DJI Matrice 400 UK Specification

DJI Matrice 400

Specifications

Aircraft	Takeoff Weight (with propellers)	Without Batteries: 5020±20 g With Batteries: 9740±40 g ^{The actual product weight may vary due to differences in batch materials and external factors.}
Aircraft	Max Takeoff Weight	15.8 kg
Aircraft	Dimensions	Unfolded: 980×760×480 mm (L×W×H) (with landing gear) Folded: 490×490×480 mm (L×W×H) (with landing gear and gimbal) ^{Maximum dimensions excluding propellers.} Aircraft carrying case dimensions: 779×363×528 mm (L×W×H)
Aircraft	Max Payload	6 kg ^{The 6 kg payload is measured at the third gimbal connector under sea level conditions. Payload capacity decreases as altitude increases. For details, refer to the official user manual.}
Aircraft	Propeller Size	25 inches
Aircraft	Diagonal Wheelbase	1070 mm
Aircraft	Max Ascent Speed	10 m/s
Aircraft	Max Descent Speed	8 m/s
Aircraft	Max Horizontal Speed (at sea level, no wind)	25 m/s
Aircraft	Max Takeoff Altitude	7000 m
Aircraft	Max Flight Time (no wind)	59 minutes ^{Measured with the aircraft flying forward at a constant speed of 10 m/s in a windless environment at sea level, carrying only the H30T (total weight 10,670 g), and from 100% battery level until 0%. Data is for reference only. Actual experience may vary depending on the environment, usage, and firmware version.}

Aircraft	Max Hover Time (no wind)	53 minutes ^{Measured with the aircraft hovering in a windless environment at sea level, carrying only the H30T (total weight 10,670 g), and from 100% battery level until 0%. Data is for reference only. Actual usage time may vary depending on the flight mode, accessories, and environment.}
Aircraft	Max Flight Distance (no wind)	49 km ^{Measured by the aircraft flying forward at a constant speed of 17 m/s in a windless environment at sea level, without external payloads, and from 100% battery level until 0%. Actual experience may vary depending on the environment, usage, and firmware version.}
Aircraft	Max Wind Speed Resistance	12 m/s ^{Max wind speed resistance during takeoff and landing.}
Aircraft	Max Yaw Angular Velocity	Yaw: 100°/s
Aircraft	Max Pitch Angle	35°
Aircraft	Operating Temperature	-20° to 50° C (-4° to 122° F) (without solar radiation)
Aircraft	Global Navigation Satellite System (GNSS)	GPS + Galileo + BeiDou + GLONASS* ^{* GLONASS is supported only when the RTK module is enabled.} Equipped with standard airborne ADS-B In receiver and dual antennas, supporting reception up to 20 km.
Aircraft	Hovering Accuracy Range (with moderate or no wind)	Vertical: ±0.1 m (with vision positioning) ±0.5 m (with satellite positioning) ±0.1 m (with RTK positioning) Horizontal: ±0.3 m (with vision positioning) ±0.5 m (with satellite positioning) ±0.1 m (with RTK positioning)
Aircraft	RTK GNSS Accuracy	RTK Fix: 1 cm + 1 ppm (horizontal), 1.5 cm + 1 ppm (vertical)
Aircraft	RTK Heading	Supports RTK heading with an accuracy better than 2°
Aircraft	Airborne ADS-B In	Equipped with standard airborne ADS-B In receiver and dual antennas, supporting reception up to 20 km.
Aircraft	Internal Storage	N/A

Aircraft	Ports	USB-C Debug Port × 1: USB 2.0 E-Port V2 × 4: At the lower part of the drone, with 120W single-port power Cellular Dongle 2 Interface × 2: On the underside of the drone
Aircraft	Propeller Model	2510F
Aircraft	Beacon	Built into the aircraft
Aircraft	Ingress Protection Rating	IP55 ^{The rating is not permanently effective and may decrease due to product wear and tear.}
Gimbal	Maximum Payload for Single Gimbal Connector	1400 g. ^{If the payload exceeds 950 g, the gimbal damper lifespan will decrease from 1000 hours to 400 hours.}
Gimbal	Maximum Payload for Dual Gimbal Connector	950 g
Gimbal	Maximum Payload for Third Gimbal Connector	3 kg for quick-release port, 6 kg for screw lock fastening
Sensing	Sensing Type	Omnidirectional binocular vision system (surround view provided by full-color fisheye vision sensors) Horizontal rotating LiDAR, upper LiDAR and downward 3D infrared range sensor Six-direction mmWave radar
Sensing	Forward	Measurement Range: 0.4-21 m Detection Range: 0.4-200 m Field of View (FOV): 90° (horizontal), 90° (vertical)
Sensing	Backward	Measurement Range: 0.4-21 m Detection Range: 0.4-200 m Field of View (FOV): 90° (horizontal), 90° (vertical)
Sensing	Lateral	Measurement Range: 0.6-21 m Detection Range: 0.5-200 m Field of View (FOV): 90° (horizontal), 90° (vertical)
Sensing	Downward	Measurement Range: 0.5-19 m The FOV to the front and rear is 160° and 105° to the right and left.

