DJI Matrice 400

Extended Flight Time, High Speed Performance | 6kg Payload Capacity With Versatile Compatibility | Safe and Reliable Flight | Enhanced Intelligence and Efficiency | Easier Automated Operations | Comprehensive Accessory Upgrades

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.
Max Takeoff Weight	15.8 kg
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)
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.
Propeller Size	25 inches
Diagonal Wheelbase	1070 mm

Max Ascent Speed	10 m/s
Max Descent Speed	8 m/s
Max Horizontal Speed (at sea level, no wind)	25 m/s
Max Takeoff Altitude	7000 m
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.
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.
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.
Max Wind Speed Resistance	12 m/s Max wind speed resistance during takeoff and landing.
Max Yaw Angular Velocity	Yaw: 100°/s
Max Pitch Angle	35°

Operating Temperature	20° to 50° C (-4° to 122° F) (without solar radiation)
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.
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)
RTK GNSS Accuracy	RTK Fix: 1 cm + 1 ppm (horizontal), 1.5 cm + 1 ppm (vertical)
RTK Heading	Supports RTK heading with an accuracy better than 2°
Airborne ADS-B In	Equipped with standard airborne ADS-B In receiver and dual antennas, supporting reception up to 20 km.
Internal Storage	N/A
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
Propeller Model	2510F

Beacon	Built into the 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 exceeds, the gimbal damper lifespan will decrease from 1000 hours to 400 hours.
Maximum Payload for Dual Gimbal Connector	950 g
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

Forward	Measurement Range: 0.4-21 m Detection Range: 0.4-200 m Field of View (FOV): 90° (horizontal), 90° (vertical)
Backward	Measurement Range: 0.4-21 m Detection Range: 0.4-200 m Field of View (FOV): 90° (horizontal), 90° (vertical)
Lateral	Measurement Range: 0.6-21 m Detection Range: 0.5-200 m Field of View (FOV): 90° (horizontal), 90° (vertical)
Downward	Measurement Range: 0.5-19 m The FOV to the front and rear is 160° and 105° to the right and left.
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.
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
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.
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.
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
Field of View (FOV)	DFOV: 150° HFOV: 139.6° VFOV: 95.3°
Frame Rate	30fps
Night Vision	Starlight Grade

Video Transmission

Video Transmission System	DJI O4 Enterprise Enhanced Video Transmission System
Live View Quality	Remote Controller: 3-channel 1080p/30fps
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.
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.
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.
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.
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
Others	Supports Dual Control Mode and 2-channel Cellular Dongle 2

Battery

Model	TB100
Capacity	20254 mAh
Standard Voltage	48.23 V
Max Charging Voltage	54.6 V
Cell Type	Li-ion 13S
Energy	977 Wh
Weight	4720 ± 20 g
Charging Temperature	5° to 45° C (41° to 113° F)
Discharging Temperature	-20° to 75° C (-4° to 122° F)

Battery Heating	Single Battery: Support Onboard: Support Battery Station: Support
Discharge Rate	4C
Max Charging Power	2C
Low-Temperature Charging	Supports low-temperature self-heating charging
Cycle Count	400

Intelligent Battery Station

Model	BS100
Net Weight	11.8 kg
Dimensions	605×410×250 mm (L×W×H)
Supported Batteries	TB100 Intelligent Flight Battery, TB100C Tethered Battery WB37 Battery
Operating Temperature	-20° to 40° C (-4° to 104° F)
Input	100-240 V (AC), 50-60 Hz, 10 A
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
Number of Charing Channels	Three TB100 and two WB37 batteries
Charging Mode	Ready-to-Fly Mode 90%; Standard Mode 100% Supports Fast Charging Mode and Silent Mode
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
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 Operating Frequency and Transmitter Power (EIRP)	902-928 MHz: < 30 dBm (FCC), < 16 dBm (MIC) 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.
Antenna	2T4R, 2.4GHz/5.8GHz multi-beam high-gain antenna sub2G Module: 2T2R
Enhanced Transmission	Supports DJI Cellular Dongle 2
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)
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.
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)
Bluetooth Protocol	Bluetooth 5.2
Bluetooth Operating Frequency	2.400-2.4835 GHz
Bluetooth Transmitter Power (EIRP)	< 10 dBm

Screen Resolution	1920 × 1200
Screen Size	7.02 inches
Screen Frame Rate	60fps
Brightness	1400 nits
Touchscreen Control	10-Point Multi-Touch
Built-in Battery	2S2P High Energy Density 18650 Lithium-ion Battery (6500 mAh @ 7.2 V) 46.8 Wh
External Battery	Optional, WB37 (4920 mAh @ 7.6 V) 37 Wh
Charging Type	Supports PD fast charging, with a maximum 20V/3.25A USB Type-C charger
Storage Capacity	RAM 8G + ROM 128G UFS + expandable storage via microSD card
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.
Internal Battery Runtime	3.8 hours
External Battery Runtime	3.2 hours
Output Port	HDMI 1.4
Indicators	Status LED, battery level LED, connection status LED, tricolor light, brightness adjustable according to ambient light
Speaker	Supports buzzer
Audio	Array MIC

Operating Temperature	-20° to 50° C (-4° to 122° F)
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)
Charging Temperature	5° to 40° C (41° to 104° F)
Supported Aircraft Model	Matrice 400
Global Navigation Satellite System	GPS + Galileo + BeiDou
Dimensions	268×163×94.5 mm (L×W×H) Width including external antenna folded, thickness including handle and controller sticks.
Weight	1.15 kg (without external battery)
Model	TKPL 2
System Version	Android 11
External Interfaces	HDMI 1.4, SD 3.0, USB-C with OTG support, max 65W PD charging, USB-A with USB 2.0 support
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