



# PHANTOM 4 RTK (SDK)

## Specifications

### • 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 (Other countries/regions)

Transmitter Power (EIRP)	2.4 GHz: < 20 dBm (CE / MIC / KCC) 5.8 GHz: < 26 dBm (FCC / SRRC / NCC)
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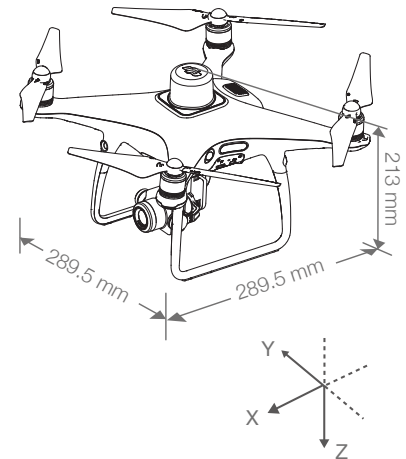
Hover Accuracy Range	RTK enabled and functioning properly: Vertical: $\pm 0.1$ m; Horizontal: $\pm 0.1$ m
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RTK disabled:

Vertical:  $\pm 0.1$  m (with vision positioning);  $\pm 0.5$  m (with GNSS positioning)  
Horizontal:  $\pm 0.3$  m (with vision positioning);  $\pm 1.5$  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)
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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
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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 <sup>2</sup> 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).

● **Gimbal**

Controllable Range	Pitch: -90° to +30°
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● **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)
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)
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)
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. 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 (Other countries/regions)
Transmitter Power (EIRP)	2.4 GHz: < 20 dBm (CE / MIC / KCC); 5.8 GHz: < 26 dBm (FCC / SRRC / NCC)
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 Voltage	1.2 A @ 7.4 V
Mobile Device Holder	Tablets and smartphones
Operating Temperature	32° to 104° F (0° to 40° C)

● **Intelligent Flight Battery (PH4-5870mAh-15.2V)**

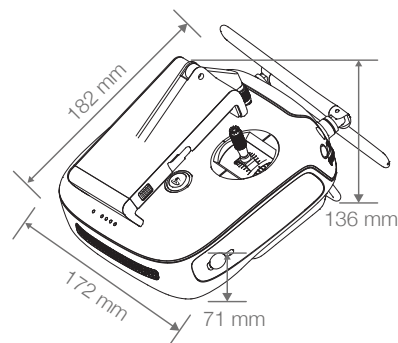
Capacity	5870 mAh
Voltage	15.2 V
Battery Type	LiPo 4S
Energy	89.2 Wh
Net Weight	468 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Max Charging Power	160 W

● **Intelligent Flight Battery Charging Hub (PHANTOM 4 CHARGING HUB)**

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

● **AC Power Adapter (PH4C160)**

Voltage	17.4 V
Rated Power	160 W



Download the user manual for more information:  
<http://www.dji.com/phantom-4-rtk>

\* Supported later.

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

※ This Quick Start Guide is subject to change without prior notice.

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