# DJI Dock 2

Lightweight and Easy to Deploy | IP55 Ingress Protection | 10km Max Effective Operating Radius | Integrated Environmental Monitoring System | Cloud-Based Modeling | FlyTo Tasks | Private Deployment | Third-Party Payload Support

#### Dock - General

Product Name	DJI Dock 2
Total Weight	34 kg (without aircraft)
	The actual product weight may vary due to differences in batch materials and external factors.
Dimensions	Dock Cover Opened: 1228×583×412 mm (L×W×H) Dock Cover Closed: 570×583×465 mm (L×W×H)
	The above data does not include the height of the wind speed gauge (145 mm) but includes the height of the mounting base brackets (55 mm).
Input Voltage	100-240 V (AC), 50/60 Hz
Input Power	Max 1000 W
Operating Temperature	-25° to 45° C (-13° to 113° F)
	When the ambient temperature is below -20° C (-4° F), the dock is in standby status, and the aircraft cannot perform flight tasks.
Ingress Protection Rating	IP55

Number of Drones Accommodated	1
Max Allowable Landing Wind Speed	8 m/s
Max Operating Altitude	4000 m
Receiving Frequency of RTK Base Station Satellite	Simultaneously receive: GPS: L1 C/A, L2 BeiDou2: B1l, B2l, B3l BeiDou3: B1l, B3l GLONASS: L1, L2 Galileo: E1, E5B
Positioning Accuracy of RTK Base Station	Horizontal: 1 cm + 1 ppm (RMS) Vertical: 2 cm + 1 ppm (RMS)

### Dock - Charging Performance

Output Voltage	28 V DC
Charging Time	32 minutes
	The data was measured when charging the aircraft (when powered off) from 20% to 90% in a 25° C (77° F) environment.

Dock - Video Transmission

Video Transmission System	O3 Enterprise
Operating Frequency	2.4000-2.4835 GHz 5.725-5.850 GHz
Antenna	Built-in 4 antennas, 2T4R, supports intelligent switching
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)

### Dock - Air Conditioning System

Operating Voltage	28 V DC
Air Conditioning Type	TEC Air Conditioning

### Dock - Backup Battery

Battery Capacity	12 Ah
Output Voltage	12 V
Battery Type	Lead-acid battery
Battery Life	> 5 hours

Measured with a fully charged backup battery in a 25° C (77° F) environment. After a power outage, the dock does not support functions like aircraft charging, air conditioning, dock cover heating, and wind speed gauge heating. Always check malfunctions promptly.
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#### Dock - Network Access

Ethernet Access	10/100/1000Mbps adaptive Ethernet port
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#### Dock - Sensor

Wind Speed Sensor	Supported
Rainfall Sensor	Supported
Ambient Temperature Sensor	Supported
Water Immersion Sensor	Supported
In-Cabin Temperature Sensor	Supported
In-Cabin Humidity Sensor	Supported

Dock - Security Camera (External)

Resolution	1920×1080
Field of View (FOV)	151°
Auxiliary Light	Auxiliary White Light

### Dock - Security Camera (Internal)

Resolution	1920×1080
Field of View (FOV)	151°
Auxiliary Light	Auxiliary White Light

### Dock - Lightning Protection

AC Power Port	20 kA (rated value), meets EN 61643-11 Type 2 and IEC 61643-1 Class ${\rm I\!I}$ protection level requirements
Ethernet Port	10 kA (I <sub>total</sub> ), meets EN/IEC 61643-21 Category C protection level requirements

Dock - Supported Software

Applications	DJI Pilot 2 (connects to DJI Dock 2 via DJI RC Pro Enterprise for deployment and commissioning)
Cloud Platform	DJI FlightHub 2 (supported by default) Third-party cloud platforms (accessed through DJI Cloud API)

### Dock - Expansion Capability

Open Protocol	DJI Cloud API
Edge Computing	Supports data communication with external switches

