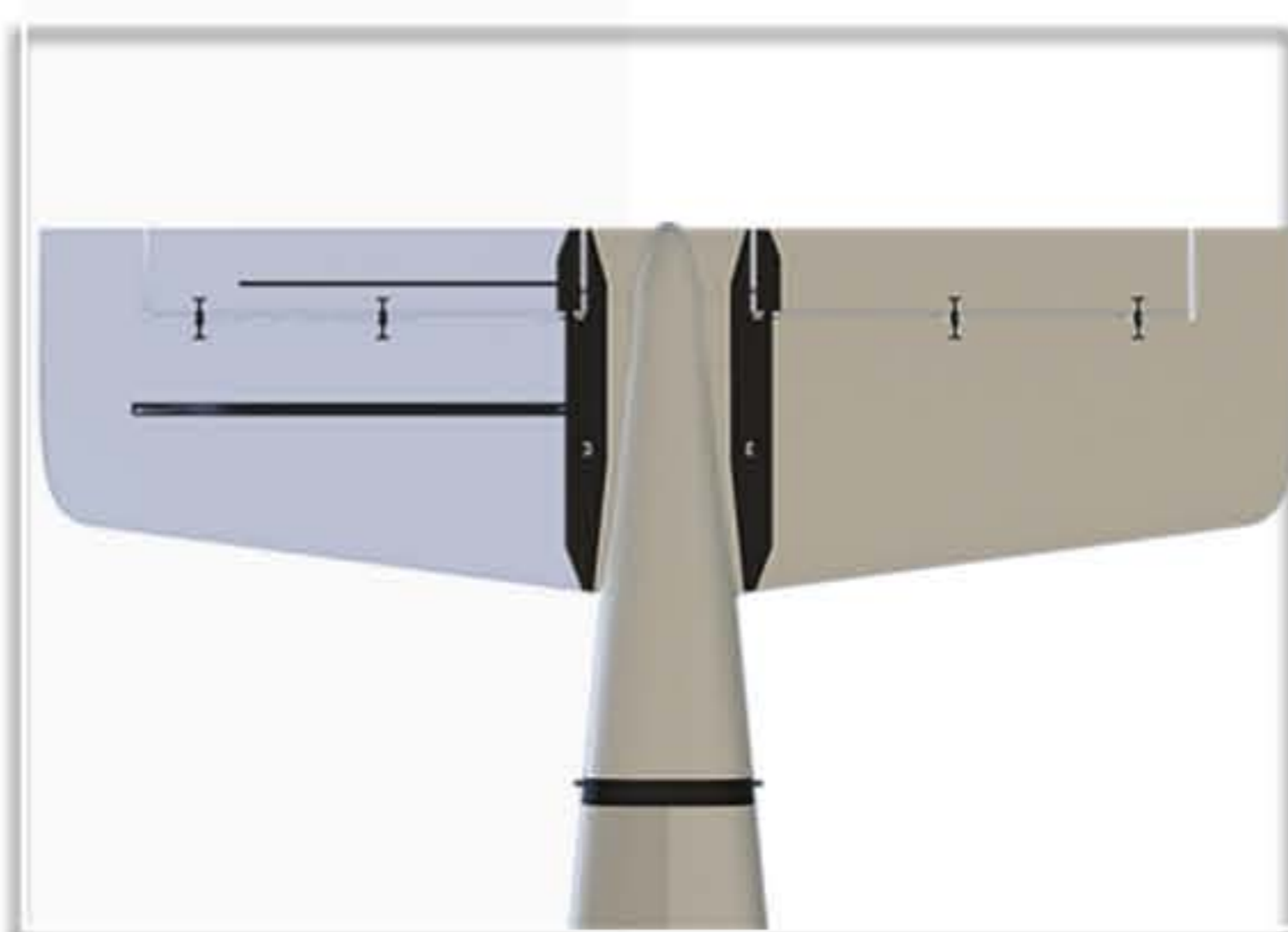


Horizontal tail servos do not need to be buried in advance, which is convenient for servo maintenance

