

<https://enterprise.dji.com/mavic-3-enterprise/specs>

Mavic 3 Enterprise: Technical Specification

Micro-UAS Remote Pilot Course

General Spec

Weight:

DJI Mavic 3E: 915 g

DJI Mavic 3T: 920 g

Max Takeoff Weight: 1050 g

Dimensions (excl. propellers)

347.5×283×107.7 mm (L×W×H) unfolded

221×96.3×90.3 mm (L×W×H) (folded)

Performance

- Max Speed:
 - 15 m/s (Normal Mode) 54 km/h
 - 21 m/s, (Sport Mode) 75.6 km/h
- Max Flight time: 45 mins (No Wind)
- Max Wind Resistance: 12 m/s 43.2 km/h
- Portability: Foldable design and 915 g
- Battery Charging: 88w (Direct) 100w (Hub) 70min

Camera & Imaging

- Wide Camera:
 - 20MP 4/3 CMOS sensor
 - mechanical shutter
 - .7 second interval shooting
- Tele Camera:
 - 12MP
 - 8x (56x hybrid zoom)
- Low-Light Performance: 3.3µm pixel size
- Thermal Options: 640×512 resolution

Precision & Safety

- RTK Module :
 - Centimeter-level accuracy
- Obstacle Avoidance:
 - Omnidirectional sensors “APAS 5.0”
- Transmission:
 - DJI O3 Enterprise system
 - 15 km range(FCC)
 - 1080p live feed
- AirSense
 - ADS-B receiver

Software & Workflow

- DJI Pilot 2: [Interface](#)
- DJI Terra: [2D / 3D Models](#)
- FlightHub 2 : [Fleet mgmt. and collab tools](#)
- DJI Thermal Analysis Tool 3: [Temperature analysis of infrared image](#)
- DJI Assistant 2 (Enterprise Series): [Device mgmt \[Log extaction, update\]](#)
- DJI Decrypt Tool: [Decrypt SD card](#)

Security & Compliance

- Local Data Mode
- AES-256 Encryption

Accessories & Bundles

- RTK Module
- Loudspeaker: 100 m @ 70 dB
- Charger / Charging hub
- Spotlight

Key Consideration for Pilots

- **Mapping efficiency**
 - Mechanical shutter → No motion blur
 - RTK module → cm level precision
- **Durability**
 - Operation temp range -10°C to 40°C
- **Data Security**
 - AES encryption
 - Local Data Mode
- **Safety / compliance**
 - ADS-B
 - Obstacle avoidance.

Search and Rescue

Thermal Imaging

- 640 * 512 resolution
- Temperature measurement
- High-temperature alerts
- isotherms
- Split –screen zoom (28x)
- Real Time Monitoring
 - 1080p / 30 fps
 - DJI O3 Enterprise Transmission [15 km FCC / 8km other]
- Low-Light Performance
 - 3.3µm pixel sensor
 - Intelligent Low-Light Mode

Security Operation

- 56x Hybrid Zoom
- 12MP telephoto camera
- Spotlight
- Loudspeaker
- Obstacle Avoidance
- Data Security

Mapping

- **Mechanical Shutter**
 - 0.7-second interval shooting
- **RTK Module**
 - centimeter-level precision
- **Efficiency**
 - 45-minute flight time
 - 2 km² per mission
- **SW**
 - DJI Terra – 2D / 3D maps (offline app available)

Aircraft

Dimensions (unfolded, excl. propellers)

347.5×283×107.7 mm (L×W×H)

Dimensions (folded, excl. propellers)

221×96.3×90.3 mm (L×W×H)

Diagonal Wheelbase

380.1 mm

Weight (with propellers, without accessories)

DJI Mavic 3E: 915 g

DJI Mavic 3T: 920 g

Max Takeoff Weight

DJI Mavic 3E: 1,050 g

DJI Mavic 3T: 1,050 g

Aircraft

Max Ascent Speed

6 m/s (Normal Mode)

8 m/s (Sport Mode)

Max Descent Speed

6 m/s (Normal Mode)

6 m/s (Sport Mode)

Max Flight Speed (at sea level, no wind)

15 m/s (Normal Mode) 54 km/h

Forward: 21 m/s, Side: 20 m/s, 75.6 km/h

Backward: 19 m/s (Sport Mode) 68.4 km /h [2]

Aircraft

Max Wind Speed Resistance

12 m/s [3]

