

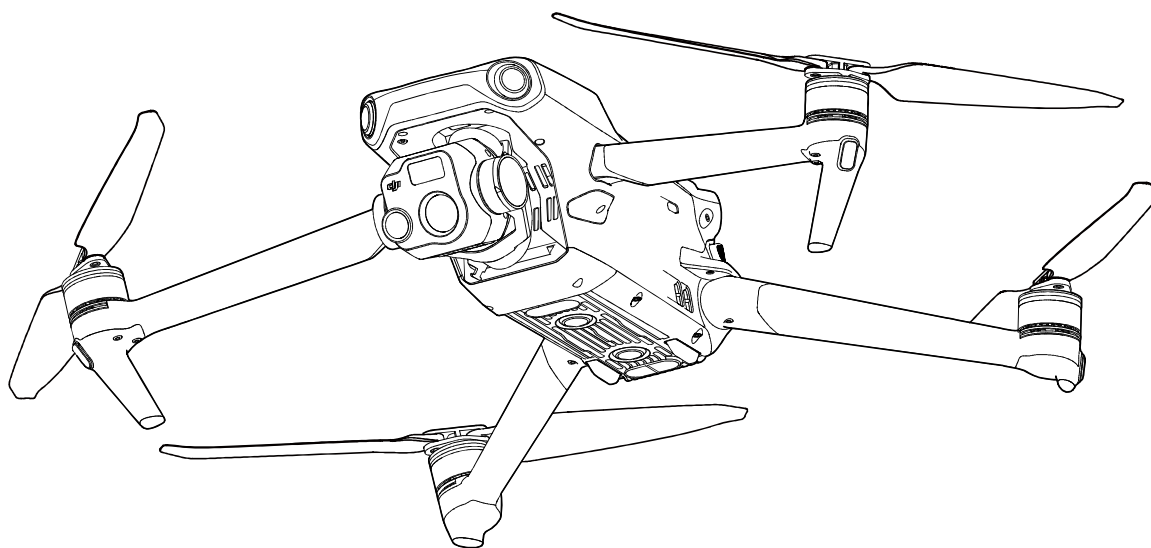
DJI MAVIC 3E / 3T

DJI MAVIC 3E EU / 3T EU

User Manual

v1.6

2023.09



Appendix

Specifications

Aircraft	
Weight (with propellers, without accessories) ^[1]	Mavic 3E: 915 g Mavic 3T: 920 g
Max Takeoff Weight	1050 g
Dimensions	Folded (without propellers): 221×96.3×90.3 mm Unfolded (without propellers): 347.5×283×107.7 mm Unfolded (with propellers and speaker): 486.4×556.3×154.8 mm
Diagonal Distance	380.1 mm
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) 21 m/s (Sport Mode)
Max Wind Speed Resistance	12 m/s
Max Take-off Altitude Above Sea Level (without payload)	6000 m
Max Flight Time (no wind)	45 mins 39 mins (Low-Noise Propellers)
Max Hover Time (no wind)	38 mins 35 mins (Low-Noise Propellers)
Max Flight Distance	32 km 25 km (Low-Noise Propellers)
Max Tilt Angle	30° (Normal Mode) 35° (Sport Mode)
Max Angular Velocity	200°/s
GNSS	GPS + Galileo + BeiDou + GLONASS (GLONASS is supported only when 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)
Internal Storage	N/A
Motor Model	2008
Propeller Model	9453E 8658F (Low-Noise Propellers must be used in countries and regions with C2 certification)