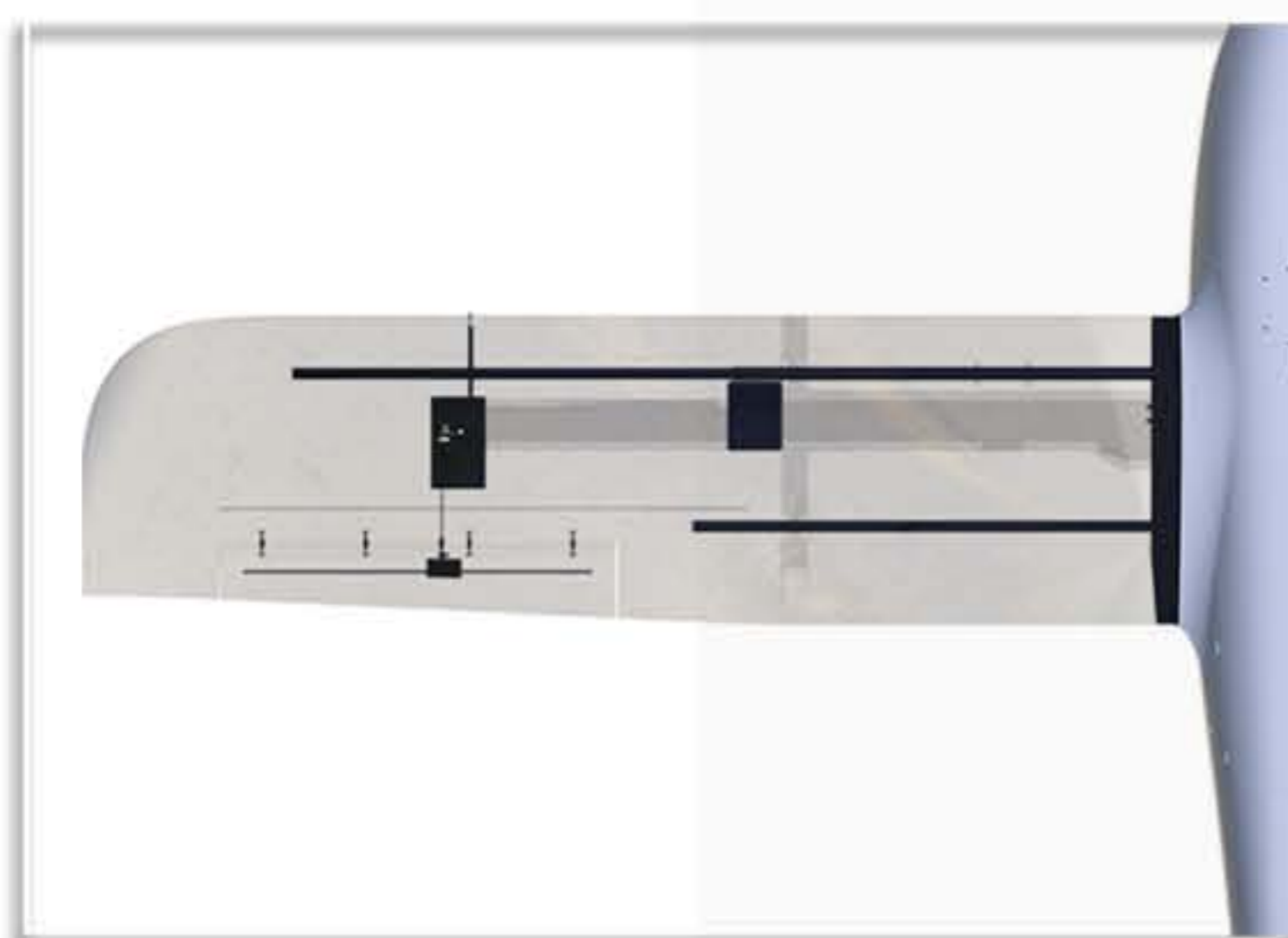
The rocker arm of servo adopts an embedded design, even if the rocker arm transmission column is loose, the rudder surface is also accurately executed

Carbon tubes are embedded in the rudder surface of the horizontal tail to increase the strength of the rudder surface

Four hinges connect the rudder surface, reduce the rotation resistance and increase the accuracy of rudder surface execution