Max Take-off Altitude Above Sea Level

6000 m (without payload)

Max Flight Time (no wind)

45 mins [4]

Max Hover Time (no wind)

38 mins

Max Flight Distance

32 km

Max Pitch Angle

- 30° (Normal Mode)
- 35° (Sport Mode)

Aircraft

- Max Angular Velocity: 200°/s
- **GNSS: GPS+Galileo+BeiDou+GLONASS** (GLONASS is supported only when the RTK module is enabled)
- **Hovering Accuracy**
 - Vertical: ± 0.1 m (with Vision System); ± 0.5 m (with GNSS); ± 0.1 m (with RTK)
 - Horizontal: ± 0.3 m (with Vision System); ± 0.5 m (with High-Precision Positioning System); ± 0.1 m (with RTK)
- **Operating Temperature Range**
 - -10° to 40° C (14° to 104° F)

Wide Camera

Sensor

- DJI Mavic 3E: 4/3 CMOS, Effective pixels: 20 MP
- DJI Mavic 3T: 1/2-inch CMOS, Effective pixels: 48 MP

Lens

- DJI Mavic 3E:
 - FOV: 84°
 - Format Equivalent: 24 mm
 - Aperture: f/2.8-f/11
 - Focus: 1 m to ∞
- DJI Mavic 3T:
 - FOV: 84°
 - Format Equivalent: 24 mm
 - Aperture: f/2.8
 - Focus: 1 m to ∞

Wide Camera

- **ISO Range**
 - DJI Mavic 3E: 100-6400
 - DJI Mavic 3T: 100-25600
- **Shutter Speed**
 - DJI Mavic 3E:
 - Electronic Shutter: 8-1/8000 s
 - Mechanical Shutter: 8-1/2000 s
 - DJI Mavic 3T:
 - Electronic Shutter: 8-1/8000 s
- **Max Image Size**
 - DJI Mavic 3E: 5280×3956
 - DJI Mavic 3T: 8000×6000

Wide Camera

Still Photography Modes

- DJI Mavic 3E:
 - Single: 20 MP
 - Timed: 20 MP
 - JPEG: 0.7/1/2/3/5/7/10/15/20/30/60 s
 - JPEG+RAW: 3/5/7/10/15/20/30/60 s
 - Smart Low-light Shooting: 20 MP
 - Panorama: 20 MP (raw image)
- DJI Mavic 3T:
 - Single: 12 MP/48 MP
 - Timed: 12 MP/48 MP
 - JPEG: 2/3/5/7/10/15/20/30/60 s*
 - Panorama: 12 MP (raw image); 100 MP (stitched image)

** Shooting 48MP photo does not support 2s interval
Smart Low-light Shooting: 12 MP*

Wide Camera

- **Video Resolution**
 - H.264
 - 4K: 3840×2160@30fps
 - FHD: 1920×1080@30fps
- **Bitrate**
 - DJI Mavic 3E:
 - 4K: 130 Mbps
 - FHD: 70 Mbps
 - DJI Mavic 3T:
 - 4K: 85 Mbps
 - FHD: 30 Mbps

Wide Camera

Supported File Formats

exFAT

Photo Format

DJI Mavic 3E: JPEG/DNG (RAW)

DJI Mavic 3T: JPEG

Video Format

MP4 (MPEG-4 AVC/H.264)

Tele Camera

Sensor

1/2-inch CMOS, Effective pixels: 12 MP

Lens

FOV: 15°

Format Equivalent: 162 mm

Aperture: f/4.4

Focus: 3 m to ∞

ISO Range

DJI Mavic 3E: 100-6400

DJI Mavic 3T: 100-25600

Shutter Speed

Electronic Shutter: 8-1/8000 s

Tele Camera

Max Image Size

4000×3000

Photo Format

JPEG

Video Format

MP4 (MPEG-4 AVC/H.264)

Still Photography Modes

DJI Mavic 3E:

Single: 12 MP

Timed: 12 MP

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

Smart Low-light Shooting: 12 MP

DJI Mavic 3T:

Single: 12 MP

Timed: 12 MP

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

Smart Low-light Shooting: 12 MP

Tele Camera

Video Resolution

- H.264
- 4K: 3840×2160@30fps
- FHD: 1920×1080@30fps

Bitrate

- DJI Mavic 3E:
 - 4K: 130 Mbps
 - FHD: 70 Mbps
- DJI Mavic 3T:
 - 4K: 85 Mbps

- FHD: 30 Mbps

Digital Zoom

8x (56x hybrid zoom)