### Aircraft - General

Weight	1410 g
	This value includes the weight of the battery, propellers, and a microSD card, but does not include third-party payloads. The actual product weight may vary due to differences in batch materials and external factors.
Max Takeoff Weight	1610 g
Dimensions	335×398×153 mm (L×W×H, without propellers)

Wheelbase	Diagonal Wheelbase: 463.2 mm Left-Right Wheelbase: 359.9 mm Front-Rear Wheelbase: 291.4 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 Horizontal Speed (at sea level, no wind)	Normal Mode, With Obstacle Sensing Enabled: 15 m/s flying forward, 12 m/s flying backward, 10 m/s flying sideways Sport Mode: 21 m/s flying forward, 18 m/s flying backward, 16 m/s flying sideways
Max Wind Speed Resistance	During Operation: 12 m/s During Takeoff/Landing: 8 m/s
Max Takeoff Altitude	4000 m
Max Flight Time	50 minutes Measured in a controlled test environment. Specific test conditions are as follows: flying forward at a constant speed of 46.8 kph in a windless laboratory environment at 20 meters above sea level, in photo mode (without photo-taking operation during flight), with Obstacle Avoidance Action set to Off, and from 100% battery level until 0%. Results may vary depending on the environment, actual use, and firmware version.
Max Hovering Time	40 minutes Measured with the DJI Matrice 3D series drones hovering in a windless environment at 20 meters above sea level and from 100% battery level until 0%. Results may vary depending on the environment, actual use, and firmware version.
Max Operating Radius	10 km

	Measured in an environment of approximately 25° C (77° F) with a safe battery level of 25%, ambient wind speed of approximately 4 m/s, round-trip flight speed of approximately 15 m/s, and hovering operation of 10 minutes. Results may vary depending on the environment, actual use, and firmware version.
Max Flight Distance	43 km
	Measured with DJI Matrice 3D/3TD flying at a constant speed of 54 kph in a windless environment at 20 meters above sea level and from 100% battery level until 0%. Results may vary depending on the environment, actual use, and firmware version.
Max Pitch Angle	25° (Normal Mode) 25° (Sport Mode)
Max Angular Velocity	250°/s
Global Navigation Satellite System	GPS + Galileo + BeiDou + GLONASS (GLONASS is supported only when the RTK module is enabled.)
Hovering Accuracy Range (windless or breezy)	Vertical: ±0.1 m (with vision positioning) ±0.5 m (with GNSS positioning) ±0.1 m (with RTK positioning) Horizontal: ±0.3 m (with vision positioning) ±0.5 m (with GNSS positioning) ±0.1 m (with RTK positioning)
Operating Temperature	-20° to 45° C (-4° to 113° F)
Ingress Protection Rating	IP54
Motor Model	2607

Propeller Model	1149, foldable, non-quick release
RTK Module	Integrated on the aircraft
Beacon	Integrated on the aircraft

# Aircraft - Wide-Angle Camera

Image Sensor	DJI Matrice 3D: 4/3 CMOS, Effective Pixels: 20 MP DJI Matrice 3TD: 1/1.32-inch CMOS, Effective Pixels: 48 MP
Lens	DJI Matrice 3D FOV: 84° Format Equivalent: 24 mm Aperture: f/2.8-f/11 Focus: 1 m to $\infty$ DJI Matrice 3TD FOV: 82° Format Equivalent: 24 mm Aperture: f/1.7 Focus: 1 m to $\infty$
Lens Defogging	DJI Matrice 3D: The wide-angle camera supports lens defogging. DJI Matrice 3TD: The wide-angle camera supports lens defogging.
ISO Range	DJI Matrice 3D: 100-6400 DJI Matrice 3TD: 100-25600

