

# FC200 Flight Control

Model: FC200



## Product description :

Ultra-high cost performance, support RTK&PPK.

The FC200 series flight control and navigation system is designed for aircraft with miniature and small electric conventional fixed wing, vertical takeoff and landing fixed wing and tilting rotor layout. It is internally integrated with flight control computer, micro- integrated navigation system (GPS/MINS), weighing only 85g.

## Features:

High cost effective;

Support external differential GPS (RTK\PPK\ dual antenna orientation function is optional), and the internal single- point positioning GPS module is redundant with each other, and the system automatically

selects GPS data with better positioning status;

Support hand throwing, ejection, parachute, support vertical takeoff and landing, support tilting rotor;

The modes of composite and tilting rotor can be automatically switched, to realize one- key take- off, landing, hovering, setting height, opening an umbrella, etc;

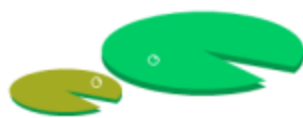
Support off- site automatic take- off and landing, and automatically switch the mission route after the take- off is completed;

The perfect emergency protection mechanism can protect against low voltage, abnormal posture, high altitude, low GPS positioning accuracy, navigation system failure, safety fence exceeding, control radius,

remote control failure, etc;

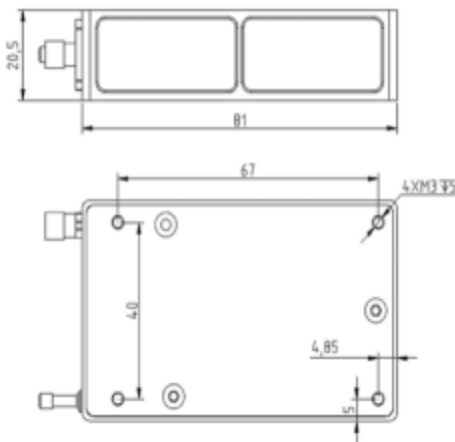
It can preset 100 landing points, and automatically land near the emergency protection;

Provide 8 user routes, each route can add 800 waypoints; automatically generate hovering route,



hovering center, hovering radius, and number of hovering circles can be set;  
 Provide photo (shutter control) tasks in the flight segment, timing/range setting can be set;  
 The flight information and mission information are recorded and downloaded separately. The flight information recording time is up to 9 hours, with the mission information record reaching up to 10,000;  
 The ground monitoring and control software supports online map and irregular multi-measurement automatic mapping route planning, and supports automatic planning of oil and electricity and other patrol routes, which can alert users to complete pre-flight inspection.

### External dimension



FC200: Electric vertical takeoff and landing fixed wing flight control and navigation system.

FC210: Electric tilt rotor flight control and navigation system.

FC250: Electric conventional fixed wing (hand throw, ejection, parachute) flight control and navigation system.

### Performance index

Parameter	index
Attitude precision	1°
Heading precision	2°
Position accuracy	2.5m
Height measuring range	-500m ~ 10000m
The range of voltage monitoring	0 ~ 52V
Voltage monitoring	2 channels
PWM control	8 channels
Digital output range	2 channels (multiplexed with extended serial signal pin)



Expansion serial port	1 channel (multiplexed with digital output signal pin)
Sbus input range	1 channel
Number of routes	8 routes (800 waypoints on each route)
Built-in data logger	9 hours
Photographing point	10000 points
Emergency landing point	100 points
<b>Electrical parameters</b>	
Power supply voltage	DC4.5- 9.0V
Power consumption	< 2W
<b>Physical parameters</b>	
Weight	≤85 g
Dimensions (mm)	81*50*20.5
<b>Environment parameters</b>	
Working temperature	-20°C~ 55°C
Storage temperature	-40°C~ 85°C