Thermal Camera

Thermal Imager

Uncooled VOx Microbolometer

Pixel Pitch

12 μm

Frame Rate

30 Hz

Lens

DFOV: 61°

Format Equivalent: 40 mm

Aperture: f/1.0

Focus: 5 m to ∞

Noise Equivalent Temperature Difference (NETD)

$\leq 50 \text{ mK@F1.0}$

Temperature Measurement Method

Spot Meter, Area Measurement

Thermal Camera

Temperature Measurement Range

-20° to 150° C (-4° to 302° F, High Gain Mode)

0° to 500° C (32° to 932° F, Low Gain Mode)

Palette

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

Photo Format

JPEG (8-bit)

R-JPEG (16-bit)

Video Resolution

640×512@30fps

Bitrate

6 Mbps

Thermal Camera

Video Format

MP4 (MPEG-4 AVC/H.264)

Still Photography Modes

DJI Mavic 3T:

Single: 640×512

Timed: 640×512

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

Digital Zoom

28x

Infrared Wavelength

8-14 μm

Infrared Temperature Measurement Accuracy

$\pm 2^{\circ}\text{C}$ or $\pm 2\%$ (using the larger value)

Gimbal

Stabilization

3-axis (tilt, roll, pan)

Mechanical Range

DJI Mavic 3E:

Tilt: -135° to 100°

Roll: -45° to 45°

Pan: -27° to 27°

DJI Mavic 3T:

Tilt: -135° to 45°

Roll: -45° to 45°

Pan: -27° to 27°

Controllable Range

Tilt: -90° to 35°

Pan: Not controllable

Max Control Speed (tilt)

$100^{\circ}/s$

Angular Vibration Range

$\pm 0.007^{\circ}$

Sensing

Type

Omnidirectional binocular vision system, supplemented with an infrared sensor at the bottom of the aircraft.

Forward

Measurement Range: 0.5-20 m

Detection Range: 0.5-200 m

Effective Sensing Speed: Flight Speed ≤ 15 m/s

FOV: Horizontal 90°, Vertical 103°

Backward

Measurement Range: 0.5-16 m

Effective Sensing Speed: Flight Speed ≤ 12 m/s

FOV: Horizontal 90°, Vertical 103°

Sensing

Lateral

Measurement Range: 0.5-25 m
Effective Sensing Speed: Flight Speed ≤ 15 m/s
FOV: Horizontal 90°, Vertical 85°

Upward

Measurement Range: 0.2-10 m
Effective Sensing Speed: Flight Speed ≤ 6 m/s
FOV: Front and Back 100°, Left and Right 90°

Downward

Measurement Range: 0.3-18 m
Effective Sensing Speed: Flight Speed ≤ 6 m/s
FOV: Front and Back 130°, Left and Right 160°

Operating Environment

Forward, Backward, Lateral, and Upward: Surface with a clear pattern and adequate lighting (lux >15)
Downward: Diffuse reflective surface with diffuse reflectivity >20% (e.g. walls, trees, people) and adequate lighting (lux >15)

Video Transmission

Video Transmission System

DJI O3 Enterprise Transmission

Live View Quality

Remote Controller: 1080p/30fps

Operating Frequency [6]

2.400-2.4835 GHz

5.725-5.850 GHz

Max Transmission Distance (unobstructed, free of interference) [7]

DJI Mavic 3E:

FCC: 15 km

CE: 8 km

SRRC: 8 km

MIC: 8 km

DJI Mavic 3T:

FCC: 15 km

CE: 8 km

SRRC: 8 km

MIC: 8 km

Video Transmission

Max Transmission Distance (Obstructed) [8]

Strong Interference (dense buildings, residential areas, etc.): 1.5-3 km (FCC/CE/SRRC/MIC)

Medium Interference (suburban areas, city parks, etc.): 3-9 km (FCC), 3-6 km (CE/SRRC/MIC)

Low Interference (open spaces, remote areas, etc.): 9-15 km (FCC), 6-8 km (CE/SRRC/MIC)

Max Download Speed[9]

15 MB/s (with DJI RC Pro Enterprise)

Latency (depending on environmental conditions and mobile device)

Approx. 200 ms

Antenna

4 Antennas, 2T4R

Transmission Power (EIRP)

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

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

DJI RC Pro Enterprise

Video Transmission System

DJI O3 Enterprise Transmission

Max Transmission Distance (unobstructed, free of interference) [7]

