Specs

GNSS Receiver

GNSS Frequency	GPS: L1C/A, L2C, L5 BDS: B1I, B2I, B3I, B1C, B2a, B2b GALILEO: E1, E5a, E5b, E6 GLONASS: L1, L2 QZSS: L1C/A, L2C, L5 L-Band
System Accuracy*	Base Station Mode (Broadcast Mode) and Relay Station Mode Base Station Accuracy: Single Point Accuracy (Uncalibrated): Horizontal: 1.5 m (RMS) Vertical: 3.0 m (RMS) Satellite-Based Differential Accuracy: Convergence Time: 20 mins Horizontal: 30 cm (RMS) Vertical: 40 cm (RMS) Network RTK Calibration**: Horizontal: 1.0 cm (RMS) + 1 ppm Vertical: 3.0 cm (RMS) + 1 ppm Rover Station Mode RTK Accuracy (Fixed Survey)*: Horizontal: 0.8 cm (RMS) + 1 ppm Vertical: 1.5 cm (RMS) + 1 ppm RTK Accuracy (Tilt Survey)***: Angle Range: 0° to 60° Horizontal: 8 mm + 0.7 mm/° tilt (accuracy <2 cm within 30°) * Measurement accuracy depends on various factors. This value is obtained under normal conditions with an unobstructed view, good sa low ionospheric activity, and no electromagnetic interference or multipath effects. ** Base station calibration coordinate accuracy depends on various factors. For surveying, high-precision flight paths, etc., it is recommen during periods of inactive ionosphere, in open, unobstructed environments with no electromagnetic interference or multipath effects, usi GNSS systems. *** Intense vibrations and rapid rotations can affect the accuracy of the inertial measurement unit.
Satellite-Based Precise Point Positioning*	Supported Frequencies: BDS B2b, GALILEO E6, L-BAND** Convergence Time: 20 mins Horizontal: 30 cm (RMS) Vertical: 40 cm (RMS) * Measurement accuracy depends on various factors. This value is obtained under normal conditions with an unobstructed view, good sa low ionospheric activity, and no electromagnetic interference or multipath effects. ** Will be supported in later versions.

	1. Supports RTCM v3.0, v3.1, v3.2, v3.3, MSM4, MSM5, MSM6, MSM7 protocols. 2. It is recommended to use receivers that support four or more GNSS systems.
Initialization Reliability	>99.9%

Video Transmission

Video Transmission System	O4 Enterprise
Operating Frequency	Relay Station Mode: O4: 2.4 GHz/5.2 GHz/5.8 GHz Base Station Mode: O4: 2.4 GHz/5.8 GHz Rover Station Mode: BLE: 2.4 GHz Operating frequency allowed varies among countries and regions. Please refer to local laws and regulations for more information.
Transmitter Power (EIRP)	2.4000 GHz to 2.4835 GHz: <33 dBm (FCC) < 20 dBm (CE/SRRC/MIC) 5.150 GHz to 5.250 GHz: <23 dBm (CE/FCC) 5.725 GHz to 5.850 GHz: <33 dBm (FCC) <30 dBm (SRRC) <14 dBm (CE)
Bluetooth	Protocol: Bluetooth 5.1 Frequency: 2.400 GHz to 2.4835 GHz Transmitter Power (EIRP): <10 dBm
Max Transmission Distance (unobstructed, free of interference)	Base Station Mode: 1. Between D-RTK 3 and Matrice 400: FCC: 40 km SRRC/CE/JP: 20 km 2. Between D-RTK 3 and other aircraft: FCC: 15 km SRRC: 12 km CE/JP: 8 km Rover Station Mode: Between D-RTK 3 and mobile devices: 30 m Measured in an unobstructed outdoor environment free of interference. The above data shows the farthest communication range for on flights under each standard. Always pay attention to RTH reminders in the app during your flight.
Max Transmission Distance in Relay Station Mode (unobstructed, free of interference)	FCC Between the aircraft and the relay station: 25 km Between the relay station and the remote controller/DJI Dock 3: Recommended within 1 km; maximum (unobstructed, free of interference) SRRC Between the aircraft and the relay station: 12 km Between the relay station and the remote controller/DJI Dock 3: Recommended within 1 km; maximum (unobstructed, free of interference) CE

(unobstructed, free of interference)

* The relay station should be deployed only after a field survey. If there is interference or obstruction at the chosen location, and the surv suitable for deploying dock," "Unable to use RTK positioning," or indicates other unsuitable conditions, the site is not recommended. This functions such as relay station upgrade and log download. It is recommended to install the relay station on rooftops, tower tops, or other unobstructed, and interference-free locations.
** Measured in an unobstructed outdoor environment free of interference. The above data shows the farthest communication range for return flights under each standard. Always pay attention to RTH reminders in the app during your flight. The relay station should be place unobstructed location to ensure clear communication between the remote controller and the aircraft.