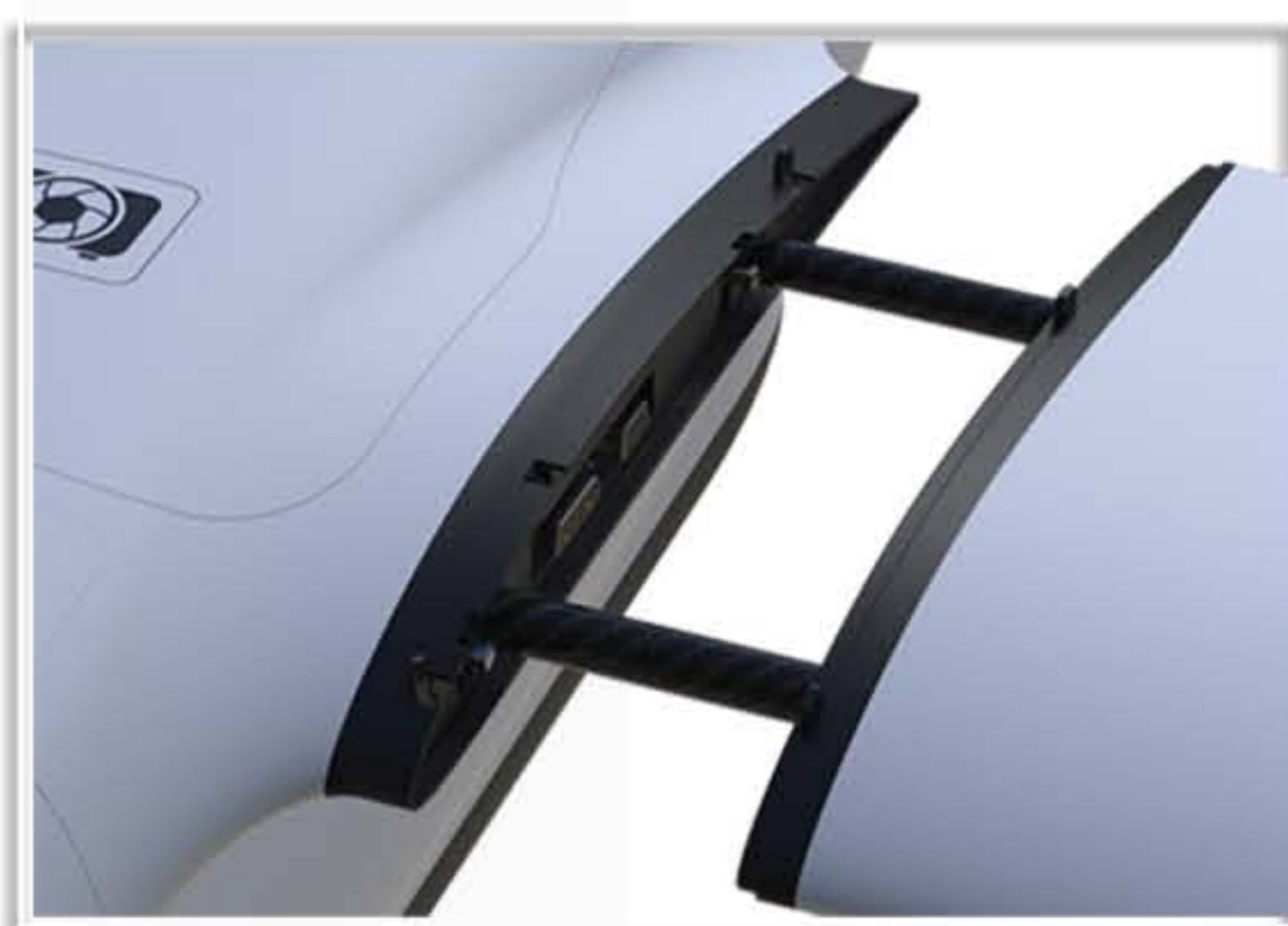


## Wing



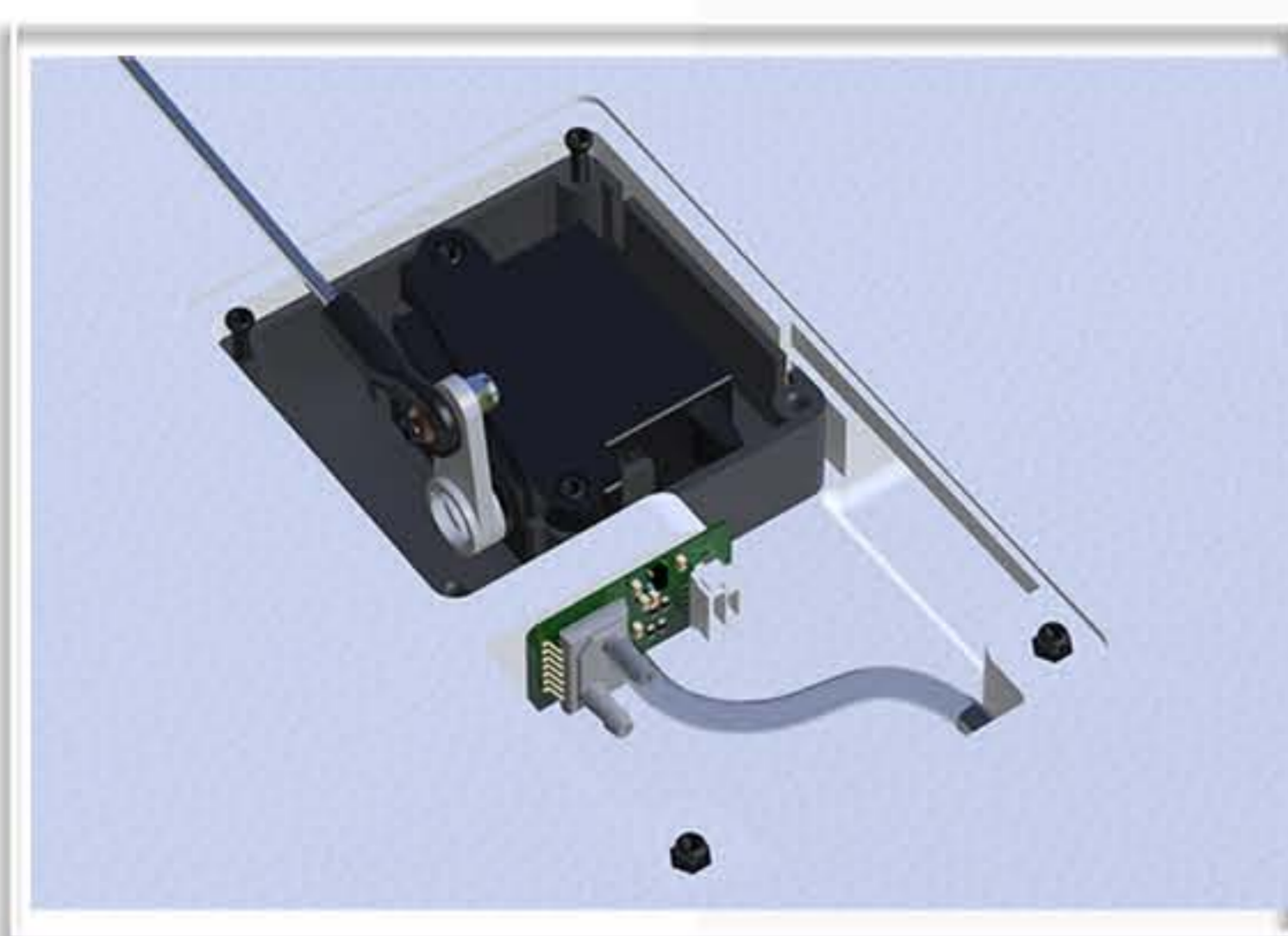
