



# **KEY FEATURES**

- Simple construction design, easy to assemble in short time
- Full automatic operation, controlled by GCS
- VTOL, no requirement for runway and airspace, high efficiency
- Aircraft-grade reliability, perfect system surveillance warning and emergency processing logic

P310 adopts hybrid configuration design of fixed wing and quadrotor, solving the difficulty of VTOL by this simple and reliable way. P310 has many characteristics, like long endurance, high speed, long flight range and large payload.

## **VTOL**

P310 is VTOL fixed wing UAV, using fixed wing with four rotors of composite wing layout form, in a simple and reliable way to solve the problem of the fixed wing VTOL. P310 owns both long fixed-wing UAV navigation time, high speed and far distance features and the function of the rotorcraft UAV VTOL.

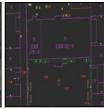
# **Easy to Operate**

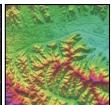
P310 electric UAV can fully automatic & vertical take off and landing, it is easy to assemble without tools and easy to transport, which is an ideal choice for separate operation. Autonomous flight all the way, without operator intervention to complete cruise, flight state transitions, such as VTOL.

## **Application**

For Aerial Photography Powerline/Pipeline Inspection, Disaster Prevention, Geological Survey, Emergency Response, etc.









# **Technical Specifications**

## **Physical**

Wingspan: 2.4 m Fuselage: 1.5 m MTOW: 10 kg Payload: 2 kg Material: Fiberglass

Suitcase Size: 1.5 x 0.5 x 0.5 m

#### Takeoff & Landing

Takeoff & Landing Method: VTOL

Landing Accuracy: 5 cm

#### Performance Specifications(1)

PPK:

Horizontal: 10 mm + 1 ppm RMS Vertical: 20 mm + 1 ppm RMS

## **Flight Specification**

Wind Resistance: 10.7 m/s

Operating Temperature: -20 °C to + 50 °C (-4 °F to 122 °F)

Flight Endurance: 100 min

Battery: 25.2 V, 1 W mAh for rotor wings; 25.2 V, 3 W mAh for fixed wings

Max. Speed: 108 km/h Cruise Speed: 75 km/h Ceiling Altitude: 4 km

#### Camera

Sony A7R (Standard): 36 mega pixel Sony A7RII (Optional): 42 mega pixel

# **Autopilot System**

**GPS Module** 

Data Update Frequency: 10Hz Positioning Accuracy: 2.5M

Tri-Axis Gyroscope

Range: ±300 deg/s

Rate Noise Density: 0.02 deg/s/sqrt(Hz) RMS

Tri-Axis Accelerometer

Range: ±18 G

Noise Density: 0.06 mg/sqrt(Hz) RMS

Tri-Axis Magnetic Sensor

Range: ±8 G

Air Pressure Sensor

Height Resolution: 0.1 m

Dynamic Pressure Range: 13.78 Kpa

Maximum Airspeed: 150 m/s (540 km/h)

Waypoints: 1000+

Internal Data Logger: 32 MB

Aerial POS Quantity: 8000+

Integrated Data Link: 902 928 MHz 1 W > 30 K

# Software (optional)

Pix4D Aerial Mapping Data Processing System (Point Cloud processing, DOM, DSM, DEM, aerial triangulation)

Context Capture Aerial Tilt photography System (Tilt photography data processing, 3D Modeling)

(1) Accuracy and reliability specifications may be affected by multipath, satellite geometry and atmospheric conditions. Performances assume minimum of 5 satellites, follow up of recommended general GPS practices.

Specifications are subject to change without notice.

© 2017 - Shanghai Huace Navigation Technology Ltd. All rights reserved. The Bluetooth® world mark and logos are owned by Bluetooth SIG, Inc. The CHC logo and CHC are trademarks of Shanghai Huace Navigation Technology Limited. All other trademarks are the property of their respective owners – Rev. February 2017

CHC - Shanghai Huace Navigation Technology Ltd. 599 Gaojing Road, Building C 201702 Shanghai, China

Tel: +86 21 542 60 273 Fax: +86 21 649 50 963

Email: sales@chcnav.com | www.chcnav.com