Max Transmission Distance (unobstructed, with interference)	Strong interference: City centers, approx. 1.5-5 km Medium interference: Suburban areas, approx. 5-15 km Micro interference: Remote areas/seasides, approx. 15-25 km Data is tested under FCC standards in unobstructed environments of typical interference. Only to serve as a reference and provides no gu actual flight distance.
Max Transmission Distance (obstructed, with interference)	Low Interference and Obstructed by Buildings: approx. 0-0.5 km Low Interference and Obstructed by Trees: approx. 0.5-3 km Data is tested under FCC standards in unobstructed environments of typical interference. Only to serve as a reference and provides no gu actual flight distance.
Relay Station Range Extension Effect	Relay Station Performance Enhancement: Severe obstruction (e.g., buildings, mountains): 3x to 5x performance improvement Mild obstruction (e.g., trees, glass): 1x to 3x performance improvement The relay station must be deployed in an elevated, unobstructed location free of interference.
Antenna	OcuSync 4 directional antennas× 4, 2T4R The antenna uses a standard reverse polarity SMA connector.
Others	D-RTK 3 Relay Fixed Deployment Version: Compatible with DJI Cellular Dongle 2

Electrical Properties

Power	D-RTK 3 Multifunctional Station: Relay Station: 14.5 W* Base Station: 7 W Rover Station: 6.2 W * Maximum power consumption without heating. When connected to a USB-C power supply above 9V, maximum power consumption wil W. D-RTK 3 Relay Fixed Deployment Version : Relay Station: 14.5 W** ** Max power consumption without heating. When connected to a PoE power supply of Type 4, maximum power consumption with heat
Power Output Port	D-RTK 3 Multifunctional Station: USB Type-C D-RTK 3 Relay Fixed Deployment Version: USB Type-C and Ethernet Port (PoE)
Supported Power Adapter	D-RTK 3 Multifunctional Station: USB PD 3.0 protocol, output voltage 9V to 15V adapter (e.g., DJI 65W Portable Charger) When using a non-recommended charger, such as a charger with 5V-output, the D-RTK 3 can be charged only after powering off. D-RTK 3 Relay Fixed Deployment Version: DJI Dock 3 PoE Output Port Third-party PoE Power Supplies:

Battery Operating Time (Under Normal Temperature)*	D-RTK 3 Multifunctional Station: Relay Station: 4 hrs Base Station： 7 hrs Rover Station: 10 hrs D-RTK 3 Relay Fixed Deployment Version: Relay Station： 4 hrs** * Battery performance may decrease in low temperatures; it is recommended to use power adapters that support the USB PD 3.0 protoc ** When powered by PoE, the device battery enters preservation mode and does not fully charge. Upon PoE disconnection, the built-in ba to 2 hours of runtime.
Ethernet Cable Requirements	D-RTK 3 Multifunctional Station: Ethernet not supported D-RTK 3 Relay Fixed Deployment Version: Requires Cat 6 twisted-pair cable, ≤100m length, 6-9mm outer diameter.
Battery	LiPo Capacity: 6500 mAh Energy: 46.8 Wh

Physical Characteristics

Operating Temperature	D-RTK 3 Multifunctional Station: -20° to 55° C (-4° to 131° F) D-RTK 3 Relay Fixed Deployment Version: -30℃ to 55° C (-22° to 131° F) 1. In normal temperature environments, charging power will be limited if the device shell temperature exceeds 48°C (118.4°F). Full power resume after cooling. 2. After storage/use in low temperatures, the device needs to be brought to a normal temperature environment and allowed to warm up battery temperature is >0°C (32°F) before charging. 3. After storage/use in high temperatures, the device needs to be brought to a normal temperature environment and allowed to cool dow internal battery temperature is <45°C (113°F) before charging. 4. When connected to Type 4 PoE power, the D-RTK 3 Relay Fixed Deployment Version enables heating for low-temperature startup.
Altitude	6000 m
Protection Rating	D-RTK 3 Multifunctional Station: IP67* D-RTK 3 Relay Fixed Deployment Version: IP67** * Please ensure all rubber seals are securely installed for optimal performance. ** The rubber seal on the PoE input port of the Fixed Deployment Version provides IPX5-rated protection. IP67 protection requires install dedicated PoE port connector and cable.
Drop Resistance	D-RTK 3 Multifunctional Station: 2 m drop with pole
Dimensions	D-RTK 3 Multifunctional Station: 163 mm × 89 mm (without OcuSync Directional Antennas) D-RTK 3 Relay Fixed Deployment Version: 163 mm × 344 mm
Weight	D-RTK 3 Multifunctional Station: Approx. 1.26 kg (2.78 lbs) D-RTK 3 Relay Fixed Deployment Version: Approx. 2.24 kg (4.94 lbs)