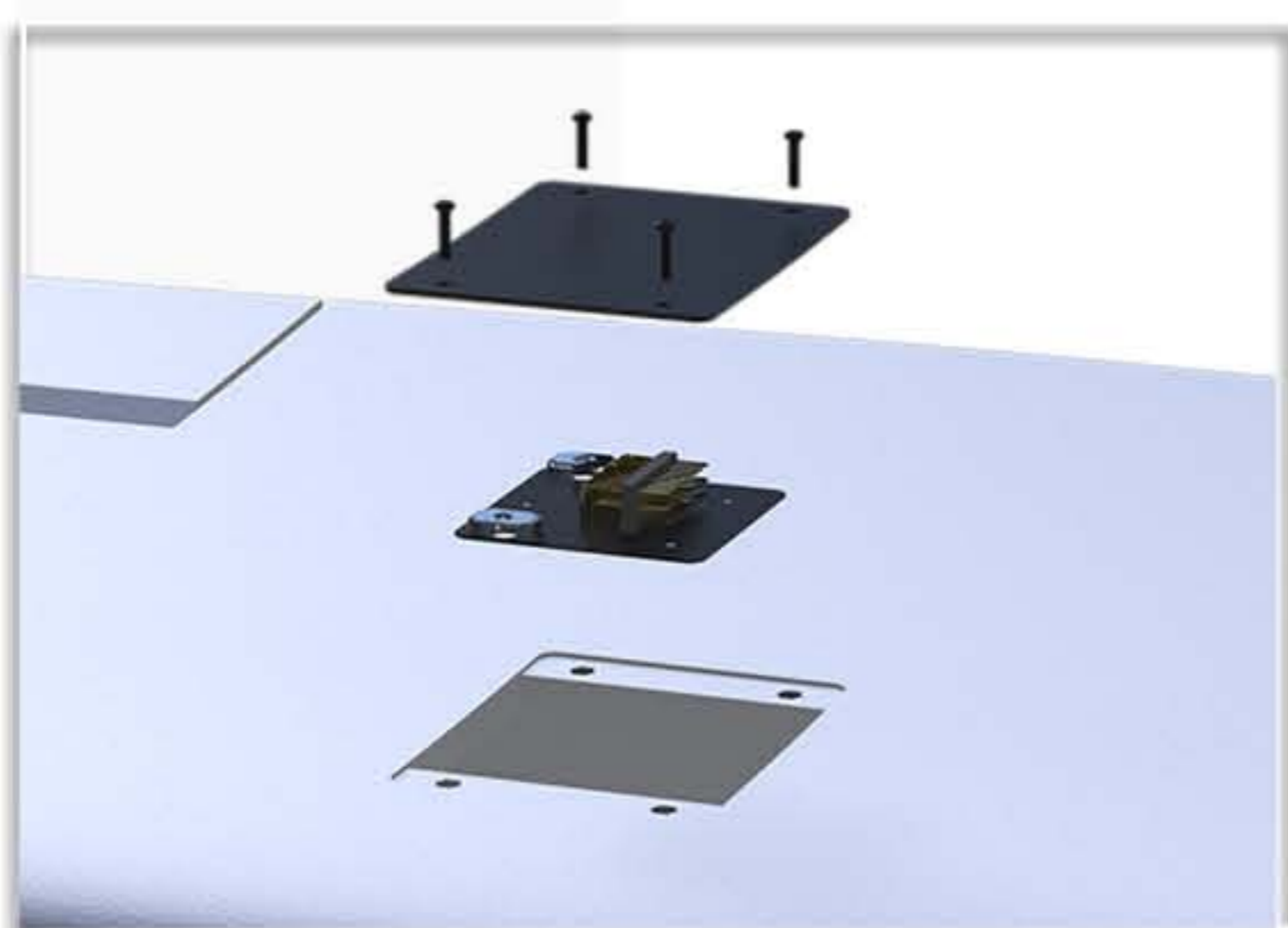
$\phi 12 \times 1000\text{mm}$  Outer covering  
 $\phi 14 \times 560\text{mm}$  Main carbon tube  
 $\phi 12 \times 600\text{mm}$  Auxiliary carbon tube  
Ensure the overall rigidity of the wing.

