



MAVIC 3 Multispectral



See More, Work Smarter

Combining a RGB camera with a multispectral camera to scan and analyse crop growth with total clarity.

AIRCRAFT

Dimensions:	[Folded without propellers]	223×96×122 mm	(L×W×H)
	[Unfolded without propellers]	348×283×140 mm	(L×W×H)
Diagonal Length:	380 mm	Max Take-off Weight:	1,050 g
Weight: [with propellers & RTK module]	951 g	Max Ascent Speed:	6 m/s (Normal Mode) 8 m/s (Sport Mode)
		Max Descent Speed:	6 m/s
Max Flight Speed: [at sea level, no wind]		Max Wind Speed Resistance:	12 m/s
- Normal Mode	15 m/s	Max Flight Time:	43 min
- Sport Mode	Forward: 21 m/s Side: 20 m/s Backward: 19 m/s	Max Flight Distance:	32 km
Max Take-off Altitude:	6000 m Above Sea Level	Max Tilt Angle:	30° (Normal Mode) 35° (Sport Mode)
Max Hover Time:	37 min		
Max Angular Velocity:	200°/s		
GNSS:	GPS+Galileo+BeiDou+GLONASS (GLONASS only when RTK module enabled)		
Hovering Accuracy:			
Vertical:	±0.1 m (Vision System enabled) ±0.5 m (with GNSS) ±0.1 m (with RTK)	Horizontal:	±0.3 m (Vision System enabled) ±0.5 m (with High-Precision Positioning System) ±0.1 m (with RTK)
Operating Temp:	-10° to 40° C	Internal Storage:	N/A
Motor Model:	2008	Propeller Model:	9453F Enterprise Edition
Light Sensor:	Built-in module		

RGB CAMERA

Image Sensor:	4/3 CMOS, Effective pixels: 20 MP	ISO Range:	100-6400
Lens:	FOV: 84° Format Equivalent: 24 mm Aperture: f/2.8-f/11 Focus: 1 m to ∞	Max Image Size:	5280×3956
		Shutter Speed:	Electronic Shutter 8-1/8000 s Mechanical Shutter 8-1/2000 s
Photo Mode	Single: 20 MP Timed: 20 MP JPEG: 0.7/1/2/3/5/7/10/15/20/30/60s JPEG+RAW: 3/5/7/10/15/20/30/60 s Panorama: 20 MP (original material)	Max. Video Bitrate:	4K: 130 Mbps FHD: 70 Mbps
		Video Format:	MP4 (MPEG-4 AVC/H.264)
Image Format:	JPEG/DNG (RAW)	Supported File Formats:	exFAT
Video Resolution:	H.264 4K: 3840×2160@30fps FHD: 1920×1080@30fps		

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MULTISPECTRAL CAMERA

Image Sensor:	½.8-inch CMOS, Effective pixels: 5 MP	Lens	FOV:	73.91° (61.2° x 48.10°)
Shutter Speed:	Electronic Shutter: 1/30-1/128000 s		Format Equivalent:	25 mm
Max Image Size:	2592x1944		Aperture:	f/2.0
			Focus:	Fixed
Multispectral Band:	Green (G): 560 ± 16nm Red (R): 650 ± 16nm Red Edge (RE): 730 ± 16nm Near infrared (NIR): 860 ± 26nm	Gain Range:	1x-32x	
		Photo Shooting Mode:	Single shot: 5 MP Timelapse: 5 MP TIFF: 2/3/5/7/10/15/20/30/60 s	
Video Resolution:	H.264 FHD: 1920x1080@30fps Video Content: NDVI / GNDVI / NDRE	Image Format:	TIFF	
		Video Format:	MP4 (MPEG-4 AVC/H.264)	
		Max Video Bitrate:	Stream: 60 Mbps	

GIMBAL

Stabilization System:	3-axis mechanical (tilt, roll, pan)		
Controllable Range:	Tilt: -90° to 35° Pan: Uncontrollable	Mechanical Range:	Tilt: -135° to 45° Roll: -45° to 45° Pan: -27° to 27°
Max Control Speed (tilt):	100°/s	Angular Vibration Range:	±0.007°

SENSING SYSTEM

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/Back 100°, Left/Right 90°

Downward

Measurement Range: 0.3-18 m
Effective Sensing Speed: Flight Speed ≤6 m/s
FOV: Front/Back 130°, Left/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	Operating Frequency:	2.400-2.4835 GHz
Live View Quality:	Remote Controller: 1080p/30fps		5.725-5.850 GHz

