PHANTOM 4 RTK SPECS

HomeProductsPhantom 4 RTKSpecs

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

32° to 104° F (0° to 40°C) **Operating Temperature Range**

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

SRRC (China) / FCC (United States) /(Taiwan,China): < 26 dBm

Hover Accuracy Range RTK enabled and functioning properly:

Vertical: ±0.1 m; Horizontal: ±0.1 m

RTK disabled

Vertical: $\pm 0.1 \, \text{m}$ (with vision positioning); $\pm 0.5~\text{m}~\text{ (with GNSS positioning)}$

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 t axis:(36, 0, and 192 mm) already applied to the image coordinates in Exif data. The positive x, y, and z as body point to the forward, rightward, and downward of the aircraft, respectively.

MAPPING FUNCTIONS

Mapping Accuracy **

Ground Sample Distance(GSD)

Data Acquisition Efficiency

Mapping accuracy meets the requirements of the ASPRS Accuracy Standards for Digital Orthophotos (** The actual accuracy depends on surrounding lighting and patterns, aircraft altitude, mapping softwa factors when shooting

(H/36.5) cm/pixel,

H means the aircraft altitude relative to shooting scene (unit: m)

Max operating area of approx. 1 km² for a single flight(at an altitude of 182 m, i.e., GSD is approx. 5 cm/ requirements of the ASPRS Accuracy Standards for Digital Orthophotos Class III

VISION SYSTEM

Velocity Range \leq 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)

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

FOV 84°; 8.8 mm / 24 mm(35 mm format equivalent:24 mm); Lens

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 Speed

8 - 1/2000 s

Electronic Shutter Speed 8 - 1/8000 s

4864×3648 (4:3) ; 5472×3648 (3:2) Max Image Size

Video Recording Modes H.264, 4K: 3840×2160 30p

Photo Format JPEG MOV Video Format

FAT32 (≤ 32 GB) ; exFAT (> 32 GB) Supported File Systems

MicroSD, Max Capacity: 128 GB. Class 10 or UHS-1 rating required Write speed \geq 15 MB/s Supported SD Cards

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 LiPo 4S Battery Type 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)