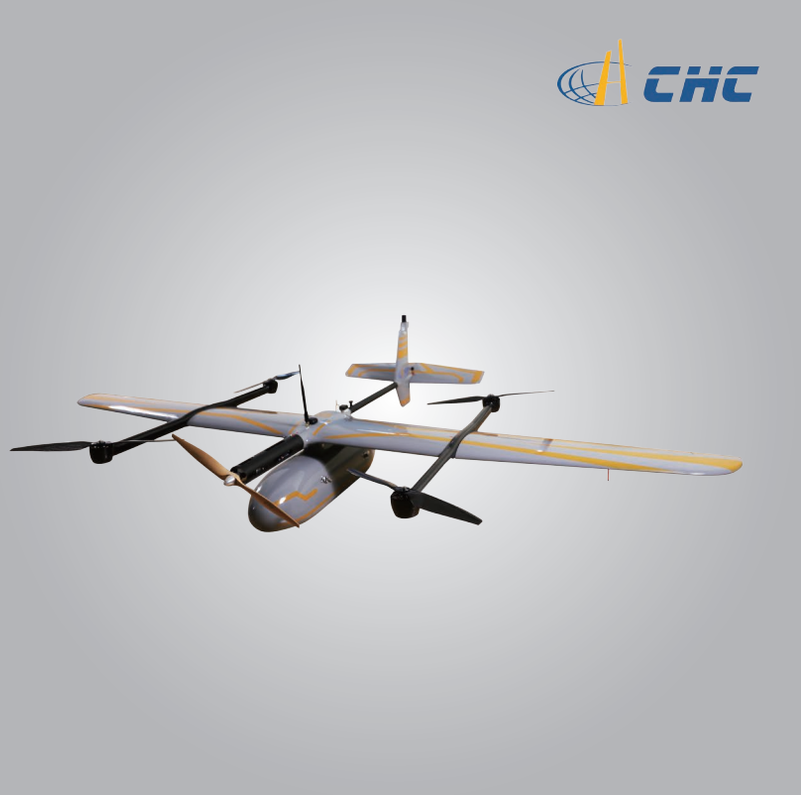
P310

Unmanned Aircraft Systems

- Simple construction design, easy to assemble in 5 min to 8 min
- Full automatic operation, controlled by GCS
- Dual-differential module
- Intelligent PPS and POS data export software
- Vertical take-off and landing (VTOL)
- Aircraftgrade reliability, perfect system surveillance warning and emergency processing



P310 is a innovative VTOL composite wing UAV, using fixed wing with four rotors of composite wing layout form can achieve both long fixed wing UAV navigation time, high speed and far distance features and the function of the rotorcraft UAV.

Dual differential system can achieve RTK and PPK automatic switching based on communication environment. The RTK/PPK vertical and horizontal accuracy can up to centimeter level.

Main body use lightweight macromolecule fiber glass materials and special model design more comply with aerodynamic principle which can achieve long endurance (90 mins), fast cruise speed (20m/s).

P310 electric UAV can fully automatic and easy to assemble without tools, which is an ideal choice for separate operation. Meanwhile, the combination between flight control system and ground control software can realize autonomous flight without operator intervention.

Technical Specifications

Physical

- Wingspan: 2.4 m
- Fuselage: 1.5 m
- MTOW: 10 kg
- Payload: 2 kg
- Material: Fiberglass
- Suitcase Size: 1.5 m x 0.5 m 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 Specifications

- 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, 30000 mAh for fixed wings
  25.2 V, 10000 mAh for rotor wings
- Max. Speed: 108 km/h
- Cruise Speed: 75 km/h
- Ceiling Altitude: 4000 m

Camera

- Sony A7R (standard): 36 mega pixel
- Sony A7RII (optional): 42 mega pixel

Autopilot System

- GPS Module
  - Data Update Frequency: 10 Hz
  - Positioning Accuracy: 2.5 M
- 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)
- TWaypoints: 1000+
- Internal Data Logger: 32 MB
- Aerial POS Quantity: 8000+
- Integrated Data Link: 902 MHz to 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 photo-graphy 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.

CHC - Shanghai Huace Navigation Technology Ltd.
599 Gaojing Road, Building C
201702, Shanghai, China
Tel : +86 21 542 60 273