Sensing	Operating Environment	Forward, Backward, Left, Right, and Upward: Delicate texture on the surface, adequate light. Downward: The ground has rich textures and sufficient lighting conditions*, with a diffuse reflection surface and a reflectivity greater than 20% (such as walls, trees, people, etc.). ^{* Sufficient lighting conditions refer to an illuminance not lower than that of a nighttime city light scene.}
Sensing	Rotating LiDAR	Standard Measurement Range: 0.5-100 m @ 100,000 lux with 10% reflectivity target Measurement Range for Power Line: 35 m @ 30° @ 10,000 lux for 21.6 mm steel-core aluminum stranded wire with a relative body tilt angle of 30° to the left and right Field of View (FOV): 360° (horizontal), 58° (vertical) Point-Frequency: 520,000 points/second Laser Wavelength: 905 nm Eye Safety Level: Class 1 (IEC60825-1:2014), eye-safe
Sensing	Upper LiDAR (3D ToF)	0.5-25 m at night (reflectivity > 10%) The FOV to the up and down is 60° and 60° to the right and left.
Sensing	Downward 3D Infrared Range Sensor	Measurement Range: 0.3-8 m (reflectivity > 10%) The FOV to the front and rear is 60° and 60° to the right and left.
Sensing	mmWave Radar	Measurement Range for Power Line: 36 m for a 12.5mm steel-core aluminum stranded wire 50 m for a 21.6mm steel-core aluminum stranded wire FOV: ± 45° (horizontal and vertical) ^{The mmWave radar function is unavailable in some countries/regions.}
FPV Camera	Resolution	1080p
FPV Camera	Field of View (FOV)	DFOV: 150° HFOV: 139.6° VFOV: 95.3°
FPV Camera	Frame Rate	30fps
FPV Camera	Night Vision	Starlight Grade

Video Transmission	Video Transmission System	DJI O4 Enterprise Enhanced Video Transmission System
Video Transmission	Live View Quality	Remote Controller: 3-channel 1080p/30fps
Video Transmission	Operating Frequency and Transmitter Power (EIRP)	902-928 MHz: < 30 dBm (FCC), < 16 dBm (MIC) 1.430-1.444 GHz: < 35 dBm (SRRC) 2.4000-2.4835 GHz: < 33 dBm (FCC), < 20 dBm (CE/SRRC/MIC) 5.150-5.250 GHz: < 23 dBm (FCC/CE) 5.725-5.850 GHz: < 33 dBm (FCC), < 14 dBm (CE), < 30 dBm (SRRC) ^{Operating frequency allowed varies among countries and regions. Refer to local laws and regulations for more information.}
Video Transmission	Max Transmission Distance (unobstructed, free of interference)	40 km (FCC) 20 km (CE/SRRC/MIC) ^{Measured in an unobstructed environment free of interference. The above data shows the farthest communication range for one-way, non-return flights under each standard. During your flight, please pay attention to RTH reminder on the DJI Pilot 2 app.}
Video Transmission	Max Transmission Distance (with interference)	Strong interference (dense buildings, residential areas, etc.): approx. 1.5-6 km Medium interference (suburban counties, city parks, etc.): approx. 6-15 km Weak interference (open spaces, remote areas, etc.): approx. 15-40 km ^{Data is tested under FCC standard in unobstructed environments of typical interference. Only to serve as a reference and provides no guarantee as to the actual flight distance.}
Video Transmission	Max Download Speed	Standard Mode: 80Mbps Downlink Playback Download: < 25 MBps Single-Channel Bitrate: ≤ 12 Mbps ^{The above data was measured under conditions where the aircraft and remote controller were in close proximity without interference.}
Video Transmission	Antenna	WLAN Antenna × 8: 6 vertically polarized antennas and 2 horizontally polarized antennas sub2G Antenna × 2: 2 vertically polarized antennas 4G Antenna × 4 Operating Mode: 2T4R

