

# P540V Unmanned Aircraft Systems

- Fix point return, support emergency "Auto Go Home" function
- High-efficiency servo system, take emergency measures in advance
- Optimized PID adjusting algorithm, support hovering, and six-axis stability, fully support static shot
- High Precision navigation, support flight according to customized route
- Support night flying, profoundly improve work efficiency





P540V adopts hyper stable hovering, automatic measurement and control system. It also uses modern, compact design and special materials.

P540V, with 2.0B CAN bus system, excellent control algorithm and AAHRS (Attitude, Height and Heading Reference System), integrates multiple high precision sensors, such as accelerometer, gyroscope and magnetometer. The operation of P540V is much simple that even a beginner can learn how to control within a short time.

P540V has an excellent safety system which makes it hover in the air automatically as soon as the operation of remote control is stopped.

Based on the modular design, the P540V can flexibly replace the airborne equipment to meet the requirement of different tasks. The ability to carry from high-resolution digital camera, video camera to high end thermal infrared imaging camera, also the customized equipment, such as air sampling device, aerial delivery equipment and air cleaning device, makes the P540V an ideal choice for various tasks and applications.

# Technical Specifications

## **Physical**

- Single Rotor Wingspan: 450 mm
- Symmetric Motor Wheelbase: 1350 mm
- Fuselage Diameter: 385 mm
- Undercarriage Size:
  Span: 630 mm
  Height: 500 mm
- MTOW: 15 kg
- Material: Fiberglass

### **Electrical**

- Stator Size: 62 mm
- KV Value: KV170
- Max. Power: 1660 W/R
- Operating Current: 80 A
- Operating Voltage: 50 V
- PWM Driver Frequency: 621 Hz

# **Flight Specifications**

- Payload: 7 kg
- Image Transmission Module: Standard Definition (Optional: High Definition)
- Flight Endurance: 40 min with standard load
- Control Distance: 3 km
- Flight Altitude: 3 km
- Wind Resistance: 13.8 m/s
- Battery: 44.4 V, 22000 mAh
- Operating Temperature: -20 °C to + 40 °C (-4 °F to 104 °F)

# Standard Camera (Sony A6000)

- Type: Full Frame industrial micro camera
- Lens: 20mm F2.8 Fixed Focus Lens
- Pixel: 24-megapixel

#### AS100 Airborne Lidar System (optional)

- GNSS Performance:
  - GPS: L1, L2
    - GLONASS: L1, L2

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- BDS: B1, B2
- Laser Grade: 1 grade
- Range: 100 m
- Accuracy: 3 cm
- Field of View: horizontal 360°, vertical 30° (+15° to -15°)
- Scan Frequency: 5 to 20 Hz
- Point Cloud Density: 300000 pt/s
- Effective Pixels: 424 hundred thousand
- Resolution: 7952 x 5304
- Continuous Shooting: 5 shoot/s

#### **AP5600 Micro Tilt Camera (optional)**

- Size: 230 mm x 260 mm x 260 mm
- Weight: 2.5 kg
- CCD Quantity: 5
- Pixel Size: 4.25 um
- Min. Exposure Interval: 2 s
- Focal Length: 20 mm
- Total Pixels: > 100 million
- Side-looking Camera Inclination Angle: 45°

#### Software (optional)

- Context Capture Aerial Tilt photography System (Tilt photography data processing, 3D Modeling)
- Pix4D Aerial Mapping Data Processing System (Point Cloud processing, DOM, DSM, DEM, aerial triangulation

Specifications are subject to change without notice.

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