The wing and fuselage with the embedded box structure enhance the contortion resistance of the wing



Dual connector can realize signal line redundancy, improve system stability, reduce wiring difficulty, and is compatible with 4 + 2 layout

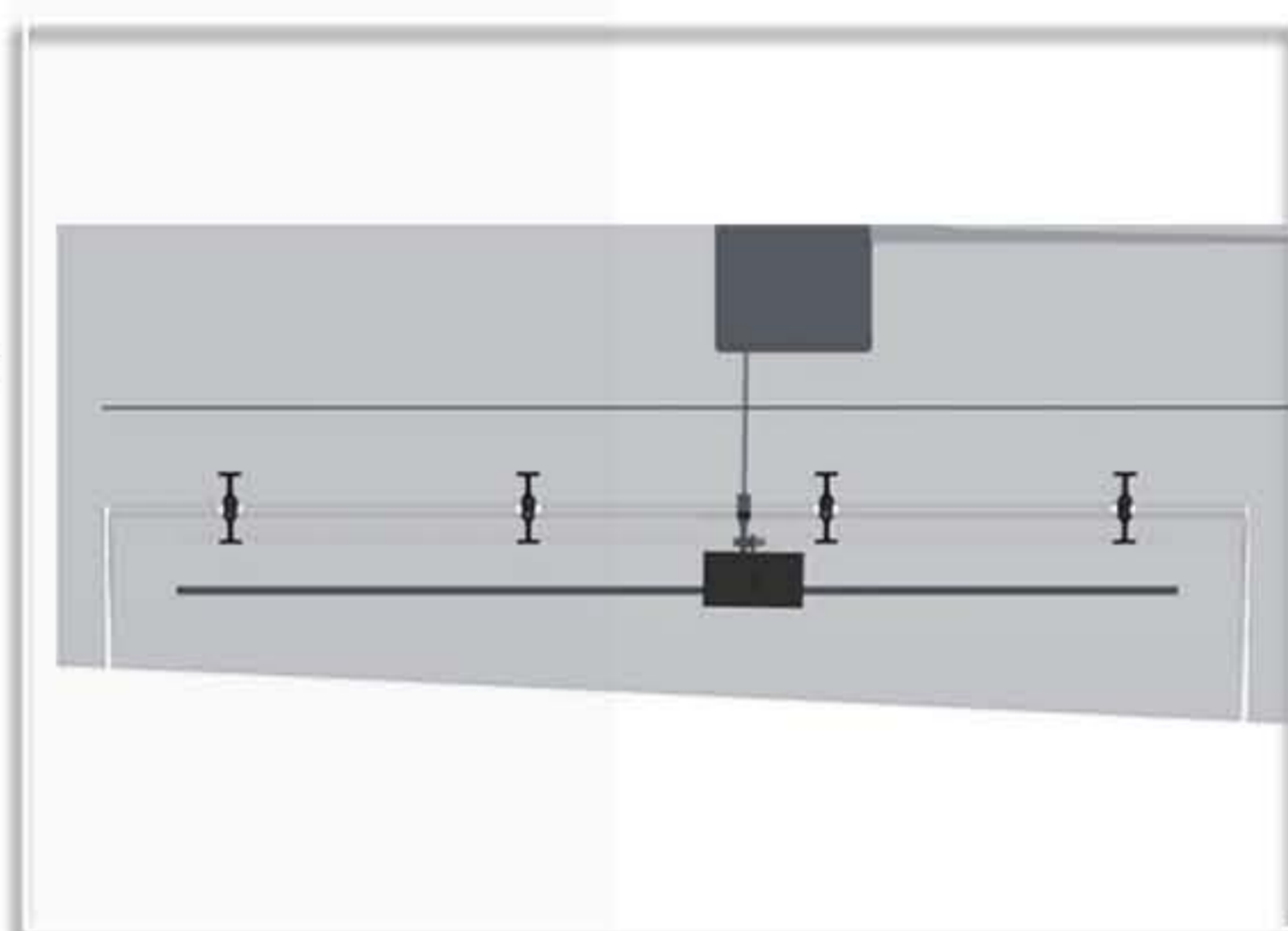
The wing wiring cabin facilitates the installation of power signal cables. With the wiring board, the wing power system can be quickly disassembled and assembled



The aileron servo cabin not only facilitates replacing servo, but also can be equipped with an airspeed meter module to improve the airspeed detection accuracy

Embedded carbon tubes on the Aileron rudder surface increase the strength of rudder surface, increase the rudder angle fixing plate, and increase the rudder surface response speed

Four hinges connect the rudder surface, reduce the rotation resistance and increase the accuracy of

