Mavic 2 Enterprise Advanced: Spec sheet

Aircraft

Takeoff Weight (Without Accessories)

909g

Max Takeoff Weight

1100g

Dimensions (L×W×H)

Folded: 214×91×84mm Unfolded: 322×242×84mm Unfolded+Spotlight: 322×242×114mm Unfolded+Beacon: 322×242×101mm Unfolded+Speaker: 322×242×140mm Unfolded+RTK Module: 322x242x125mm

Diagonal Distance

354 mm

Max Ascent Speed

6 m/s (S-mode) 5 m/s (P-mode) 4 m/s (S-mode with accessories) 4 m/s (P-mode with accessories)

Max Descent Speed

Descend Vertically 5 m/s (S-mode) 4 m/s (P-mode) Tilt 7 m/s (S-mode) 4 m/s (P-mode)

Max Speed

72 kph (S-mode, without wind) 50 kph (P-mode, without wind)

Max Service Ceiling Above Sea Level

6000 m

Max Flight Time

31 min (measured while flying at 25 kph in windless conditions)
28 min (RTK module attached)
29 min (with beacon turned on)
30 min (with beacon turned off)
24 min (with spotlight turned on)
28 min (with spotlight turned off)
27 min (with speaker turned on)
28 min (with speaker turned off)

Max Wind Speed Resistance

10 m/s (scale 5)

Max Tilt Angle

35°(S-mode, with remote controller) 25°(P-mode)

Max Angular Velocity

200°/s (S-mode) 100°/s (P-mode)

Operating Temperature

-10° to 40° C

GNSS

GPS+GLONASS

Hovering Accuracy Range

Vertical: $\pm 0.1 \text{ m}$ (with RTK) $\pm 0.1 \text{ m}$ (with Vision Positioning) $\pm 0.5 \text{ m}$ (with GPS Positioning) Horizontal: $\pm 0.1 \text{ m}$ (with RTK) $\pm 0.3 \text{ m}$ (with Vision Positioning) $\pm 1.5 \text{ m}$ (with GPS Positioning)

Operating Frequency

2.400-2.4835 GHz; 5.725-5.850 GHz

Transmitter Power (EIRP)

2.400 - 2.4835 GHz FCC: \leq 26 dBm ; CE: \leq 20 dBm ; SRRC: \leq 20 dBm; MIC: \leq 20 dBm 5.725 - 5.850 GHz FCC: \leq 26 dBm; CE: \leq 14 dBm; SRRC: \leq 26 dBm

Internal Storage

24 GB

M2EA Thermal Camera

Sensor

Uncooled VOx Microbolometer

Focal Length

Approx. 9mm 35 mm format equivalent: Approx. 38mm

Sensor Resolution

640×512 @30Hz

Accuracy of Thermal Temperature

Measurement: $\pm 2^{\circ}$ C or $\pm 2\%$, whichever is greater.

Scene Range

-40 °C to 150 °C (High Gain) -40 °C to 550 °C (Low Gain)

Digital Zoom

 $16 \times$

Pixel Pitch

12 µm

Spectral Band

8-14 µm

Photo Format

R-JPEG

Video Format

MP4

Metering Method

Spot Meter, Area Measurement

FFC

Auto/Manual

M2EA Visual Camera

Sensor

1/2" CMOS, Effective Pixels: 48 M

Lens

FOV: 84° 35 mm format equivalent: 24 mm Aperture: f/2.8 Focus: 1 m to ∞

ISO Range

Video: 100-12800 (auto) Photos: 100-1600 (auto)

Digital Zoom

 $32 \times$

Max Image Size

 8000×6000

Still Photography Modes

Single shotInterval: 2/3/5/7/10/15/20/30/60 s Panorama: Sphere

Video Resolution

3840×2160@30fps 1920×1080@30fps

Photo Format

JPEG

Video Format

MP4

Gimbal

Mechanical Range

Tilt: -135°- +45° Pan: -100°- +100°

Controllable Range

Tilt: -90°- +30° Pan: -75°- +75°

Stabilization

3-axis (tilt, roll, pan)

Max control speed

120°/s

Angular Vibration Range

 $\pm 0.005^{\circ}$

Sensing System

Sensing System

Omnidirectional Obstacle Sensing^[2]

Forward

Precision Measurement Range: 0.5 - 20 m Detectable Range: 20 - 40 m Effective Sensing Speed: ≤ 14 m/s FOV: Horizontal: 40° , Vertical: 70°

Backward

Precision Measurement Range: 0.5 - 16 m Detectable Range: 16 - 32 m Effective Sensing Speed: ≤ 12 m/s FOV: Horizontal: 60° , Vertical: 77°

Upward

Precision Measurement Range: 0.1-8 m

Downward

Precision Measurement Range: 0.5 -11m Detectable Range: 11-22 m

Sides

Precision Measurement Range: 0.5 - 10 m Effective Sensing Speed: ≤ 8 m/s FOV: Horizontal: 80° , Vertical: 65°

Operating Environment

Forward, Backward and Sides: Surface with clear pattern and adequate lighting (lux > 15) Upward: Detects diffuse reflective surfaces(>20%) (walls, trees, people, etc.) Downward: Surface with clear pattern and adequate lighting (lux > 15)Detects diffuse reflective surfaces (>20%) (walls, trees, people, etc.)