Beacon	Built into the aircraft	
Gimbal	Mavic 3E	Mavic 3T
Stabilization	3-axis (tilt, roll, pan)	
Mechanical Range	Tilt: -135° to 100° Roll: -45° to 45° Pan: -27° to 27°	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°/s	
Angular Vibration Range	±0.007°	
Wide Camera	Mavic 3E	Mavic 3T
Sensor	4/3 CMOS, Effective pixels: 20 MP	1/2" CMOS, Effective pixels: 48 MP
Lens	FOV: 84° Format Equivalent: 24 mm Aperture: f/2.8-f/11 Focus: 1 m to ∞ (with autofocus)	FOV: 84° Format Equivalent: 24 mm Aperture: f/2.8 Focus: 1 m to ∞
ISO Range	100-6400	100-25600
Shutter Speed	Electronic Shutter: 8-1/8000 s Mechanical Shutter: 8-1/2000 s	Electronic Shutter: 8-1/8000 s
Max Image Size	5280×3956	8000×6000
Still Photography Modes	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); 100 MP (stitched image)	Single: 12 MP/48 MP Timed: 12 MP/48 MP JPEG: 2/3/5/7/10/15/20/30/60 s* * Shooting 48MP photo does not support 2s interval Smart Low-light Shooting: 12 MP Panorama: 12 MP (raw image); 100 MP (stitched image)
Video Resolution	H.264 4K: 3840×2160@30fps FHD: 1920×1080@30fps	
Bitrate	4K: 130Mbps FHD: 70Mbps	4K: 85Mbps FHD: 30Mbps
Photo Format	JPEG/DNG (RAW)	JPEG
Video Format	MP4 (MPEG-4 AVC/H.264)	
Supported File Formats	exFAT	
Tele Camera	Mavic 3E	Mavic 3T
Sensor	1/2" CMOS, Effective pixels: 12 MP	
Lens	FOV: 15° Format Equivalent: 162 mm Aperture: f/4.4 Focus: 3 m to ∞	
ISO Range	100-6400	100-25600
Shutter Speed	Electronic Shutter: 8-1/8000 s	

Max Image Size	4000×3000	
Photo Format	JPEG	
Video Format	MP4 (MPEG-4 AVC/H.264)	
Still Photography Modes	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	Single: 12 MP Timed: 12 MP JPEG: 2/3/5/7/10/15/20/30/60 s Smart Low-light Shooting: 12 MP
Video Resolution	H.264 4K: 3840×2160@30fps FHD: 1920×1080@30fps	
Bitrate	4K: 130Mbps FHD: 70Mbps	4K: 85Mbps FHD: 30Mbps
Digital Zoom	8× (56× hybrid zoom)	
Thermal Camera (Mavic 3T)		
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 ∞	
Sensitivity	≤50 mk@F1.1	
Temperature Measurement Method	Spot Meter, Area Measurement	
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	6Mbps	
Video Format	MP4 (MPEG-4 AVC/H.264)	
Still Photography Modes	Single: 640×512 Timed: 640×512 JPEG: 2/3/5/7/10/15/20/30/60 s	
Digital Zoom	28×	
Infrared Wavelength	8-14 μm	
Infrared Temperature Measurement Accuracy ^[6]	±2° C or ±2% (using the larger value)	
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°
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 ^[2]	2.400-2.4835 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), <14 dBm (CE), <30 dBm (SRRC)
Max Transmission Distance (unobstructed, free of interference) ^[3]	15 km (FCC), 8 km (CE/SRRC/MIC)
Max Transmission Distance (Obstructed) ^[4]	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 ^[5]	15 MB/s (with DJI RC Pro Enterprise)
Latency (depending on environmental conditions and mobile device)	Approx. 200 ms
Antenna	4 Antennas, 2T4R
Remote Controller	
Screen Resolution	1920×1080
Screen Size	5.5 inch
Screen Frame Rate	60fps
Screen Brightness	1000 nit

