

Precise Aerial Imaging System

PAIS D-600 6 Rotor Multicopter

Technical characteristics of PAIS MultiCopter:

- The D-600 can carry mirrorless cameras or DSLR for a 15 to 20 minutes flight with 1 battery set. Optional battery packs of three sets for 45 to 60 minutes jobs.
- ※ Easy operating! Configuring route planning and control software, automatic landing and auto return.
- ※ In addition to FCC auto pilot and flight control IMU attitude recording unit, it also equipped PAIS POS-1 Position and orientation system that can solve precision trace element exterior orientation and to make a direct geopositioning, without ground control points or RTK base station.
- ※ A traditional large-format camera can be equipped with large-scale mapping. Optional GPS+GLONASS or GPS+GLONASS+BEIDOU GNSS can be added to POS-2 high-precision positioning and orientation systems.
- X Configuration 2D gimbal which is capable for tilt and pan photography.
- X Configuration 3D gimbal can be 360-degree panorama photography.

Performance Specifications:

The PAIS D-600 is a 6 rotors type UAS, standard payload capacity for carrying more than 20Mpixcel high resolution digital camera (with video transmitter module), as shown. D-600 can be operated height of up to 500m, each operation endurance time for maximum 20 minutes.

The D-600 is designed for shooting high-definition video of the small area. 6 rotors type UAS with panoramic photography module, in addition to shoot aerial photographs , it also capable for 360 degrees panoramic photo shoot. With 曼Autopana Giga包 software and 曼Pano2VR包 post processing softwares, it can create more comprehensive and intuitive image of the shooting area.

Compact POS is designed for 6 rotor type UAS with integrating GPS module

and micro-electromechanical IMU ADIS16405. GPS module is equipped U-Blox LEA-6T single frequency receiver. Both are providing high precision with a light weight. It is suitable for multirotor type UAS. In addition, the GPS module also supports external time mark recording function, it can record GPS time while shooting images. It can be a reference for a photo and POS data synchronization solution.





- **X** GoPro HERO3+ camera
- ※ GoPro HERO4 camera
- Sony A7R camera/Sony 20/F2.8
- ※ Nikon D750 camera
- ※ Nikon 20mm/F2.8D Lens
- ※ Nikon 28mm/F2.8D Lens
- ※ Olympus E-PL7 camera
- ※ F1.8 17mm lens
- ※ F1.8 25mm lens
- ※ F2.5 14mm lens
- X Canon 6D cameraX Canon F2.8 20mm lens
- **%** Voigtlander F3.5 20mm lens