FCC: 15 km

CE/SRRC/MIC: 8 km

Video Transmission Operating Frequency [6]

2.400-2.4835 GHz

5.725-5.850 GHz

Antenna

4 Antennas, 2T4R

Video Transmission 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 (SRR)

DJI RC Pro Enterprise

Wi-Fi Protocol

802.11 a/b/g/n/ac/ax

Support 2×2 MIMO Wi-Fi

Wi-Fi Operating Frequency [6]

2.400-2.4835 GHz

5.150-5.250 GHz

5.725-5.850 GHz

Wi-Fi 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

DJI RC Pro Enterprise

Bluetooth Operating Frequency

2.400-2.4835 GHz

Bluetooth Transmitter Power (EIRP)

< 10 dBm

Screen Resolution

1920×1080

Screen Size

5.5 inches

Screen

60 fps

Brightness

1,000 nits

Touchscreen Control

10-point multi-touch

DJI RC Pro Enterprise

Battery

Li-ion (5000 mAh @ 7.2 V)

Charging Type

Recommended to be charged with the included DJI USB-C Power Adapter (100W) or USB charger at 12V or 15V

Rated Power

12 W

Storage Capacity

Internal Storage (ROM): 64 GB

Supports a microSD card for expanded capacity.

Charging Time

Approx. 1 hour 30 minutes (with the included DJI USB-C Power Adapter (100W) only charging the remote controller or a USB charger at 15 V)

Approx. 2 hours (with a USB charger at 12 V)

Approx. 2 hours 50 minutes (with the included DJI USB-C Power Adapter (100W) charging the aircraft and remote controller simultaneously)

DJI RC Pro Enterprise

Operating Time

Approx. 3 hours

Video Output Port

Mini-HDMI port

Operating Temperature Range

-10° to 40° C (14° to 104° F)

Storage Temperature

- 30° to 60° C (-22° to 140° F) (within one month)
- 30° to 45° C (-22° to 113° F) (one to three months)
- 30° to 35° C (-22° to 95° F) (three to six months)
- 30° to 25° C (-22° to 77° F) (more than six months)

DJI RC Pro Enterprise

Charging Temperature

5° to 40° C (41° to 104° F)

Supported DJI Aircraft[10]

DJI Mavic 3E

DJI Mavic 3T

GNSS

GPS+Galileo+GLONASS

Dimensions

Antennas folded and controller sticks unmounted:

183.27×137.41×47.6 mm (L×W×H)

Antennas unfolded and controller sticks mounted:

183.27×203.35×59.84 mm (L×W×H)

Weight

Approx. 680 g

Model

RM510B

Storage

Supported Memory Cards

Aircraft: U3/Class10/V30 or above is required.

A list of recommended microSD cards can be found at

<https://enterprise.dji.com/mavic-3-enterprise/specs>

Battery

Capacity

5000 mAh

Standard Voltage

15.4 V

Max Charging Voltage

17.6 V

Type

LiPo 4S

Chemical System

LiCoO₂

Energy

77 Wh

Weight

335.5 g

Charging Temperature

5° to 40° C (41° to 104° F)

Charging Time

1 hour 20 min

Charger

Input

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

Output Power

100 W

Output

Max. 100 W (total)

When both ports are used, the maximum output power of each interface is 82 W, and the charger will dynamically allocate the output power of the two ports according to the load power.

Charging Hub

Input

USB-C: 5-20 V, 5.0 A

Output

Battery Port: 12-17.6 V, 8.0 A

Rated Power

100 W

Charging Type

Three batteries charged in sequence

Charging Temperature Range

5° to 40° C (41° to 104° F)

RTK Module

Dimensions

50.2×40.2×66.2 mm (L×W×H)

Weight

24±2 g

Interface

USB-C

Power

Approx. 1.2 W

RTK Positioning Accuracy

RTK Fix:

Horizontal: 1 cm + 1 ppm; Vertical: 1.5 cm + 1 ppm

Speaker

Dimensions

114.1×82.0×54.7 mm (L×W×H)

Weight

85±2 g

Interface

USB-C

Rated Power

3 W

Max Volume [11]

110 dB @ 1 m

Effective Broadcast Distance [11]

100 m @ 70 dB

Bit Rate

16 Kbps/32 Kbps

Operating Temperature Range

-10° to 40° C (14° to 104° F)

Questions?

Thank You