Shutter Speed	DJI Matrice 3D Electronic Shutter: 8-1/8000 s Mechanical Shutter: 8-1/2000 s DJI Matrice 3TD Electronic Shutter: 8-1/8000 s
Max Image Size	DJI Matrice 3D: 5280×3956 DJI Matrice 3TD: 8064×6048
Still Photography Modes	DJI Matrice 3D Single: 20 MP Timed: 20 MP, 0.7/1/2/3/5/7/10/15/20/30/60 s Smart Low-Light: 20 MP Panorama: 20 MP (raw image); 100 MP (stitched image) DJI Matrice 3TD Single: 12 MP, 48 MP Timed: 12 MP, 48 MP, 0.7/1/2/3/5/7/10/15/20/30/60 s* Smart Low-Light: 12 MP Panorama: 12 MP (raw image); 100 MP (stitched image) * The 0.7s and 1s intervals are not supported when taking 48MP timed photos.
Video Resolution	H.264 4K: 3840×2160@30fps FHD: 1920×1080@30fps
Video Bitrate	DJI Matrice 3D 4K: 130 Mbps FHD: 70 Mbps

	DJI Matrice 3TD 4K: 85 Mbps FHD: 30 Mbps
Supported File System	exFAT
Photo Format	JPEG
Video Format	MP4 (MPEG-4 AVC/H.264)

### Aircraft - Tele Camera

Image Sensor	1/2-inch CMOS, Effective Pixels: 12 MP
Lens	FOV: 15° Format Equivalent: 162mm Aperture: f/4.4 Focus: 3 m to ∞
Lens Defogging	DJI Matrice 3D: The tele camera supports lens defogging. DJI Matrice 3TD: The tele camera supports lens defogging.
ISO Range	DJI Matrice 3D: 100-6400 DJI Matrice 3TD: 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	DJI Matrice 3D Single: 12 MP Timed: 12 MP, 0.7/1/2/3/5/7/10/15/20/30/60 s Smart Low-Light: 12 MP DJI Matrice 3TD Single: 12 MP Timed: 12 MP, 0.7/1/2/3/5/7/10/15/20/30/60 s Smart Low-Light: 12 MP
Video Resolution	H.264 4K: 3840×2160@30fps FHD: 1920×1080@30fps
Video Bitrate	DJI Matrice 3D 4K: 130 Mbps FHD: 70 Mbps DJI Matrice 3TD 4K: 85 Mbps FHD: 30 Mbps
Digital Zoom	8x (56x hybrid zoom)

# Aircraft - Infrared Camera (DJI Matrice 3TD)

Thermal Imager Uncooled VOx Microbolometer	
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Pixel Pitch	12 μm
Frame Rate	30 Hz
Lens	FOV: 61° Format Equivalent: 40 mm Aperture: f/1.0 Focus: 5 m to ∞ Do not expose the infrared camera lens to strong sources of energy, such as the sun, lava, or a laser beam. Otherwise, the camera sensor may be burned, leading to permanent damage.
Sensitivity	≤ 50 mK@F1.0
Temperature Measurement Method	Spot Measurement, 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	Normal Mode: 640×512@30fps UHR Infrared Image Mode: 1280×1024@30fps (With the UHR Infrared Image function enabled, the aircraft can automatically enable or disable UHR Infrared Image mode according to the ambient light brightness.)
Video Bitrate	6 Mbps
Video Format	MP4 (MPEG-4 AVC/H.264)

Still Photography Modes	Single Normal Mode: 640×512 UHR Infrared Image Mode: 1280×1024 Timed Normal Mode: 640×512, 0.7/1/2/3/5/7/10/15/20/30/60 s UHR Infrared Image Mode: 1280×1024, 0.7/1/2/3/5/7/10/15/20/30/60 s
Digital Zoom	28x
Infrared Wavelength	8-14 μm
Infrared Temperature Measurement Accuracy	±2° C or ±2% (using the larger value)

## Aircraft - Gimbal

Stabilization	3-axis mechanical gimbal (tilt, roll, pan)
Mechanical Range	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	±0.005°