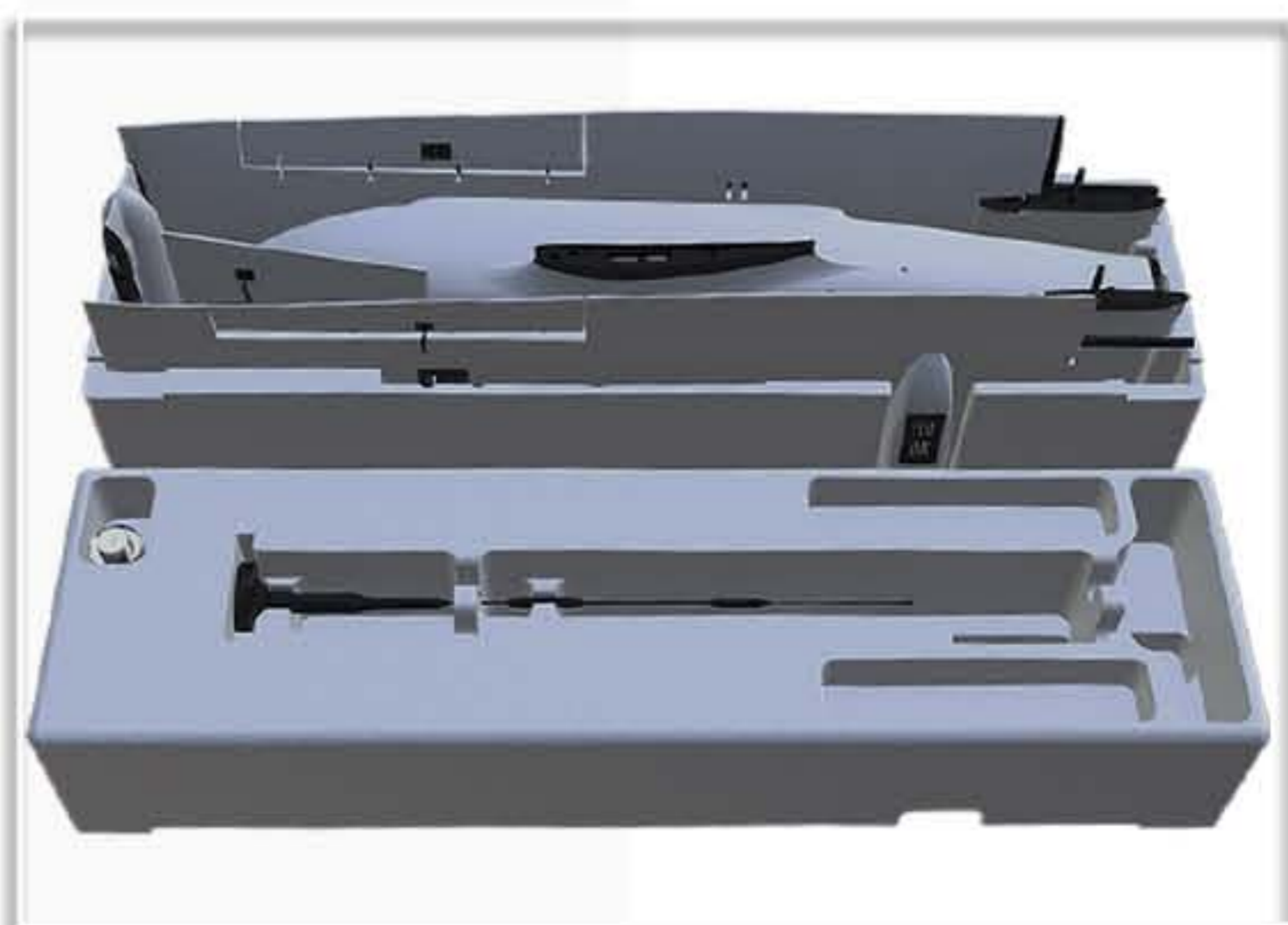


Double forward-pull motor, embedded reinforced board connects the wing carbon tube and the motor frame to ensure the strength and rigidity of the motor frame

## Customized Transport Box



The transport box is made of high-expansion EPS foam, which has light specific gravity, impact resistance and good shock resistance, and is suitable for long-distance transportation