Touchscreen Control	10-point multi-touch
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 12 V or 15 V
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)
Operating Time	Approx. 3 hours
Rated Power	12 W
Storage Capacity	Internal Storage (ROM): 64 GB Support microSD card to expand capacity
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)
Charging Temperature	5° to 40° C (41° to 104° F)
GNSS	GPS + Galileo + GLONASS
Dimensions	Antennas folded and controller sticks unmounted: 183.27×137.41×47.6 mm Antennas unfolded and controller sticks mounted: 183.27×203.35×59.84 mm
Weight	Approx. 680 g
Model	RM510B
Video Transmission System	DJI O3 Enterprise Transmission
Max Transmission Distance (unobstructed, free of interference) ^[3]	15 km (FCC), 8 km (CE/SRRC/MIC)
Operating Frequency ^[2]	2.400-2.4835 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), <14 dBm (CE), <23 dBm (SRRC)
Antenna	4 Antennas, 2T4R
Wi-Fi	
Protocol	802.11 a/b/g/n/ac/ax Support 2×2 MIMO Wi-Fi
Operating Frequency ^[2]	2.400-2.4835 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	2.400-2.4835 GHz
Transmitter Power (EIRP)	<10 dBm
Storage	
Supported Memory Cards	Aircraft: U3/Class10/V30 or above is required. A list of recommended microSD cards can be found below.
Recommended microSD Cards	<p>Remote Controller:</p> <p>SanDisk Extreme PRO 64GB V30 A2 microSDXC SanDisk High Endurance 64GB V30 microSDXC SanDisk Extreme 128GB V30 A2 microSDXC SanDisk Extreme 256GB V30 A2 microSDXC SanDisk Extreme 512GB V30 A2 microSDXC Lexar 667x 64GB V30 A2 microSDXC Lexar High-Endurance 64GB V30 microSDXC Lexar High-Endurance 128GB V30 microSDXC Lexar 667x 256GB V30 A2 microSDXC Lexar 512GB V30 A2 microSDXC Samsung EVO Plus 64GB V30 microSDXC Samsung EVO Plus 128GB V30 microSDXC Samsung EVO Plus 256GB V30 microSDXC Samsung EVO Plus 512GB V30 microSDXC Kingston Canvas Go! Plus 128GB V30 A2 microSDXC Kingston Canvas React Plus 128GB V90 A1 microSDXC</p> <p>Aircraft:</p> <p>Sandisk Extreme 32GB V30 A1 microSDHC Sandisk Extreme PRO 32GB V30 A1 microSDHC SanDisk Extreme 512GB V30 A2 microSDXC Lexar 1066x 64GB V30 A2 microSDXC Kingston Canvas Go! Plus 64GB V30 A2 microSDXC Kingston Canvas React Plus 64GB V90 A1 microSDXC Kingston Canvas Go! Plus 128GB V30 A2 microSDXC Kingston Canvas React Plus 128GB V90 A1 microSDXC Kingston Canvas React Plus 256GB V90 A2 microSDXC Samsung PRO Plus 256GB V30 A2 microSDXC</p>
Intelligent Flight 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)
Charger	
Input	100-240 V AC, 50-60 Hz, 2.5 A
Output Power	100 W
Output	<p>Max. 100 W (total)</p> <p>When both ports are used, the maximum output of one of the ports is 82 W. The charger will dynamically allocate the output power of the two ports according to the load power.</p>

- [1] The standard weight of the aircraft (including the battery, propellers, and a microSD card). The actual product weight may vary due to differences in batch materials and external factors.
- [2] In some countries and regions, the 5.8 and 5.1GHz frequencies are prohibited, or the 5.1GHz frequency is only allowed for indoor use. Check local laws and regulations for more information.
- [3] Measured in an unobstructed environment free of interference. The above data shows the farthest communication range for one-way, non-return flights (with no payload) under each standard. During your flight, please pay attention to RTH reminders in the DJI Pilot 2 app.
- [4] Data tested under different standards in unobstructed environments with typical interference. Uses for reference purposes only and provides no guarantee as to the actual flight distance.
- [5] Measured in a laboratory environment with little interference in countries/regions that support both 2.4 GHz and 5.8 GHz. With footage saved on the officially recommended microSD cards. Download speeds may vary depending on actual conditions.
- [6] The temperature measurement accuracy is affected by various factors:
 - Reflectivity of objects – shiny metals with high reflectivity will reflect more of the background radiation and result in lower accuracy, whereas objects with matte surfaces will produce a higher accuracy.
 - Temperature of background radiation – sunlight has a great influence on the temperature measurement accuracy, direct or reflected sunlight should be avoided from the infrared thermal camera.
 - Air temperature and humidity – the temperature and humidity have been calibrated before delivery, but some temperature measurement errors are inevitable. Extreme temperatures or humidity levels will affect the measurement accuracy.
 - Distance between the camera and the object – the default distance used in calibration is 5 m, and the temperature measurement is most accurate at this distance. Deviations from this distance will lower the accuracy.
 - Emissivity of objects – the emissivity of the object will affect the temperature measurement accuracy. Generally, accuracy increases proportionally to emissivity. Emissivity is affected by factors such as the material, the roughness or the degree of oxidation of the object's surface.



When measuring a blackbody 5 m away at a windless 25°C indoors, the camera provides an accuracy of up to $\pm 2^\circ\text{C}$ or $\pm 2\%$ (whichever is the larger value). Since the emissivity of different blackbody varies, this measurement result only represents the accuracy of the tested blackbody, for reference only.
