



Matrice 400

Engineered for Excellence, Designed for Versatility

Built for strength, reliability, and versatility, the DJI Matrice 400 delivers intelligent performance that empowers a wide range of industrial and enterprise applications.

AIRCRAFT

Take-off Weight (with propellers):

Without Batteries:	5020 ± 20 g
With Batteries:	9740 ± 40 g

Dimensions:

Unfolded, with landing gear:	980×760×480 mm
Folded, with landing gear and gimbal:	490×490×480 mm

Max Take-off Weight:	15.8 kg
Max Payload:	6 kg
Propeller Size:	25 inches
Max Descent Speed:	8 m/s

Aircraft carrying case dimensions:	779×363×528 mm
Diagonal Wheelbase:	1070 mm
Max Ascent Speed:	10 m/s
Diagonal Wheelbase:	1070 mm

Max Horizontal Speed:	25 m/s
at sea level, no wind	

Max Take-off Altitude:	7000 m
Operating Temperature:	-20° to 50° C

Max Flight Time (no wind):	59 minutes
Max Flight Distance (no wind):	49 km
Max Yaw Angular Velocity:	100°/s

Max Hover Time (no wind):	53 minutes
Max Wind Speed Resistance:	12 m/s
Max Pitch Angle:	35°

Global Navigation Satellite System (GNSS):

GPS + Galileo + BeiDou + GLONASS

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°

Hovering Accuracy Range (with moderate or no wind):

Vertical:	±0.1 m (with vision positioning)	Horizontal:	±0.3 m (with vision positioning)
	±0.5 m (with satellite positioning)		±0.5 m (with satellite positioning)
	±0.1 m (with RTK positioning)		±0.1 m (with RTK positioning)

Airborne ADS-B In: Equipped with standard airborne ADS-B In receiver and dual antennas, supporting reception up to 20 km.

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

Internal Storage:	N/A
Propeller Model:	2510F

Ingress Protection Rating:	IP55
Beacon:	Built into the aircraft

GIMBAL

Maximum Payload for Single Gimbal Connector:	1400 g
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
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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 FOV front & rear: 160° FOV right & left: 105°
Operating Environment	Forward, Backward, Left, Right & Upward: Downward:	Delicate texture on the surface, adequate light 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.).	

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 aluminium 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 To F):	0.5-25 m at night (reflectivity > 10%) The FOV to the up and down is 60° and 60° to the right and left
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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.
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mmWave Radar	Measurement Range for Power Line:	36 m for a 12.5mm steel-core aluminium stranded wire 50 m for a 21.6mm steel-core aluminium stranded wire
	FOV:	± 45° (horizontal and vertical)

FPV Camera

Field of View (FOV):	DFOV: 150° HFOV: 139.6° VFOV: 95.3°	Resolution:	1080p
		Frame Rate:	30fps
		Night Vision:	Starlight Grade

VIDEO TRANSMISSION

Video Transmission System :	DJI O4 Enterprise Enhanced Video Transmission System		
Diagonal 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)	
Max Transmission Distance : (unobstructed, free of interference)	40 km (FCC) 20 km (CE/SRRC/MIC)		
Max Transmission Distance :	Strong interference:	approx. 1.5-6 km	
	Medium interference:	approx. 6-15 km	
	Weak interference:	approx. 15-40 km	
Max Download Speed :	Standard Mode:	80Mbps Downlink	
	Playback Download:	< 25 MBps	
	Single-Channel Bitrate:	≤ 12 Mbps	

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Antenna:	LAN Antenna ×8 (6 vertically polarized antennas & 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
Battery Heating	Single Battery: Support Onboard: Support Battery Station: Support	Discharge Rate:	4C
		Max Charging Power:	2C
Discharging Temperature:	-20° to 75° C	Cycle Count:	400
Low-Temperature Charging:	Supports low-temperature self-heating charging		

INTELLIGENT BATTERY STATION

Model:	BS100	Supported Batteries:	TB100 Intelligent Flight Battery TB100C Tethered Battery WB37 Battery
Dimensions:	605×410×250 mm		
Net Weight:	11.8 kg		
Operating Temperature:	-20° to 40° C		
Input:	100-240 V (AC), 50-60 Hz, 10 A	Number of Charging Channels:	3x TB100 and 2x WB37 batteries
Output:	USB-C : TB100 Battery Interface: 100-110 V: Approx. 1185 W 110-180 V: Approx. 1474 W 180-240 V: Approx. 2184 W		
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)		

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)		
Video Transmission Operating Frequency & 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)	
Antenna:	2T4R, 2.4GHz/5.8GHz multi-beam high-gain antenna sub2G Module: 2T2R		
Enhanced Transmission:	Supports DJI Cellular Dongle 2		

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Wi-Fi Protocol:	Wi-Fi Direct, Wireless Display, IEEE 802.11 a/b/n/ac/ax Supports 2x2 MIMO Wi-Fi, dual-band simultaneous (DBS) support for dual MAC, with data rates up to 1774.5 Mbps (2x2 + 2x2 11ax dual-band simultaneous)		
Wi-Fi Operating Frequency:	2.4000-2.4835 GHz 5.150-5.250 GHz 5.725-5.850 GHz	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
Screen Resolution:	1920 × 1200	Bluetooth Transmitter Power (EIRP):	< 10 dBm
Screen Size:	7.02 inches	Brightness:	1400 nits
Screen Frame Rate:	60fps	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.		
Internal Battery Runtime:	3.8 hours		
Indicators:	Status LED, battery level LED, connection status LED, tricolor light, brightness adjustable according to ambient light		
External Battery Runtime:	3.2 hours	Output Port:	HDMI 1.4
Speaker:	Supports buzzer	Charging Temperature:	5° to 40° C
Audio:	Array MIC	Supported Aircraft Model:	Matrice 400
Operating Temperature:	-20° to 50° C	GNSS:	GPS + Galileo + BeiDou
Storage Temperature		Dimensions:	268×163×94.5 mm
Within one month:	-30° to 45° C	Weight:	1.15 kg (without external battery)
One to three months:	-30° to 35° C	Model:	TKPL 2
Three months to one year:	-30° to 30° C	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
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