Video Transmission	Others	Supports Dual Control Mode and 2-channel Cellular Dongle 2
Battery	Model	TB100
Battery	Capacity	20254 mAh
Battery	Standard Voltage	48.23 V
Battery	Max Charging Voltage	54.6 V
Battery	Cell Type	Li-ion 13S
Battery	Energy	977 Wh
Battery	Weight	4720 ± 20 g
Battery	Charging Temperature	5° to 45° C (41° to 113° F)
Battery	Discharging Temperature	-20° to 75° C (-4° to 122° F)
Battery	Battery Heating	Single Battery: Support Onboard: Support Battery Station: Support
Battery	Discharge Rate	4C
Battery	Max Charging Power	2C
Battery	Low-Temperature Charging	Supports low-temperature self-heating charging
Battery	Cycle Count	400
Intelligent Battery Station	Model	BS100
Intelligent Battery Station	Net Weight	11.8 kg
Intelligent Battery Station	Dimensions	605×410×250 mm (L×W×H)
Intelligent Battery Station	Supported Batteries	TB100 Intelligent Flight Battery, TB100C Tethered Battery WB37 Battery
Intelligent Battery Station	Operating Temperature	-20° to 40° C (-4° to 104° F)
Intelligent Battery Station	Input	100-240 V (AC), 50-60 Hz, 10 A
Intelligent Battery Station	Output	USB-C： TB100 Battery Interface: 100-110 V: Approx. 1185 W 110-180 V: Approx.1474 W 180-240 V: Approx. 2184 W WB37 Battery Interface: 100-240 V: Approx. 52 W USB-C: 5.0 V 3.0 A, 9.0 V 3.0 A, 12.0 V 3.0 A, 15.0 V 3.0 A, 20.0 V 3.25 A
Intelligent Battery Station	Number of Charging Channels	Three TB100 and two WB37 batteries
Intelligent Battery Station	Charging Mode	Ready-to-Fly Mode 90%; Standard Mode 100% Supports Fast Charging Mode and Silent Mode

Intelligent Battery Station	Charging Time	TB100/TB100C Battery From 0% to 100%: 220 V: 45 minutes (Fast Charging Mode); 110 minutes (Silent Mode) 110 V: 70 minutes (Fast Charging Mode); 110 minutes (Silent Mode) ^{Charging time is measured in a test environment with a temperature of 25° C.}
DJI RC Plus 2 Enterprise Enhanced	Video Transmission System	DJI O4 Enterprise Enhanced Video Transmission System
DJI RC Plus 2 Enterprise Enhanced	Max Transmission Distance (unobstructed, free of interference)	40 km (FCC) 20 km (CE/SRRC/MIC) ^{Measured in an unobstructed environment free of interference. The above data shows the farthest communication range for one-way, non-return flights under each standard. During your flight, please pay attention to RTH reminder on the DJI Pilot 2 app.}
DJI RC Plus 2 Enterprise Enhanced	Video Transmission Operating Frequency and Transmitter Power (EIRP)	902-928 MHz: < 30 dBm (FCC), < 16 dBm (MIC) 1.430-1.444 GHz: < 35 dBm (SRRC) 2.400-2.4835 GHz: < 33 dBm (FCC), < 20 dBm (CE/SRRC/MIC) 5.150-5.250 GHz: < 23 dBm (FCC/CE) 5.725-5.850 GHz: < 33 dBm (FCC), < 14 dBm (CE), < 30 dBm (SRRC) ^{Operating frequency allowed varies among countries and regions. Refer to local laws and regulations for more information.}
DJI RC Plus 2 Enterprise Enhanced	Antenna	2T4R, 2.4GHz/5.8GHz multi-beam high-gain antenna sub2G Module: 2T2R
DJI RC Plus 2 Enterprise Enhanced	Enhanced Transmission	Supports DJI Cellular Dongle 2
DJI RC Plus 2 Enterprise Enhanced	Wi-Fi Protocol	Wi-Fi Direct, Wireless Display, IEEE 802.11 a/b/n/ac/ax Supports 2×2 MIMO Wi-Fi, dual-band simultaneous (DBS) support for dual MAC, with data rates up to 1774.5 Mbps (2×2 + 2×2 11ax dual-band simultaneous)
DJI RC Plus 2 Enterprise Enhanced	Wi-Fi Operating Frequency	2.4000-2.4835 GHz 5.150-5.250 GHz 5.725-5.850 GHz ^{5.2 and 5.8GHz frequencies are prohibited in some countries. In some countries, the 5.2GHz frequency is only allowed for use in indoor.}

