

DJI Matrice 4 Series

Specs

Aircraft

Takeoff Weight (with propellers) 1219 g*

* The standard weight of the aircraft (including the battery, propellers, and a microSD card). The actual product weight may vary due to differenc

materials and external factors.

Takeoff Weight (with Low-Noise

propellers)

1229 g*

* The standard weight of the aircraft (including the battery, propellers, and a microSD card). The actual product weight may vary due to differenc

materials and external factors.

Max Takeoff Weight Standard Propellers: 1420 g

Low-Noise Propellers: 1430 g

Dimensions Folded: 260.6×113.7×138.4 mm (L×W×H)

Unfolded: 307.0×387.5×149.5 mm (L×W×H)

Maximum dimensions excluding propellers.

Max Payload 200 g

Propeller Size 10.8 in

Diagonal Wheelbase 438.8 mm

Max Ascent Speed 10 m/s

Maximum Ascent Speed With

Accessories

6 m/s

Max Descent Speed 8 m/s

Max Descent Speed With

Accessories

6 m/s

Max Horizontal Speed (at sea

level, no wind)

21 m/s

21 m/s flying forward, 18 m/s flying backward, 19 m/s flying sideways*

* No faster than 19 m/s with Sport mode in EU regions.

Max Altitude 6000 m

Max Operating Altitude with

Payload

4000 m

Max Flight Time (without wind) 49 min (standard propellers)

46 min (low-noise propellers)

Measured with the aircraft flying at approximately 8 m/s without payloads in a windless environment until the battery level reached 0%. Data is f reference only. Actual usage time may vary depending on the flight mode, accessories, and environment. Please pay attention to reminders in the

Max Hover Time (without wind) 42 min (standard propellers)

39 min (low-noise propellers)

Measured with the aircraft flying at approximately 8 m/s without payloads in a windless environment until the battery level reached 0%. Data is f reference only. Actual usage time may vary depending on the flight mode, accessories, and environment. Please pay attention to reminders in the

Max Flight Distance (no wind) 35 km (standard propellers)

32 km (low-noise propellers)

Measured by the aircraft hovering in a windless environment at sea level, from 100% battery level until 0%.

Max Wind Speed Resistance 12 m/s*

* Max wind speed resistance during takeoff and landing.

Max Pitch Angle 35°

Operating Temperature -10°C to 40°C (14°F to 104°F)

GNSS GPS + Galileo + BeiDou + GLONASS*

* GLONASS is supported only when the RTK module is enabled.

Hovering Accuracy Range (windless or breezy)

±0.1 m (with Vision System); ±0.5 m (with GNSS); ±0.1 m (with RTK)

RTK GNSS Accuracy RTK Fix:

1 cm + 1 ppm (horizontal), 1.5 cm + 1 ppm (vertical)

Internal Storage N/A

Ports E-Port interface × 1: Supports official accessories and third-party PSDK devices (hot-swapping is not supporte

E-Port Lite interface × 1: supports USB connection to DJI tuning software and some third-party PSDK devices.

Accessories or expansion modules must be installed before powering on.

Propeller Model 1157F (standard propellers)

1154F (low noise propeller)

Beacon Built into the aircraft

Camera

Image Sensor DJI Matrice 4T

Wide:

1/1.3-inch CMOS, Effective Pixels: 48 MP

Medium Tele Camera:

1/1.3-inch CMOS, Effective Pixels: 48 MP

Telephoto:

1/1.5-inch CMOS, Effective Pixels: 48 MP

DJI Matrice 4E

Wide:

4/3-inch CMOS Effective Pixels: 20 MP

Medium Tele Camera:

1/1.3-inch CMOS, Effective Pixels: 48 MP

Telephoto:

1/1.5-inch CMOS, Effective Pixels: 48 MP

Lens

DJI Matrice 4T

FOV: 82°

Equivalent Focal Length: 24 mm

Aperture: f/1.7 Focus: 1 m to ∞

DJI Matrice 4E FOV: 84°

Equivalent Focal Length: 24 mm

Aperture: f/2.8-f/11 Focus: 1 m to ∞

Medium Tele Camera

FOV: 35°

Equivalent Focal Length: 70 mm

Aperture: f/2.8 Focus: 3 m to ∞

Tele camera FOV: 15°

Equivalent Focal Length: 168 mm

Aperture: f/2.8 Focus: 3 m to ∞

ISO Range

Normal Mode: ISO 100 to ISO 25600

Night Scene Mode:

Matrice 4T:

Wide Camera: ISO 100 to ISO 409600 Midum Tele Camera: ISO 100 to ISO 409600 Tele Camera: ISO 100 to ISO 819200

Matrice 4E:

Wide Camera: ISO 100 to ISO 204800 Midum Tele Camera: ISO 100 to ISO 409600 Tele Camera: ISO 100 to ISO 409600

Shutter Speed

DJI Matrice 4T 2-1/8000 s

DJI Matrice 4E

Wide:

Electronic Shutter: 2-1/8000 s Mechanical Shutter: 2-1/2000 s Medium Telephoto: 2-1/8000 s

Telephoto: 2-1/8000 s

Max Photo Size

DJI Matrice 4T Wide: 8064 × 6048

Medium Telephoto: 8064×6048

Telephoto: 8192 × 6144

DJI Matrice 4E Wide: 5280 × 3956

Medium Telephoto: 8064 × 6048 Telephoto: 8192 × 6144

Minimum Photo Interval

DJI Matrice 4T: 0.7 s DJI Matrice 4E: 0.5 s Still Photography Modes

DJI Matrice 4T:

Wide:

Single: 12 MP/48 MP Interval: 12 MP/48 MP

JPEG: 0.7/1/2/3/5/7/10/15/20/30/60 s

Smart Shooting:12MP

Panorama: 12 MP (raw image);100 MP (stitched image)

Medium Tele Camera: Single: 12 MP and 48 MP Interval: 12 MP/48 MP

JPEG: 0.7/1/2/3/5/7/10/15/20/30/60 s

Smart Shooting: 12MP

Telephoto:

Single: 12 MP and 48 MP Interval: 12 MP/48 MP

JPEG: 0.7/1/2/3/5/7/10/15/20/30/60 s

Smart Shooting: 12MP

DJI Matrice 4E: Single: 20 MP Interval: 20 MP

JPEG: 0.5/0.7/1/2/3/5/7/10/15/20/30/60 s JPEG + RAW: 2/3/5/7/10/15/20/30/60 s

Smart Shooting: 20 MP

Panorama: 20 MP (raw image);100 MP (stitched image)

Medium Tele Camera: Single: 12 MP and 48 MP Interval: 12 MP/48 MP

JPEG: 0.5/0.7/1/2/3/5/7/10/15/20/30/60 s

Smart Shooting: 12 MP

Telephoto:

Single: 12 MP and 48 MP Interval: 12 MP/48 MP

JPEG: 0.5/0.7/1/2/3/5/7/10/15/20/30/60 s

Smart Shooting: 12 MP

Video Codec and Resolution

Video Coding Format: H.264/H.265

Coding Strategy: CBR, VBR

Resolution:

4K: 3840 × 2160@30fps FHD: 1920 × 1080@30fps

Max Video Bitrate

H.264: 60Mbps H.265: 40Mbps

Supported File System

exFAT

Photo Format

DJI Matrice 4T: JPEG

DJI Matrice 4E:

Wide: JPEG/DNG (RAW) Medium Tele Camera: JPEG

Telephoto: JPEG

Video Format

MP4 (MPEG-4 AVC/H.264)

Digital Zoom

Telephoto:

16x (112x hybrid zoom)

NIR Auxiliary Light

Infrared Illumination DJI Matrice 4T:

FOV: 5.7°±0.3°

Laser Module

Laser Rangefinding Measurement Range: 1800 m (1 Hz) @20% reflectivity target*

Oblique Incidence Range (1:5 Oblique Distance): 600 m (1 Hz)

Blind Zone: 1 m

Distance Measurement Accuracy:

1-3 m: System Error <0.3 m, Random Error <0.1 meters @1 σ

Other Distances: ±(0.2+0.0015D) (D represents the measurement distance in meters)

Infrared Thermal Camera

Thermal Imager DJI Matrice 4T: uncooled vanadium oxide (VOx)

DO NOT expose the infrared camera lenses to strong sources of energy such as the sun, lava, or a laser beam. Otherwise, the camera sensor ma

burned leading to permanent damage.

