

# FC300 Flight Control

Model: FC300



## Product description :

Ultra-high cost performance and ultra-high integration.

The FC300 series, flight control and navigation system, is designed for an aircraft with miniature and small size electric conventional fixed-wing, vertical take-off and landing fixed-wing, also tilt-rotor layout. It is internally integrated with flight control computer, micro-integrated navigation system (GPS/MINS) and a datalink of 30km transmission distance, product's weight is only 95g.

## Features:

Super cost-effective;

Ultra-high integration (internal integrated digital datalink, integrated power supply, weighs only 95 grams);

Support hand throwing, ejection, parachute landing, also vertical take-off and landing, tilt-rotor;

The modes of combined and tilt-rotor can be automatically switched, to meet the functions of one key take-off, landing, hovering, circling, parachute landing, 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 position accuracy, navigation system failure, exceeding of safety and control radius ranges, remote control failure, etc;

It can preset 100 landing points, automatically land nearby according to the emergency;

Provide 8 user routes, each route can add 800 waypoints; automatically generate hovering route, hovering center, hovering radius, and number of hovering circles;

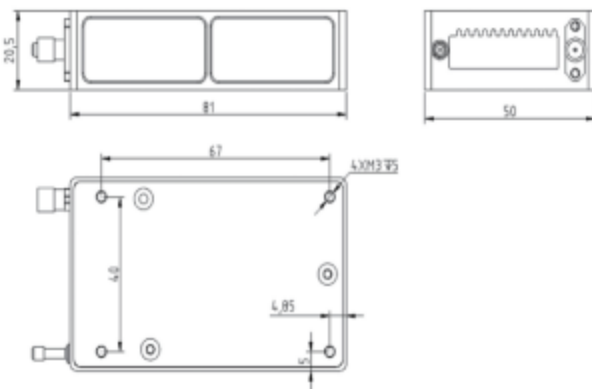
Provide photo (shutter control) function in the flight segment, timing/fixed-distance setting can be set;

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 reach up to 10,000; The ground monitoring and control software support online map and irregular multi- measurement automatic mapping route planning, and support automatic planning of oil, electric and other patrol routes, which can alert users to complete pre- flight inspection.

### External dimension:



FC300: Electric vertical take-off and landing fixed-wing flight control and navigation system

FC310: Electric tilt-rotor flight control and navigation system

FC350: Electric conventional fixed-wing (hand throwing, ejection, parachute landing) 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
Integrated datalink	840 ~ 845MHz, 1W, > 30km
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	< 4W
<b>Physical parameters</b>	
Weight	≤95 g
Dimensions (mm)	81*50*20.5
<b>Environment parameters</b>	
Working temperature	-20°C~ 55°C
Storage temperature	-40°C~ 85°C