



PHANTOM 4 RTK

Visionary Intelligence. Elevated Accuracy.

The most compact and accurate low altitude mapping solution.

AIRCRAFT

Take-off Weight:	1391 g	Diagonal Distance:	350 mm
Max Service Ceiling:	6000 m Above Sea Level	Max Ascent Speed:	6 m/s (automatic flight) 5 m/s (manual control)
Max Descent Speed:	3 m/s	Max Flight Time:	Approx. 30 minutes
Max Speed:	50 km/h [P-mode] 58 km/h [A-mode]	Operating Temperature:	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)	Transmission Power (EIRP):	
		2.4 GHz < 20 dBm	CE/MIC/KCC
		5.8 GHz < 26 dBm	FCC/SRRC/NCC
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.		

MAPPING FUNCTION

Mapping Accuracy **	Meets requirements of the ASPRS Accuracy Standard for Digital Orthophotos Class III
Ground Sample Distance (GSD):	(H/36.5) cm/pixel where H = the aircraft altitude relative to shooting scene (unit: m)
Data 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

** The actual accuracy depends on surrounding lighting and patterns, aircraft altitude, mapping software used, and other factors when shooting.

VISION SYSTEM

Velocity Range:	≤ 50 km/h at 2 m above ground with adequate lighting	Altitude Range:	0 - 10 m
FOV: Forward/Rear -	60° (horizontal) ± 27° (vertical)	Operating Range:	0 - 10 m
Downward -	70° (front & rear) 50° (left & right)	Obstacle Sensing Range:	0.7 - 30 m
Operating Environment:	Surfaces with clear patterns and adequate lighting (> 15 lux)	Measuring Frequency:	Forward / Rear - 10 Hz Downward - 20 Hz

INTELLIGENT FLIGHT BATTERY (PH4 – 5870 mAh - 15.2V)

Capacity:	5870 mAh	Voltage Energy:	15.2 V 89.2 Wh
Battery Type:	LiPo 4S	Charging Temp Range:	-10° to 40°C
Net Weight:	468 g	Max charging Power:	160 W

INTELLIGENT BATTERY CHARGING HUB (WCH2)

Input Voltage:	17.3 - 26.2 V	Operating Temp:	5° to 40°C
Output Voltage and Current:	8.7 V ; 6 A 5 V ; 2 A		

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CAMERA

Sensor:	1" CMOS Effective pixels: 20 M		
Lens:	FOV 84° 8.8 mm / 24 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)	Mechanical Shutter Speed:	8 - 1/2000 s
	Photo - 100-3200 (Auto) 100-12800 (Manual)	Electronic Shutter Speed:	8 - 1/8000 s
Max Image Size:	4864×3648 (4:3) 5472×3648 (3:2)	Video Recording Modes:	H.264, 4K 3840×2160 30p
Photo Format:	JPEG	Video Format:	MOV
Supported File Systems:	FAT32 (≤ 32 GB) exFAT (> 32 GB)	Operating Temp Range:	0° to 40°C
Supported SD Cards:	MicroSD Max Capacity: 128 GB. Class 10 or UHS-1 rating required Write speed ≥15 MB/s		

REMOTE CONTROLLER

Operating Frequency:	2.400 GHz to 2.483 GHz (Europe, Japan, Korea) 5.725 GHz to 5.850 GHz (United States, China)	Transmission Power (EIRP):	2.4 GHz < 20 dBm 5.8 GHz < 26 dBm	CE/MIC/KCC FCC/SRRC/NCC
Max Transmission Distance:	FCC: 7 km SRRC / CE / MIC / KCC: 5 km	Power Consumption:	16 W (typical value)	
Display:	5.5 inch screen, 1920×1080, 1000 cd/m ² Android System Memory 4G RAM+16G ROM	Operating Temperature:	0° to 40°C	
		Capacity:	4920 mAh	
		Battery Type:	LiPo 2S	
		Energy:	37.39 Wh	
		Operating Temp:	-20° to 40°C	

SDK REMOTE CONTROLLER

Operating Frequency:	2.400 GHz to 2.483 GHz (Europe, Japan, Korea) 5.725 GHz to 5.850 GHz (Other countries / regions)		
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)		
Built-in Battery:	6000 mAh LiPo 2S	Operating Current / Voltage:	1.2 A @ 7.4 V
Mobile Device Holder:	Tablets and smartphones	Operating Temperature:	0° to 40°C

GNSS

Single-Frequency, High-Sensitivity GNSS Module:	GPS, BeiDou, Galileo (Asia) GPS, GLONASS, Galileo (other regions)		
Multi-Frequency Multi-System High-Precision RTK GNSS:	GPS (L1/L2) ; GLONASS (L1/L2) ; BeiDou (B1/B2) ; Galileo (E1/E5a)		
First-Fixed Time:	< 50 s	Positioning Accuracy:	Vertical 1.5 cm + 1 ppm (RMS) Horizontal 1 cm + 1 ppm (RMS)

GIMBAL

Stabilization:	3-axis (tilt, roll, yaw)	Max Controllable Angular Speed:	90°/s
Pitch:	-90° to +30°	Angular Vibration Range:	±0.02°

INFRARED

Obstacle Sensing Range:	0.2 - 7 m	Measuring Frequency:	10 Hz
Field of View:	70° (Hor) ±10° (Vert)	Operating Environment:	Reflectivity > 8%

AC POWER ADAPTER (PH4C160)

Voltage:	17.4 V	Rated Power:	160 W
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