Resolution DJI Matrice 4T: 640 × 512

Pixel Pitch DJI Matrice 4T: 12 μm

Frame Rate DJI Matrice 4T: 30 Hz

Lens DJI Matrice 4T DFOV: 45°±0.3°

DJI Matrice 4T equivalent focal length: 53 mm

DJI Matrice 4T Aperture: f/1.0 DJI Matrice 4T Focus: 5 m to ∞

Sensitivity DJI Matrice 4T: ≤50mk@F1.0

Temperature Measurement

Method

DJI Matrice 4T: Spot Meter, Area Measurement

Temperature Measurement Range DJI Matrice 4T:

High Gain Mode: -20° C to 150° C (-4° F to 302° F) () Low Gain Mode: 0° C to 550° C (32° F to 1022° F)

Palette DJI Matrice 4T:

White Hot/Black Hot/Tint/Iron Red/Hot Iron/Arctic/Medical/Fulgurite/Rainbow 1/Rainbow 2

Photo Format DJI Matrice 4T: JPEG (8bit)、R-JPEG (16bit)

Video Resolution DJI Matrice 4T:

1280 × 1024@30fps (Super Resolution enabled, Night Mode not activated)

Other conditions: 640 × 512@30fps

Video Bitrate DJI Matrice 4T:

6.5Mbps (H.264 640 × 512@30fps) 5Mbps (H.265 640 × 512@30fps) 12Mbps (H.264 1280 × 1024@30fps) 8Mbps (H.265 1280 × 1024@30fps)

Video Format DJI Matrice 4T: MP4

^{*} Performance degradation may occur in rainy or foggy conditions

Still Photography Modes DJI Matrice 4T:

Single: 1280 × 1024/640 × 512 Interval: 1280 × 1024/640 × 512 JPEG: 0.7/1/2/3/5/7/10/15/20/30/60 s

Photo Resolution DJI Matrice 4T:

Infrared: 1280 × 1024 (Super Resolution on)

640 × 512 (Super Resolution off)

Digital Zoom DJI Matrice 4T: 28x

Infrared Wavelength DJI Matrice 4T: 8um to 14um

Infrared TemperatureDJI Matrice 4T: High Gain: ±2°C or ±2%, whichever is greaterMeasurement AccuracyDJI Matrice 4T: Low Gain: ±5°C or ±3%, whichever is greater

Gimbal

Stabilization System DJI Matrice 4T: 3-axis (tilt, roll, pan)

DJI Matrice 4E: 3-axis (tilt, roll, pan)

Mechanical Range DJI Matrice 4T

Gimbal Mechanical Limits:

Tilt: -140° to 113°
Roll: -52° to 52°
Pan: -65° to 65°
Soft Limits:
Tilt: -90° to 35°
Roll: -47° to 47°
Pan: -60° to 60°

DJI Matrice 4E

Gimbal Mechanical Limits:

Tilt: -140° to 50° Roll: -52° to 52° Pan: -65° to 65° Soft Limits: Tilt: -90° to 35° Roll: -47° to 47° Pan: -60° to 60°

Controllable Rotation Range DJI Matrice 4T

DJI Matrice 4T Pan: ±-90° to 35° Pan: Not controllable

DJI Matrice 4E Tilt: -90° to 35° Pan: Not controllable

Max Control Speed (tilt) 100°/s

Angular Vibration Range ±0.007°

Yaw Axis Manual operation is uncontrollable

The MSDK interface program is controllable.

Ingress Protection Rating No Standard Protection Level

Operating Temperature Standard: -10°C to 40°C (14°F to 104°F)

Sensing

Sensing Type Omnidirectional binocular vision system, supplemented with a 3D infrared sensor at the bottom of the aircra

Forward Binocular Measurement Range: 0.4-22.5 m

Measurement Range: 0.4-200 m

Obstacle Avoidance Speed: Flight Speed ≤21 m/s

FOV: 90° (horizontal), 135° (vertical)

Backward Measurement Range: 0.4-22.5 m

Measurement Range: 0.4-200 m

Obstacle Avoidance Speed: Flight Speed ≤21 m/sField of View (FOV)-90° (horizontal), 135° (vertical)

Lateral Measurement Range: 0.5-32 m

Measurement Range: 0.5-200 m

Obstacle Avoidance Speed: Flight Speed ≤21 m/s

FOV: 90° (horizontal), 90° (vertical)

Downward Measurement Range: 0.3-18.8 m

Obstacle Avoidance Speed: Flight Speed ≤10 m/s

The FOV to the front and rear is 160° and 160° 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 reflec

greater than 20% (such as walls, trees, people, etc.).