# Aircraft - Sensing

Sensing Type	The aircraft supports six-directional obstacle sensing.
	The aircraft has a 10° blind spot in the upper rear area. Always fly with caution.
Forward	Measurement Range: 0.5-21 m Detection Range: 0.5-200 m Effective Sensing Speed: Flight Speed ≤ 15 m/s FOV: Horizontal 90°, Vertical 90°
Backward	Measurement Range: 0.5-23 m Effective Sensing Speed: Flight Speed ≤ 12 m/s FOV: Horizontal 90°, Vertical 90°
Lateral	Measurement Range: 0.5-15 m Effective Sensing Speed: Flight Speed ≤ 10 m/s FOV: Horizontal 104°, Vertical 90°
Upward	Measurement Range: 0.5-21 m Effective Sensing Speed: Flight Speed ≤ 6 m/s FOV: Front and Back 90°, Left and Right 90°
Downward	Measurement Range: 0.5-14 m Effective Sensing Speed: Flight Speed ≤ 6 m/s FOV: Front and Back 95°, Left and Right 110°
Operating Environment	Forward, Backward, Left, Right, and Upward: Surfaces with discernible patterns and adequate lighting (lux > 15) Downward: Diffuse reflective surface with diffuse reflectivity > 20% (e.g. walls, trees, people) and adequate lighting (lux > 15)

### Aircraft - Video Transmission

Video Transmission System	DJI O3 Enterprise Transmission
Live View Quality	720p/30fps, 1080p/30fps (with DJI RC Pro Enterprise) 540p/30fps, 720p/30fps, 1080p/30fps (with DJI FlightHub 2)
Operating Frequency	2.4000-2.4835 GHz 5.150-5.250 GHz (CE: 5.170-5.250 GHz) 5.725-5.850 GHz In some countries and regions, the 5.1GHz and 5.8GHz frequency bands are prohibited, or the 5.1GHz frequency band is only allowed for indoor use. Please refer to local laws and regulations for more information.
Max Transmission Distance (unobstructed, free of interference)	DJI Matrice 3D FCC: 15 km CE: 8 km SRRC: 8 km MIC: 8 km DJI Matrice 3TD FCC: 15 km CE: 8 km SRRC: 8 km SRRC: 8 km MIC: 8 km MIC: 8 km
Max Transmission Distance (unobstructed, with interference)	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) Measured with the aircraft flying (without third-party payloads) in unobstructed environments with typical interference. The above data shows the farthest communication range for one-way, non-return flights under each standard. Always pay attention to RTH reminders in DJI FlightHub 2 during your flight.
Max Download Speed	5 MB/s (with DJI Dock 2) 15 MB/s (with DJI RC Pro Enterprise) Measured in a laboratory environment with little interference in countries/regions that support both 2.4 GHz and 5.8 GHz. Download speeds may vary depending on the actual conditions.
Lowest Latency	The video transmission latency from the aircraft to the dock is approximately 110 to 150 milliseconds (affected by the actual environmental conditions). The video transmission latency from the dock to DJI FlightHub 2 is affected by the actual network conditions and the computer's configuration.
Antenna	4 antennas, 2T4R
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/SRRC), < 14 dBm (CE)

## Aircraft - Storage

Supported Memory Cards	Aircraft:
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	U3/Class10/V30 or above is supported. A list of recommended microSD cards can be found below.
Recommended microSD Cards	Aircraft: 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 128GB V90 A2 microSDXC Kingston Canvas React Plus 256GB V90 A2 microSDXC

## Aircraft - Battery

Capacity	7811 mAh
Voltage	14.76 V
Max Charging Voltage	17.0 V
Туре	Li-ion 4S
Chemical System	LiNiMnCoO2
Energy	115.2 Wh
Weight	544 g

Cycle Count	400
Charging Temperature	5° to 45° C (41° to 113° F)

# Aircraft - Power Adapter

Input	100-240 V (AC), 50/60 Hz, 2.5 A
Output Power	100 W
Output	Max output power of 100 W (total)
	When both ports are used, the power adapter will dynamically allocate the output power of the two ports according to the load power, and the maximum output power of one of the ports is 82 W.

# Aircraft - Charging Base

Input	USB-C: 5-20 V, 5.0 A
Output	Battery Port: 12-17 V, 8.0 A
Rated Power	100 W
Charging Type	One battery charged at a time
Charging Temperature	5° to 40° C (41° to 104° F)

### Others

Guaranteed software updates until	2025/12/31
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