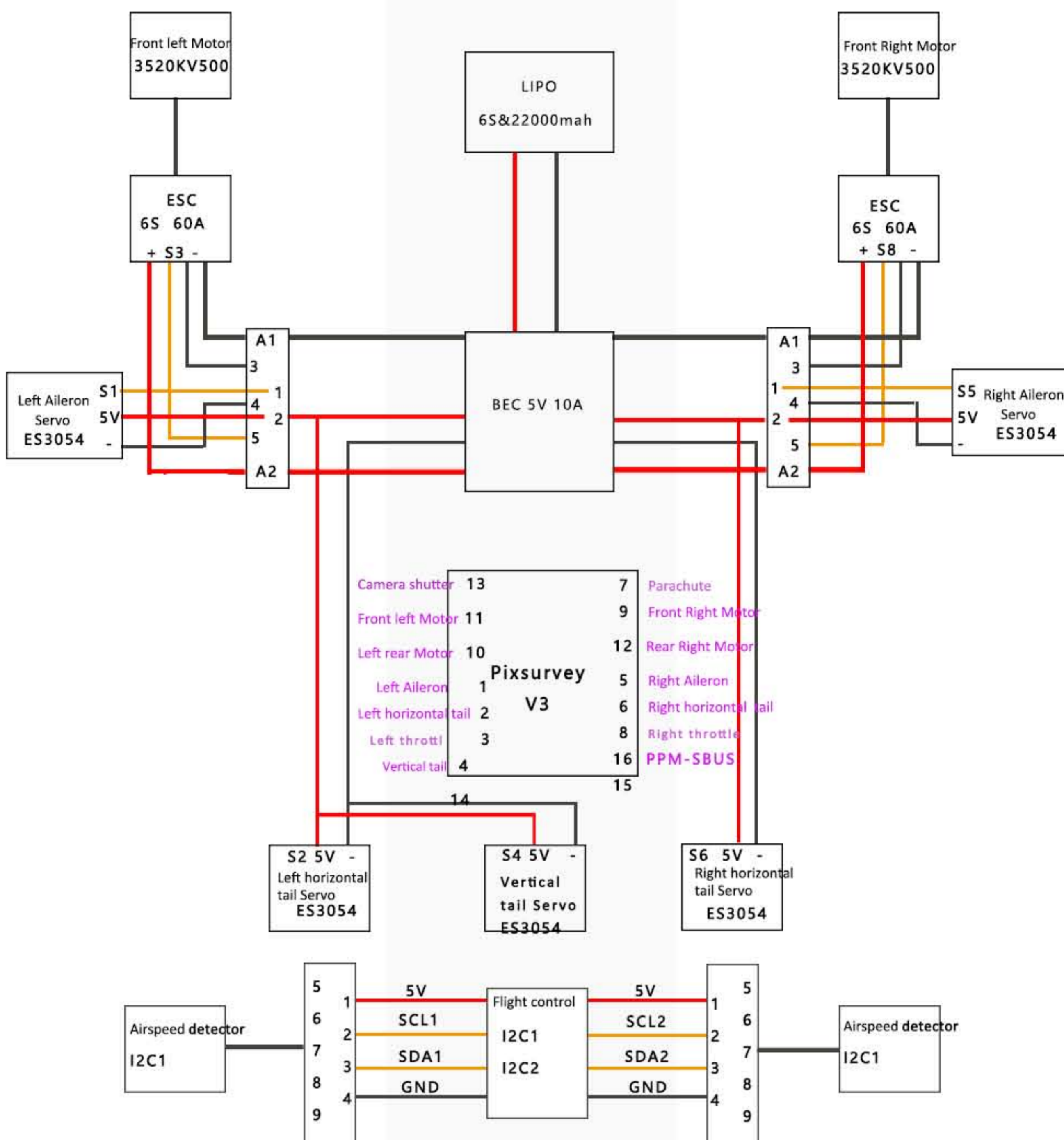


# Technical Support



We have complete user manuals which can be downloaded in our website, and welcome to join our QQ group, aerial survey enthusiasts and technical support are waiting for you here!

## Wiring Diagram



## Configuration List of Spare Parts

Fighter (Hand) Configuration List			
Type	Model	KIT	PNP
Aircraft	Left Wing	1	1
	Right Wing	1	1
	Fuselage	1	1
	Fuselage Fittings	1	1
	Vertical Tail	1	1
	Horizontal Tail	1	1
	Small Components Packet	1	1
	Foam Packing Box	1	1
	Carton	1	1
Power System	Customize 3520 kv500 Motor		2
	APC1510 Propeller CW&CCW		2
	60A Brushless ESC		2
	EMAX ES3054 Servo		5
	EMAX Parachute Servo ES08MD		1
	Customize 6S UBEC 6V10A		1

## Disclaimer

Makeflyeasy aerial survey series products are sensitive items, and the manufacturer does not bear any responsibility for the consequences of direct or indirect derivative accidental injury caused by any reason, and it is forbidden to use in military

Please keep the aircraft out of the reach of children. Make sure that the aircraft is far away from crowds and dangerous objects when flying. Do not carry out any aircraft operation while drinking, fatigue or mental discomfort

## Specifications

Video Capture Resolution	Other	Operator Skill Level	Beginner
Indoor/Outdoor Use	Outdoor	Camera Mount Type	Other
State of Assembly	Unassembled Kit	Controller Mode	MODE1,MODE2
Control Channels	7 Channels	Controller Battery	0
Remote Distance	0	Power Source	Electric
Remote Control	Yes	Package Includes	Original Box
Material	Metal,Plastic,Carbon Fiber,Foam	Features	Auto Return
Recommend Age	14+y	Origin	Mainland China
Aerial Photography	No	Type	Airplane