Video Transmission

Video Transmission System O4 Enterprise

Live View Quality Remote Controller: 1080p/30fps

Operating Frequency 2.400-2.4835 GHz

2.400-2.4835 GHz 5.725-5.850 GHz 5.150-5.250 GHz (CE)

 $Operating\ frequency\ allowed\ varies\ among\ countries\ and\ regions.\ Refer\ to\ local\ laws\ and\ regulations\ for\ more\ information.$

Transmitter Power (EIRP) 2.4 GHz: ≤33 dBm (FCC), ≤20 dBm (CE/SRRC/MIC)

5.8 GHz: <33 dBm (FCC), <30 dB (SRRC), <14 dBm (CE)

5.15-5.25: < 23 dBm (FCC/CE)

Max Transmission Distance

(unobstructed, free of interference)

25 km (FCC) 12 km (CE)

12 km (SRRC)

12 km (MIC)

Measured in an unobstructed environment free of interference. The above data shows the farthest communication range for one-way, non-returned each standard. During your flight, please pay attention to RTH reminder on the DJI Pilot 2 app.

^{*} Sufficient lighting conditions refer to an illuminance not lower than that of a nighttime city light scene.

Max Transmission Distance (with

interference)

Strong Interference - City Centers (approx. 1.5-5 km) Medium Interference - Suburban Areas (approx. 5-15 km) Micro interference: Suburbs/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 guaran

the actual flight distance.

Max Download Speed 20 MB/s

The above data was measured under conditions where the aircraft and remote controller were in close proximity without interference.

Latency (depending on environmental conditions and

mobile device)

130 ms

Under near-field interference-free conditions, the Latency performance when shooting with a 1x lens.

Antenna 8 antennas, 2T4R

Others Cellular Dongle Compartment

Memory Card

Supported SD Cards U3/Class10/V30 or above is required, or use a memory card from the recommended list.

Recommended microSD Cards Lexar 1066x 64GB U3 A2 V30 microSDXC

Lexar 1066x 128GB U3 A2 V30 microSDXC Lexar 1066x 256GB U3 A2 V30 microSDXC Lexar 1066x 512GB U3 A2 V30 microSDXC

Kingston Canvas GO! Plus 64GB U3 A2 V30 microSDXC Kingston Canvas GO! Plus 128GB U3 A2 V30 microSDXC Kingston Canvas GO! Plus 256GB U3 A2 V30 microSDXC Kingston Canvas GO! Plus 512GB U3 A2 V30 microSDXC

Intelligent Flight Battery

Capacity 6741 mAh

Standard Voltage 14.76 V

Max Charging Voltage 17.0 V

Cell Type Li-ion 4S

Energy 99.5 Wh

Weight 401 g

Recharging Temperature $5^{\circ}\text{C to }40^{\circ}\text{C }(41^{\circ}\text{F to }104^{\circ}\text{F})$

Discharge Rate 4C

Max Charging Power 1.8C

Supports low-temperature

charging

Not supported

Cycle Count 200

Power Adapter (100W)

Input 100-240 V (AC), 50-60 Hz, 2.5 A

Output Max. 100 W (total)

When both ports are used, the max output power of one port is 82 W, and the charger will dynamically allocate the output power of the two port

to the power load.

Rated Power 100 W

Charging Hub

Input USB-C: 5-20 V, max 5 A

Battery Interface: 11.2 V to 17 V Output

100 W **Rated Power**

Recharging Type 4 batteries charging in sequence

Support Standard Mode (100% SOC) and Standby Mode (90% SOC)

Compatible Battery DJI Matrice 4E/T Series Intelligent Flight Battery

Charging Temperature 5° to 40° C (41°F to 104°F)

DJI RC Plus 2 Enterprise

Video Transmission System O4 Enterprise

Max Transmission Distance 25 km (FCC) (unobstructed, free of 12 km (CE) interference)

12 km (SRRC) 12 km (MIC)

Measured in an unobstructed environment free of interference. The above data shows the farthest communication range for one-way, non-retuing

under each standard. During your flight, please pay attention to RTH reminder on the DJI Pilot 2 app.

Operating Band of Image

Transmission

2.4000-2.4835 GHz 5.725 - 5.850 GHz 5.1GHz (receive only)

Operating frequency allowed varies among countries and regions. Refer to local laws and regulations for more information.

