

DJI Matrice 30

The Matrice 30 series integrates multiple high-performance sensors into a lightweight and portable body. Equipped with a remote controller designed for enterprise users and the newly upgraded Pilot 2 flight app, to improve the efficiency of drone operations.

Aircraft

Dimensions (unfolded, excl. propellers)	470×585×215 mm (L×W×H)
Dimensions (folded)	365×215×195 mm (L×W×H)
Diagonal Wheelbase	668 mm
Weight (incl. two batteries)	3770 ± 10 g
Max Takeoff Weight	4069 g
Max Takeoff Weight for C2 Certification in EU	3998 g
Operation Frequency [1]	2.4000-2.4835 GHz; 5.725-5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FCC); <20 dBm (CE/SRRC/MIC) 5.8 GHz: <33 dBm (FCC/SRRC); <14 dBm (CE)
Hovering Accuracy (windless or breezy)	Vertical: ±0.1 m (Vision System enabled); ±0.5 m (N-mode with GPS); ±0.1 m (RTK) Horizontal: ±0.3 m (Vision System enabled); ±1.5 m (N-mode with GPS); ±0.1 m (RTK)

RTK Positioning Accuracy (fixed RTK enabled)	1 cm+1 ppm (horizontal) 1.5 cm+1 ppm (vertical)
Max Angular Velocity	Pitch: 150°/sec.; Yaw: 100°/sec.
Max Pitch Angle	35° (N-mode and Forward Vision System enabled: 25°)
Max Ascent/Descent Speed	6 m/s, 5 m/s
Max Tilt Descent Speed	7 m/s
Max Horizontal Speed	23 m/s
Max Service Ceiling Above Sea Level (without other payload)	5,000 m (with 1671 propellers) 7,000 m (with 1676 propellers)
Max Wind Resistance	12 m/s
Max Hover Time [2]	36 min
Max Flight Time [2]	41 min
Motor Model	3511
Propeller Model	1671 1676 High Altitude (not included)
Ingress Protection Rating [3]	IP55
GNSS	GPS+Galileo+BeiDou+GLONASS (GLONASS is supported only when RTK module is enabled)
Operating Temperature	-20° to 50° C (-4° to 122° F)
Class	C2 (EU)

Gimbal

Angular Vibration Range	$\pm 0.01^\circ$
Controllable Range	Pan: $\pm 90^\circ$ Tilt: -120° to $+45^\circ$
Mechanical Range	Pan: $\pm 105^\circ$ Tilt: -135° to $+60^\circ$ Roll: ± 45

Zoom Camera

Sensor	1/2" CMOS, Effective pixels: 48M
Lens	Focal length: 21-75 mm (equivalent: 113-405 mm) Aperture: f/2.8-f/4.2 Focus: 5 m to ∞
Exposure Compensation	± 3 ev (using 1/3 ev as step length)
Electronic Shutter Speed	Auto Mode: Photo: 1/8000-1/2 s Video: 1/8000-1/30 s M Mode:

	Photo: 1/8000-8 s Video: 1/8000 -1/30 s
ISO Range	100-25600
Max. Video Resolution	3840×2160
Max Photo Size	8000×6000

Wide Camera

Sensor	1/2" CMOS, Effective pixels: 12M
Lens	DFOV: 84° Focal length: 4.5 mm (equivalent: 24 mm) Aperture: f/2.8 Focus: 1 m to ∞
Exposure Compensation	±3 ev (using 1/3 ev as step length)
Electronic Shutter Speed	Auto Mode: Photo: 1/8000-1/2 s Video: 1/8000-1/30 s M Mode: Photo: 1/8000-8 s Video: 1/8000-1/30 s
ISO Range	100-25600

Max. Video Resolution	3840×2160
Photo Size	4000×3000

Thermal Camera

Thermal Imager	Uncooled VOx Microbolometer
Lens	DFOV: 61° Focal length: 9.1 mm (equivalent: 40 mm) Aperture: f/1.0 Focus: 5 m to ∞
Noise Equivalent Temperature Difference (NETD)	≤50 mK@F1.0
Infrared Temperature Measurement Accuracy [4]	±2°C or ±2% (using the larger value)
Video Resolution	Infrared Image Super-resolution Mode: 1280×1024 Normal Mode: 640×512
Photo Size	Infrared Image Super-resolution Mode: 1280×1024 Normal Mode: 640×512
Pixel Pitch	12 um
Temperature Measurement Method	Spot Meter, Area Measurement

Temperature Measurement Range	High Gain Mode: -20° to 150° C (-4° to 302° F) Low Gain Mode: 0° to 500° C (32° to 932° F)
Temperature Alert	Supported
Palette	White Hot/Black Hot/Tint/Iron Red/Hot Iron/Arctic/Medical/Fulgurite/Rainbow 1/Rainbow 2

FPV Camera

Resolution	1920×1080
DFOV	161°
Frame Rate	30 fps

Laser Module

Wavelength	905 nm
Max Laser Power	3.5 mW
Single Pulse Width	6 ns
Measurement Accuracy	$\pm (0.2 \text{ m} + D \times 0.15\%)$ D is the distance to a vertical surface

Measuring Range	3-1,200 m (0.5×12 m vertical surface with 20% reflectivity)
Safety Regulation Level	Class 1M
Accessible Emission Limit (AEL)	304.8 nJ
Reference Aperture	18mm length, 18mm width (20.3mm diameter if equivalent to circular)
Max Laser Pulse Emission Power Within 5 Nanoseconds	60.96 W