Remote Controller

Operating Frequency

2.400 - 2.483 GHz; 5.725 - 5.850 GHz

Max Transmission Distance (unobstructed, free of interference)

2.400 - 2.483 GHz; 5.725 - 5.850 GHz FCC: 10000m CE: 6000m SRRC: 6000m MIC: 6000m

Transmission Power (EIRP)

2.400-2.4835 GHz : 25.5 dBm (FCC) ; 18.5 dBm (CE) 19 dBm (SRRC) ; 18.5 dBm (MIC) 5.725-5.850 GHz : 25.5 dBm (FCC) ; 12.5 dBm (CE) 18.5 dBm (SRRC)

Storage

ROM 16GB + microSD Extensible Storage

Video Output Port

HDMI Port

Built-in Battery

Type: 18650 Li-Po (5000 mAh @ 7.2 V) Charging Mode: Charged with USB charger at 12V/2A Rated Power 15 W Charging time: 2 hr (with a USB charger at 12V/2A)

Operating Current/Voltage

1800mA = 3.83V

Battery Life

Built-in Battery Approx. 2.5 hr

Operating Temperature

-20° C - 40° C

RC Size

Folded without Joystick: 177.5 x 121.3 x 40 mm Unfolded with Joystick: 177.5 x 181 x 60 mm

Weight

Approx. 630 g

Intelligent Flight Battery

Main Link: 17.6V = 3.41A or 17.0V=3.53A USB: 5.0 V = 2.0 A

Intelligent Flight Battery

Capacity

3850 mAh

Voltage

15.4V

Max Charging Voltage

17.6V

Battery Type

LiPo

Energy

59.29 Wh

Net Weight

297g

Charging Temperature

5°C - 40°C

Operating Temperature Range:

-10°C - 40°C

Heating Methods:

Manual Heating, Auto Heating

Heating Temperature

-20°C - 6°C

Heating duration

500s (Max)

Heating Power

55W (Max)

Charging Time

90 mins

Max Charging Power

80W

RTK Module

Dimensions

69 mm x 69 mm x 59mm

Connections

Micro USB Port

RTK Positioning Precision

In RTK FIX 1cm+1ppm (Horizontal) 1.5cm+1 ppm (Vertical)

M2EA Spotlight

Dimensions

68×60×41mm

Connections

Micro USB Port

Operating Range

30 m

Power

Max 26W

Illuminance

FOV17°, Max: 11lux @ 30m Straight

M2EA Beacon

Dimensions

 $68mm{\times}40mm{\times}27.8mm$

Connections

Micro USB Port

Power

Avg. 1.6W

Controllable Range

5000 m

Light intensity

Min Angle: 55 cd; Light intensity: 157cd

M2EA Speaker

Dimensions

 $68 \times 55 \times 65 \text{ mm}$

Connections

Micro USB Port

Power

Max 10W

Decibel

100 db @ 1 meter distance

Max Bitrate

16kbps

SD Cards

Supported SD Cards

Micro SD[™] Supports a microSD with capacity of up to 128 GB. A UHS-I Speed Grade 3 rating microSD card is required.

APP / Live View

Video Transmission System

OcuSync 2.0

Mobile App

DJI PILOT(Android Version)

Live View Quality

Remote Controller: 720p@30fps / 1080p@30fps

Max Live View Bitrate

40Mbps

Latency

120 - 130 ms

Required Operating System

ios 10.0 or later Android 5.0 or later

Others

Footnotes

[1] The accuracy of the temperature measurement is measured at a distance of 5m against a blackbody with an emissivity of 0.95 under ideal conditions. The actual accuracy is also affected by various environmental factors such as temperature and humidity, and needs to be corrected by post-processing software. Under ideal conditions, the temperature accuracy can reach $\pm 2^{\circ}$ C or $\pm 2\%$, whichever is greater.

[2] Omnidirectional Obstacle Sensing includes left/right, up/down, and forward/backward obstacle sensing. Sensing for left/right directions is only available in Tripod Mode. Omnidirectional Obstacle Sensing does not fully cover the circumference of a 360-degree arc. And left and right obstacle sensing system only works in specific modes and environments. DJI warranty does not cover any loss caused by crashing when flying left or right, even when Tripod mode is activated. Please be aware of your surroundings and App notifications when operating the Mavic 2 to ensure safety.