Antenna 2T4R, built-in multi-beam high-gain antenna

Video Transmission Transmitter

Power (EIRP)

2.4 GHz: <33 dBm (FCC), <20 dBm (CE/SRRC/MIC)

5.1 GHz: <23 dBm (CE)

5.8 GHz: <33 dBm (FCC), <14 dBm (CE), <30 dBm (SRRC)

4G Transmission DJI Cellular Dongle 2

Wi-Fi Protocol Wi-Fi Direct, Wireless Display, IEEE 802.11a/b/g/n/ac/ax

Support 2 \times 2 MIMO Wi-Fi, Dual Band Simultaneous (DBS) with dual MAC, up to 1774.5 Mbps data rate (2 \times 2

11ax DBS)

Wi-Fi Operating Band 2.4000-2.4835 GHz

> 5.150-5.250 GHz 5.725-5.850 GHz

5.8 and 5.2GHz 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 (FCC), <20 dBm (CE/SRRC/ MIC)

5.1 GHz: <23 dBm (FCC)

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 60 fps

Brightness 1400 nits

Touchscreen Control 10 Points 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

Recharging Type Supports PD fast charging, with a maximum specification of 20 V/3.25 A USB Type-C charger.

Storage Capacity ROM 128 G + expandable storage via microSD card

Charging Time 2 hrs for internal battery or internal and external battery.

When remote controller is powered off and using a standard DJI charger.

Internal Battery Runtime 3.8 hrs

External Battery Runtime 3.2 hrs

Output Port HDMI 1.4

Indicators Status light & power light & permission light, three-color light, brightness can be adjusted according to ambie

brightness.

Speaker Supports buzzer

Audio Array MIC

Operating Temperature -20° to 50° C (D228 (-4°F to 122°F)

Storage Temperature Within one month: -30° to 45° C (-22°F to 113°F)

One to three months: -30° to 35° C (-22°F to 95°F) Three months to one year: -30° to 30° C (-22°F to 86°F)

Recharging Temperature 5° to 40° C (41° F to 104° F)

Supported Aircraft Models Support for Matrice 4T/4E

GNSS GPS, Galileo, and BeiDou triple-mode, supports dynamic Home Point refresh.

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, SD3.0, Type-C supports OTG, supports PD charging, maximum power 65W, USB-A supports USB 2.

interface.

Accessory Optional strap/waist support

AL1 Spotlight

Weight 99 g (including bracket)

Approx. 91 g (excluding bracket)

Dimensions 95×164×30 mm (L×W×H,including bracket)

79×164×28 mm (L×W×H, without bracket)

Max. Power 32 W

Illuminance 4.3±0.2 lux @ 100 meters, 17±0.2 lux @ 50 meters

The data was measured in a laboratory environment with the spotlight installed separately on the aircraft at an ambient temperature of 25 °C.

Effective Illumination Angle 23° (10% relative illumination)

Effective Illumination Area 1,300 square meters @ 100 meters (10% relative illumination, Normal Mode)

2,200 square meters @ 100 meters (10% central illuminance, Wide fov Mode)

Operating Mode Supports always-on and strobe modes.

Gimbal Structural Design Range Tilt: -140° to 50°

Controllable Range: Tilt: -90° to 35°

Max Control Speed (tilt) 120°/s

Gimbal Alignment Accuracy ±0.1°

Operating Temperature -20°C to 50°C (-4°F to 122°F)

Mounting Quick-release hand-tightened screws

AS1 Speaker

Weight 92.5 g (including bracket)

Approx. 90 g (excluding bracket)

Dimensions 73×70×52 mm (L×W×H,including bracket)

73×70×47 mm (L×W×H, without bracket)

Max. Power 15 W

Max. Volume At 1 meter, it can reach 114 decibels (114dB@1m).

 $Data\ measured\ in\ a\ laboratory\ environment\ at\ 25^{\circ}C.\ Actual\ conditions\ may\ vary\ slightly\ due\ to\ software\ version,\ audio\ source,\ specific\ environment\ at\ 25^{\circ}C.$

other factors. The final effect is subject to actual use.

Effective Broadcast Distance 300 m

Data measured in a laboratory environment at 25°C. Actual conditions may vary slightly due to software version, audio source, specific environment of the first state of the software version.

other factors. The final effect is subject to actual use.

Broadcast Mode Real-time broadcasting (supports echo suppression*), recorded broadcasting, media import (supports simul

transmission and playback), text-to-speech**

 $\ensuremath{^{\star}}$ Need to upgrade to the latest firmware.

** Currently only supports Chinese and English.

Operating Temperature -20°C to 50°C (-4°F to 122°F)

Mounting Quick-release hand-tightened screws