DJI RC Plus 2 Enterprise Enhanced	Wi-Fi Transmitter Power (EIRP)	2.4 GHz: < 26 dBm, < 20 dBm (CE/SRRC/MIC) 5.1 GHz: < 23 dBm (FCC/CE/SRRC/MIC) 5.8 GHz: ＜ 23 dBm (FCC/SRRC), ＜ 14 dBm (CE)
DJI RC Plus 2 Enterprise Enhanced	Bluetooth Protocol	Bluetooth 5.2
DJI RC Plus 2 Enterprise Enhanced	Bluetooth Operating Frequency	2.400-2.4835 GHz
DJI RC Plus 2 Enterprise Enhanced	Bluetooth Transmitter Power (EIRP)	＜ 10 dBm
DJI RC Plus 2 Enterprise Enhanced	Screen Resolution	1920 × 1200
DJI RC Plus 2 Enterprise Enhanced	Screen Size	7.02 inches
DJI RC Plus 2 Enterprise Enhanced	Screen Frame Rate	60fps
DJI RC Plus 2 Enterprise Enhanced	Brightness	1400 nits
DJI RC Plus 2 Enterprise Enhanced	Touchscreen Control	10-Point Multi-Touch
DJI RC Plus 2 Enterprise Enhanced	Built-in Battery	2S2P High Energy Density 18650 Lithium-ion Battery (6500 mAh @ 7.2 V) 46.8 Wh
DJI RC Plus 2 Enterprise Enhanced	External Battery	Optional, WB37 (4920 mAh @ 7.6 V) 37 Wh
DJI RC Plus 2 Enterprise Enhanced	Charging Type	Supports PD fast charging, with a maximum 20V/3.25A USB Type-C charger
DJI RC Plus 2 Enterprise Enhanced	Storage Capacity	RAM 8G + ROM 128G UFS + expandable storage via microSD card
DJI RC Plus 2 Enterprise Enhanced	Charging Time	2 hours for internal battery; 2 hours for internal plus external batteries. ^{When remote controller is powered off and using a standard DJI charger.}
DJI RC Plus 2 Enterprise Enhanced	Internal Battery Runtime	3.8 hours
DJI RC Plus 2 Enterprise Enhanced	External Battery Runtime	3.2 hours
DJI RC Plus 2 Enterprise Enhanced	Output Port	HDMI 1.4
DJI RC Plus 2 Enterprise Enhanced	Indicators	Status LED, battery level LED, connection status LED, tricolor light, brightness adjustable according to ambient light
DJI RC Plus 2 Enterprise Enhanced	Speaker	Supports buzzer
DJI RC Plus 2 Enterprise Enhanced	Audio	Array MIC
DJI RC Plus 2 Enterprise Enhanced	Operating Temperature	-20° to 50° C (-4° to 122° F)

DJI RC Plus 2 Enterprise Enhanced	Storage Temperature	Within one month: -30° to 45° C (-22° to 140° F) One to three months: -30° to 35° C (-22° to 113° F) Three months to one year: -30° to 30° C (-22° to 86° F)
DJI RC Plus 2 Enterprise Enhanced	Charging Temperature	5° to 40° C (41° to 104° F)
DJI RC Plus 2 Enterprise Enhanced	Supported Aircraft Model	Matrice 400
DJI RC Plus 2 Enterprise Enhanced	Global Navigation Satellite System	GPS + Galileo + BeiDou
DJI RC Plus 2 Enterprise Enhanced	Dimensions	268×163×94.5 mm (L×W×H) ^{Width including external antenna folded, thickness including handle and controller sticks.}
DJI RC Plus 2 Enterprise Enhanced	Weight	1.15 kg (without external battery)
DJI RC Plus 2 Enterprise Enhanced	Model	TKPL 2
DJI RC Plus 2 Enterprise Enhanced	System Version	Android 11
DJI RC Plus 2 Enterprise Enhanced	External Interfaces	HDMI 1.4, SD 3.0, USB-C with OTG support, max 65W PD charging, USB-A with USB 2.0 support
DJI RC Plus 2 Enterprise Enhanced	Accessories	Strap/waist support
Supported Products	DJI Products Compatible With Matrice 400	Gimbal Cameras: Zenmuse H30, Zenmuse H30T, Zenmuse L2 and Zenmuse P1 Accessories: Zenmuse S1 (drone spotlight), Zenmuse V1 (drone speaker), Manifold 3, DJI RC Plus 2 sub2G SDR Module, DJI Cellular Dongle 2 RTK Station: D-RTK 3 Multifunctional Station, D-RTK 2 Mobile Station Ecosystem Accessories: DJI X-Port DJI E-Port V2 Development Kit DJI E-Port V2 Coaxial Cable Kit DJI SKYPORT V3 Adapter Set DJI SKYPORT V3 Coaxial Cable Kit