Vision Systems

Obstacle Sensing Range	Forward: 0.6-38 m Upward/Downward/Backward/Sideward: 0.5-33 m
FOV	65° (H), 50° (V)
Operating Environment	Surfaces with clear patterns and adequate lighting (> 15 lux)

Infrared Sensing Systems

Obstacle Sensing Range	0.1 to 10 m
FOV	30°

Operating Environment	Large, diffuse, and reflective obstacles (reflectivity >10%)
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TB30 Intelligent Flight Battery

Capacity	5880 mAh
Voltage	26.1 V
Battery Type	Li-ion 6S
Energy	131.6 Wh
Net Weight	Approx. 685 g
Operating Temperature	-20° to 50° C (-4° to 122° F)
Storage Temperature	20° to 30° C (68° to 86° F)
Charging Temperature	-20° to 40° C (-4° to 104° F) (When the temperature is lower than 10° C (50° F), the self-heating function will be automatically enabled. Charging in a low temperature may shorten the lifetime of the battery)
Chemical System	LiNiMnCoO ₂

Auxiliary Lights

Effective Illumination Distance	5 m
Illumination Type	60 Hz, solid glow

Remote Controller

Screen	7.02 inch LCD touchscreen, with a resolution of 1920×1200 pixels, and high brightness of 1200 cd/m ²
Internal Battery	Type: Li-ion (6500 mAh @ 7.2 V) Charge Type: Supports battery station or USB-C charger maximum rated power 65W (max voltage of 20V) Charge Time: 2 hours Chemical System: LiNiCoAlO ₂
External Battery (WB37 Intelligent Battery)	Capacity: 4920 mAh Voltage: 7.6 V Battery Type: Li-ion Energy: 37.39 Wh Chemical System: LiCoO ₂
Operating Time [5]	Internal Battery: Approx. 3 hours 18 min Internal Battery + External Battery: Approx. 6 hours
Ingress Protection Rating [3]	IP54
GNSS	GPS+Galileo+BeiDou
Operating Temperature	-20° to 50° C (-4° to 122° F)

03 Enterprise

Operating Frequency [1]	2.4000-2.4835 GHz, 5.725-5.850 GHz
Max Transmission Distance (unobstructed, free of interference)	15 km (FCC); 8 km (CE/SRRC/MIC)
Max Transmission Distance (with interference)	Strong Interference (urban landscape, limited line of sight, many competing signals): 1.5-3 km (FCC/CE/SRRC/MIC) Medium Interference (suburban landscape, open line of sight, some competing signals): 3-9 km (FCC); 3-6 km (CE/SRRC/MIC) Weak Interference (open landscape abundant line of sight, few competing signals): 9-15 km (FCC); 6-8 km (CE/SRRC/MIC)
Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FCC); <20 dBm (CE/SRRC/MIC) 5.8 GHz: <33 dBm (FCC); <14 dBm (CE); <23 dBm (SRRC)

Wi-Fi

Protocol	Wi-Fi 6
Operating Frequency [1]	2.4000-2.4835 GHz; 5.150-5.250 GHz; 5.725-5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <26 dBm (FCC); <20 dBm (CE/ SRRC/MIC) 5.1 GHz: <26 dBm (FCC); <23 dBm (CE/ SRRC/MIC) 5.8 GHz: <26 dBm (FCC/SRRC); <14 dBm(CE)

Bluetooth

Protocol	Bluetooth 5.1
Operating Frequency	2.4000-2.4835 GHz
Transmitter Power (EIRP)	<10 dBm

BS30 Intelligent Battery Station

Dimensions	353×267×148 mm
Net Weight	3.95 kg
Compatible Battery Type	TB30 Intelligent Flight Battery WB37 Intelligent Battery
Input	100-240 VAC, 50/60 Hz
Output	TB30 Battery Port: 26.1 V, 8.9 A (supported up to two outputs simultaneously) WB37 Intelligent Battery: 8.7 V, 6 A
Output Power	525 W
USB-C port	Max. output power of 65 W
USB-A port	Max. output power of 10 W (5 V, 2 A)

Power Consumption (when not charging battery)	< 8 W
Output Power (when warming up battery)	Approx. 30 W
Operating Temperature	-20° to 40° C (-4° to 104° F)
Ingress Protection Rating [3]	IP55 (with the cover closed properly)
Charging Time [6]	Approx. 30 min (charging two TB30 batteries from 20% to 90%) Approx. 50 min (charging two TB30 batteries from 0% to 100%)
Protection Features	Anti-Backflow Protection Short Circuit Protection Over Voltage Protection Over Current Protection Temperature Protection

Other

Footnotes	<p>[1] 5.8 and 5.1GHz frequencies are prohibited in some countries. In some countries, the 5.1GHz frequency is only allowed for use indoors.</p> <p>[2] The maximum flight time and the hover time were tested in a lab environment and is for reference only.</p> <p>[3] This protection rating is not permanent and may reduce over time after long-term use.</p> <p>[4] Infrared temperature measurement accuracy was tested in a lab environment and is for reference only.</p>
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	<p>[5] The maximum operating time was tested in a lab environment and is for reference only.</p> <p>[6] The charging time was tested in a lab environment at room temperature. The value provided should be used for reference only.</p>
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Guaranteed software updates until	2024/12/31