

P4R SPECS

● Aircraft	
Weight (Battery & Propellers Included)	1391 g
Max Service Ceiling Above Sea Level	19685 ft (6000 m)
Max Ascent Speed	6 m/s (automatic flight); 5 m/s (manual control)
Max Descent Speed	3 m/s
Max Speed	31 mph (50 kph) (P-mode); 36 mph (58 kph) (A-mode)
Max Flight Time	Approx. 30 minutes
Operating Temperature	32° to 104° F (0° to 40° C)
Operating Frequency	2.400 GHz to 2.483 GHz (Europe, Japan, Korea) 5.725 GHz to 5.850 GHz (United States, China)
EIRP	2.4 GHz CE (Europe) / MIC (Japan) / KCC (Korea): < 20 dBm 5.8 GHz FCC (United States) / SRRC (Mainland China) / NCC (Taiwan, China): < 26 dBm
Hover Accuracy Range	RTK enabled and functioning properly: Vertical: ± 0.1 m; Horizontal: ± 0.1 m RTK disabled: Vertical: ± 0.1 m (with vision positioning); ± 0.5 m (with GNSS positioning) Horizontal: ± 0.3 m (with vision positioning); ± 1.5 m (with GNSS positioning)
Image Position Offset	The position of the camera center is relative to the phase center of the onboard D-RTK antenna under the aircraft body's axis: (36, 0, and 192 mm) already applied to the image coordinates in Exif data. The positive x, y, and z axes of the aircraft body point to the forward, rightward, and downward of the aircraft, respectively.
● GNSS	
Single-Frequency High-Sensitivity GNSS	GPS + BeiDou + Galileo* (Asia); GPS + GLONASS + Galileo* (other regions)
Multi-Frequency Multi-System High-Precision RTK GNSS	Frequency Used GPS: L1/L2; GLONASS: L1/L2; BeiDou: B1/B2; Galileo*: E1/E5 First-Fixed Time: < 50 s Positioning Accuracy: Vertical 1.5 cm + 1 ppm (RMS); Horizontal 1 cm + 1 ppm (RMS). 1 ppm indicates error with a 1 mm increase over 1 km of movement. Velocity Accuracy: 0.03 m/s

● Mapping Functions	
Mapping Accuracy**	Mapping accuracy meets the requirements of the ASPRS Accuracy Standards for Digital Orthophotos Class III.
Ground Sample Distance (GSD)	(H/36.5) cm/pixel, H indicates the aircraft altitude relative to the shooting scene (unit: m)
Acquisition Efficiency	Max operating area of approx. 1 km ² for a single flight (at an altitude of 182 m, i.e., GSD is approx. 5 cm/pixel, meeting the requirements of the ASPRS Accuracy Standards for Digital Orthophotos Class III).
* Supported later. ** The actual accuracy depends on surrounding lighting and patterns, aircraft altitude, mapping software used, and other factors when shooting.	
● Gimbal	
Stabilization	3-axis (pitch, roll, yaw)
Controllable Range	Pitch: -90° to +30°
Max Controllable Angular Speed	Pitch: 90°/s
Angular Vibration Range	±0.02°
● Vision System	
Velocity Range	≤ 31 mph (50 kph) at 6.6 ft (2 m) above ground with adequate lighting
Altitude Range	0 - 33 ft (0 - 10 m)
Operating Range	0 - 33 ft (0 - 10 m)
Obstacle Sensory Range	2 - 98 ft (0.7 - 30 m)
FOV	Forward/Rear: 60° (horizontal), ±27° (vertical) Downward: 70° (front and rear), 50° (left and right)
Measuring Frequency	Forward/Rear: 10 Hz Downward: 20 Hz
Operating Environment	Surfaces with clear patterns and adequate lighting (> 15 lux)
● Infrared Sensing System	
Obstacle Sensory Range	0.6 - 23 ft (0.2 - 7 m)
FOV	70°(Horizontal), ±10°(Vertical)
Measuring Frequency	10 Hz
Operating Environment	Surface with diffuse reflection material, and reflectivity > 8% (such as wall, trees, humans, etc.)
● Camera	
Sensor	1" CMOS; Effective pixels: 20M

Lens	FOV (Field of View) 84°, 8.8 mm (35 mm format equivalent: 24 mm), f/2.8 - f/11, auto focus at 1 m - ∞
ISO Range	Video: 100 - 3200 (Auto), 100 - 6400 (Manual); Photo: 100 - 3200 (Auto), 100 - 12800 (Manual)
Mechanical Shutter	8 - 1/2000 s
Electronic Shutter	8 - 1/8000 s
Max Image Size	4864×3648 (4:3); 5472×3648 (3:2)
Still Photography Modes	Single shot
Video Recording Modes	H.264, 4K: 3840×2160 30p
Photo	JPEG
Video	MOV
Supported File Systems	FAT32 (≤ 32 GB); exFAT (> 32 GB)
Supported SD Cards	microSD, Max Capacity: 128 GB. Write speed ≥15MB/s, class 10 or UHS-1 rating required
Operating Temperature	32° to 104° F (0° to 40° C)
● Remote Controller	
Operating Frequency	2.400 GHz to 2.483 GHz (Europe, Japan, Korea) 5.725 GHz to 5.850 GHz (United States, China)
EIRP	2.4 GHz CE / MIC / KCC: < 20 dBm 5.8 GHz FCC / SRRC / NCC: < 26 dBm
Max Transmission Distance	FCC / NCC: 4.3 mi (7 km); CE / MIC / KCC / SRRC: 3.1 mi (5 km) (Unobstructed, free of interference)
Power Consumption	16 W (typical value)
Display Device	5.5 inch screen, 1920×1080, 1000 cd/m ² , Android system, 4G RAM + 16G ROM
Operating Temperature	32° to 104° F (0° to 40° C)
● Intelligent Flight Battery (PH4-5870mAh-15.2V)	
Capacity	5870 mAh
Voltage	15.2 V
Battery Type	LiPo 4S
Energy	89.2 Wh
Net Weight	468 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Max Charging Power	160 W

● Intelligent Flight Battery Charging Hub (P4CH)	
Voltage	17.5 V
Operating Temperature	41° to 104° F (5° to 40° C)
● Remote Controller Intelligent Battery (WB37-4920mAh-7.6V)	
Capacity	4920 mAh
Voltage	7.6 V
Battery Type	LiPo 2S
Energy	37.39 Wh
Operating Temperature	-4° to 104° F (-20° to 40° C)
● Intelligent Battery Charging Hub (WCH2)	
Input Voltage	17.3 to 26.2 V
Output Voltage and Current	8.7 V, 6 A; 5 V, 2 A
Operating Temperature	41° to 104° F (5° to 40° C)
● AC Power Adapter (PH4C160)	
Voltage	17.4 V
Rated Power	160 W