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Max Transmission Distance:

Unobstructed / free of interference	FCC: 15 km CE: 8 km SRRC: 8 km MIC: 8 km
Obstructed	Strong Interference: 1.5-3 km (FCC/CE/SRRC/MIC)
	Medium Interference: 3-9 km (FCC), 3-6 km (CE/SRRC/MIC)
	Low Interference: 9-15 km (FCC), 6-8 km (CE/SRRC/MIC)

Max Download Speed:	15 MB/s (with DJI RC Pro Enterprise)	Latency:	Approx. 200 ms
Antenna:	4 Antennas, 2 Transmitting / 4 Receiving		

Transmission Power:	2.4 GHz: <33 dBm (FCC), <20 dBm (CE/SRRC/MIC)
(EIRP)	5.8 GHz: <33 dBm (FCC), <30 dBm (SRRC), <14 dBm (CE)

Other:	Supports the DJI Cellular module
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DJI RC PRO ENTERPRISE

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 ∞

Video Transmission System:	DJI O3 Enterprise Transmission
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Max Transmission Distance (unobstructed):	FCC: 15 km CE/SRRC/MIC: 8 km
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Video Transmission Operating Frequency:	2.400-2.4835 GHz 5.725-5.850 GHz
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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 (SRRC)

Antenna:	4 Antennas, 2T4R	Wi-Fi Operating Frequency:	2.400-2.4835 GHz
Wi-Fi Protocol:	802.11 a/b/g/n/ac/ax		5.150-5.250 GHz
	Support 2x2 MIMO Wi-Fi		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	Bluetooth Operating Frequency:	2.400-2.4835 GHz
Bluetooth Transmitter Power (EIRP):	< 10 dBm	Screen Resolution:	1920x1080
Screen Size:	5.5 inches	Screen:	60 fps
Brightness:	1,000 nits	Touchscreen Control:	10-point multi-touch
Battery:	Li-ion (5000 mAh @ 7.2 V)	Rated Power:	12 W

Charging Type:	Recommended to be charged with included 100W DJI USB-C Power Adapter or 12V / 15 V USB charger
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Storage Capacity:	Internal Storage (ROM): 64 GB
	Supports a microSD card for expanded capacity.

Charging Time:	
Approx. 1 hour 30 minutes	100W DJI USB-C Power Adapter charging the remote controller or USB charger at 15 V
Approx. 2 hours	with a USB charger at 12 V
Approx. 2 hours 50 minutes	100W DJI USB-C Power Adapter charging aircraft and remote controller simultaneously

Operating Time:	Approx. 3 hours	Video Output Port :	Mini-HDMI port
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Operating Temp Range:	-10° to 40° C	Storage Temperature:	-30° to 60° C (within one month)
Charging Temperature:	5° to 40° C		-30° to 45° C (one to three months)
Supported DJI Aircraft:	DJI Mavic 3E 3T 3M		-30° to 35° C (three to six months)

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 microSD Cards: Aircraft:
U3/Class10/V30 or above is required. A list of recommended microSD cards can be found below.

Recommended microSD Cards

Remote Controller:	Aircraft:
SanDisk Extreme PRO 64GB V30 A2 microSDXC	SanDisk Extreme 32GB V30 A1 microSDHC
SanDisk High Endurance 64GB V30 microSDXC	SanDisk Extreme PRO 32GB V30 A1 microSDHC
SanDisk Extreme 128GB V30 A2 microSDXC	SanDisk Extreme 512GB V30 A2 microSDXC
SanDisk Extreme 256GB V30 A2 microSDXC	Lexar 1066x 64GB V30 A2 microSDXC
SanDisk Extreme 512GB V30 A2 microSDXC	Kingston Canvas Go! Plus 64GB V30 A2 microSDXC
Lexar 667x 64GB V30 A2 microSDXC	Kingston Canvas React Plus 64GB V90 A1 microSDXC
Lexar High-Endurance 64GB V30 microSDXC	Kingston Canvas Go! Plus 128GB V30 A2 microSDXC
Lexar High-Endurance 128GB V30 microSDXC	Kingston Canvas React Plus 128GB V90 A1 microSDXC
Lexar 667x 256GB V30 A2 microSDXC	Kingston Canvas React Plus 256GB V90 A2 microSDXC
Lexar 512GB V30 A2 microSDXC	Samsung PRO Plus 256GB 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	

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 Temp:	5° to 40° C

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		

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		

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