PAIS D-600 6 Rotor Multicopter



Technical Specifications

Dimensions	Chassis		FCC Autopilot	
Arm length 37cm Central unit Diameter 32.5cm Power system Motor Scorpion KV 420KV Diameter(motor) 40mm Max power 780W Weight(motor) 288g Electronic Speed Controller Drone 40A Propeller Material High-strength plastic Dimensions 16*5.4 cm Operation Max. take off weight 7-9kg Maximum power 4500W Control range 2 km (Max) Endurance 20 mins Maximum Altitude 500m Length [cm] 11.5cm Weight [kg] 265g Drone Weight 5.3iKg Heading [deg] <1 Pitch and Roll [deg] <0.5 Output Noise [deg/sec rms] 0.9 Data update rate[Hz] 200 Accelerometer Performance Range In-run bias stability Velocity random walk ±18 g Output Noise [deg/sec rms] 0.9 Data update rate[Hz] 200 Accelerometer Performance Range In-run bias stability Velocity random walk 2 deg//vhr	Dimensions	110*110*52cm	Power	Consumption Max: 5W (0.3A@12.5V)
Arm length 37cm Central unit Diameter 32.5cm Power system Motor Scorpion KV 420KV Diameter(motor) 40mm Max power 780W Weight(motor) 288g Electronic Speed Controller Drone 40A Propeller Material High-strength plastic Dimensions 16*5.4 cm Operation Max take off weight 7-9kg Maximum power 4500W Control range 2 km (Max) Endurance 20 mins Maximum Altitude 500m Maximum Altitude 500m Operating Temperature -40°C ~ +70°C Drone Weight 5.3kg Max. climb rate 2-2.7m/s Cruise Speed 6-8m/s Wind loading Beaufort scale 5 (10m/s) Battery 65 10000mah -16000mah (li-polymer) Auto Pilot Fail safe Auto/One key go home Point surrounding mode Communication & control frequency 2.4G 12 Prosition orientation GPS.IMU Meight 224g Built-in Receiver Supported Low Voltage Protection External Beceiver Supported Intelligent Orientation Control Sound Alarm 4 Configurable Output Control range > 2 km Max Control range > 2 km Max Control range (Control range Park (Max)) Weight 93g PALS POS-1 Position and Orientation Systems Height [cm] 3.5cm Width [cm] 6.5cm Length [cm] 11.5cm Weight [kg] 265g Pifch and Roil [deg] < 1 Pifch and Roil [deg] < 0.5 Output Noise [deg/sec rms] 0.9 Data update ratel[Hz] 200 Accelerometer Performance Range In-run bias stability Velocity random walk ±18 g 0.2 mg 0.2 mg 0.2 mg/s/hr Communication & control frequency 2.4 GHz Position orientation GPS.IMU Auto Pilot GP	Main blade Length	107cm		
Power system Weight 224g	Arm length	37cm	Diamention	
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Motor Scorpion KV 420KV Diameter(motor) 40mm Max power 780W Weight(motor) 288g Electronic Speed Controller Drone 40A Material High-strength plastic Dimensions 16°5.4 cm Operation Max. take off weight 7~9kg Maximum power 4500W Control range 2 km (Max) Endurance 20 mins Width [cm] 6.5cm Maximum Altitude 500m Length [cm] 11.5cm Operating Temperature 40°C ~ +70°C Drone Weight 5.3Kg Wind loading Beaufort scale 5 (10m/s) Battery 65 10000mah~16000mah (I-polymer) GPS auto pilot Fail safe Auto/One key go home Point surrounding mode Communication & control frequency 2.4 GHz Position orientation (GPS.IMU Accuracy Verticla:±0.5m Modula et al. Dwiss Albus (Low Voltage Protection External Receiver Multiple Control Modes (Low Voltage Protection (External Receiver Multiple Control Modes (Intelligent Control Systems Control range 2 km Max (Control range > 2 km Max (Control range 3.5cm (PS-1 Rosition and Orientation Systems) Height [cm] 3.5cm (Width [cm] 3.5cm (Width [cm] 5.5cm (Weight [kg] 265g (Heading Ideg) < 1.1 (Pich and Roll [deg) < 0.5 (Operating temperature [C] -40 to 85 (Tight orthogonal alignment [deg] 0.05 (Output Noise [deg/sec rms] 0.9 (O			Weight	
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Max power 780W Weight(motor) 288g Electronic Speed Controller Drone 40A Material High-strength plastic Dimensions 16*5.4 cm Operation Max. take off weight 7~9kg Maximum power 4500W Control range 2 km (Max) Endurance 20 mins Width [cm] 3.5cm Maximum Attitude 500m Operating Temperature 40°C ~+70°C Drone Weight 5.3kg Drone Weight 5.3kg Wind loading Baetort scale 5 (10m/s) Battery 65 10000mah~16000mah (1i-polymer) Battery 65 2 suto pilot Auto Pilot Fail safe Auto/One key go home Point surrounding mode Communication & control frequency 2.4 G/2 and East polymer and Communication & control frequency 2.4 G/2 and Max Communication & control fre	KV	420KV		
Max power 780W Selectronic Speed Controller Drone 40A	Diameter(motor)	40mm	Features	
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GCS ground control system Material High-strength plastic Control range >2 km Max Dimensions 16*5.4 cm Communication & control frequency 2.4G(2400MHz ~2483MHz) Operation Diamention (Antena excl.) -10°C ~+60°C Max. take off weight 7~9kg Weight 73mmx47.8mmx17.1mm Maximum power 4500W PAIS POS-1 Position and Orientation Systems Control range 2 km (Max) Height (cm) 3.5cm Endurance 20 mins Width [cm] 6.5cm Maximum Altitude 500m Length [cm] 11.5cm Operating Temperature -40°C ~ +70°C Weight [kg] 265g Drone Weight 5.3kg Heading [deg] <1	Electronic Speed Controller	Drone 40A		
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Operating Temperature -40°C ~ +70°C Drone Weight 5.3Kg Heading [deg] Cruise Speed 6~8m/s Wind loading Beaufort scale 5 (10m/s) Battery 6S 10000mah~16000mah (li-polymer) GPS auto pilot Fail safe Auto/One key go home Point surrounding mode Communication & control frequency 2.4 GHz Position orientation Accuracy Weight [kg] 265g Heading [deg] <1 Pitch and Roll [deg] operating temperature [C] -40 to 85 Tight orthogonal alignment [deg] 0.05 Output Noise [deg/sec rms] 0.9 Data update rate[Hz] 200 Accelerometer Performance Range In-run bias stability Velocity random walk ±18 g 0.2 mg 0.2 mg 0.2 m/s/√hr Gyroscope Performance Input range ±300 deg/sec In-run bias stability 0.007 deg/sec Angular random walk 2 deg/√hr	Endurance	20 mins	Width [cm]	6.5cm
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		Horizontal:±0.5m	gaa. randon man	= <i>5,</i> v

 $^{{}^{*}}$ specofocations are subject to change without notice.

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