

Phantom 4 RTK Specs

Aircraft

Takeoff Weight 1391 g

Diagonal Distance 350 mm

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 Range 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)
2.4 GHz

Transmission Power (EIRP) CECE (Europe) / MIC (Japan) / KCC (Korea) : < 20 dBm

5.8 GHz
SRRC (China) / FCC (United States) / (Taiwan,China): < 26 dBm
RTK enabled and functioning properly:
Vertical: ±0.1 m; Horizontal: ±0.1 m

Hover Accuracy Range 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 Functions

Mapping Accuracy **	Mapping accuracy meets 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.
Ground Sample Distance(GSD)	(H/36.5) cm/pixel, H means 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

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 Sensing 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)

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 - ∞ Video:100-3200(Auto) 100-6400(Manual);
ISO Range	Photo:100-3200(Auto) 100-12800(Manual)
Mechanical Shutter Speed	8 - 1/2000 s
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)
Supported SD Cards	MicroSD, Max Capacity: 128 GB. Class 10 or UHS-1 rating required Write speed≥15 MB/s
Operating Temperature Range	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
Charging Temperature Range	14° to 104°F(-10° to 40°C)
Max charging Power	160 W

Intelligent Battery Charing Hub(WCH2)

Input Voltage	17.3 - 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)

GNSS

Single-Frequency, High-Sensitivity GNSS Module	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/E5a
	First-Fixed Time: < 50 s
	Positioning Accuracy: Vertical 1.5 cm + 1

ppm (RMS) ;
 Horizontal 1 cm + 1 ppm (RMS)
 1 ppm means the error has a 1mm increase for every 1
 km of movement from the aircraft.
 *Available soon

Gimbal

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

Infrared

Obstacle Sensing 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.)

Remote Controller

Operating Frequency	2.400 GHz-2.483 GHz(Europe,Japan,Korea) 5.725 GHz-5.850 GHz(United States, China) 2.4 GHz
Transmission Power (EIRP)	CE / MIC / KCC: < 20 dBm 5.8 GHz SRRC / FCC: < 26 dBm
Max Transmission Distance	FCC: 4.3 mi(7 km); SRRC / CE / MIC / KCC: 3.1 mi(5 km) (Unobstrcted, free of interference)
Power Consumption	16 W(typical value)
Display	5.5 inch screen, 1920×1080, 1000 cd/m², Android System Memory 4G RAM+16G ROM
Operating Temperature Range	32° to 104° F (0° to 40°C)

Intelligent Flight Battery Charging Hub(PHANTOM 4 CHARING HUB)

Voltage	17.5 V
Operating Temperature Range	41° to 104°F(5° to 40°C)
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)

AC Power Adapter(PH4C160)

Voltage	17.4 V
Rated Power	160 W