

dji



dji

www.dji.com/matrice-200-series-v2

Follow us @DJIEnterprise



MATRICE 200 SERIES V2

BUILT TO ENDURE. ENGINEERED TO ADAPT.



The ultimate platform for aerial productivity combines a rugged design and simple customizability to work as a solution for a variety of industrial applications. Improvements to the M200 Series V2 enhance intelligent control systems, flight performance, and add flight safety and data security features.



IP43



OcuSync 2.0



TimeSync



Anti-Collision
Beacons



AES-256
Encryption



DJI AirSense

VERSATILE PLATFORM



MATRICE 200 V2

RELIABLY TOUGH

- FPV Camera
- Anti-collision Beacon
- Discreet Mode
- Mobile SDK Compatibility
- DJI SkyPort Compatibility
- TimeSync



MATRICE 210 V2

ADAPTABILITY ON THE GO

- All M200 V2 Features
- Onboard SDK Compatibility
- Power Onboard Devices



MATRICE 210 RTK V2

POWERFUL PRECISION

- All M210 V2 Features
- Built-in High-performance RTK Modules
- D-RTK 2 Mobile Station Compatibility¹

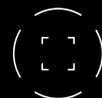
¹D-RTK 2 High Precision GNSS Mobile Station For Matrice Series

INTELLIGENT CONTROLS



TRANSMISSION

Enjoy a more reliable and stable flight with the new OcuSync 2.0 system, which supports automatic dual frequency band switching² and extends flight range to up to 8km³.



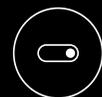
CALIBRATION

When multiple payloads or third-party payloads are installed, users can readjust the drone's center of gravity in the DJI Pilot app, enhancing flight performance and safety.



DATA ACCURACY

The TimeSync system continuously aligns the flight controller, camera, GPS module, RTK module for the M210 RTK V2, as well as payloads or onboard accessories. The position data is fixed to the center of the CMOS for precise geotagging when using DJI payloads.



DISCREET MODE

When the situation calls for unobtrusive drone operations, especially at night, all lights can be completely turned off in the DJI Pilot app.

ALWAYS READY



1-CLICK UPGRADE

The remote controller, drone, payloads⁴, RTK module, and RTK base station can now be upgraded simultaneously with just 1-click in DJI Pilot or DJI Assistant 2.



DUAL-BATTERY SYSTEM

The self-heating battery system allows a maximum flight time of 38 minutes⁵ and an operating temperature range of -20 to 50°C.

²Due to local policies, some countries do not support 5.8 GHz transmission.

³Unobstructed, free of interference, when FCC compliant. Maximum flight range specification is a proxy for radio link strength and resilience. Always fly your drone within visual line of sight unless otherwise permitted.

⁴Currently supports DJI Zenmuse X5S, Zenmuse X7, Zenmuse X4S. Support for additional payloads is coming soon.

⁵Acquired at a constant speed of 25 kph, free of wind. Actual flight time may vary because of the environment, use of flight modes, and or accessories.

SAFE AND SECURE



AES-256 ENCRYPTION

The AES-256 encryption keeps your data transmission secure so you can be sure that your critical information stays safe.



OBSTACLE AVOIDANCE

A robust FlightAutonomy system with front, bottom and upper sensors detects and avoids obstacles while enabling precision hovering so that you can fly with confidence.



ANTI-COLLISION BEACON

Equipped with new top and bottom anti-collision beacons, the V2 drones are visible at night or in lowlight conditions, making operation in less than ideal conditions safer



DJI AIRSENSE

With a built-in ADS-B receiver, the DJI AirSense technology enhances airspace safety by automatically providing the operator with real-time information about nearby airplanes and helicopters.

COMPATIBLE PAYLOADS



ZENMUSE XT2

<50mK Thermal Sensitivity
IP44 Level Ingress Protection
12 MP Visual Sensor



ZENMUSE X5S

4K 60fps video
20.8MP Stills
M4/3



ZENMUSE X7

4K 60fps video
24 MP Stills
Super 35 Sensor



ZENMUSE Z30

30x Optical Zoom
6x Digital Zoom
Gimbal Angular Vibration Range 0.01°



ZENMUSE X4S

1-inch Sensor
20 MP Stills
4K 60FPS



ZENMUSE XT

<50mK Thermal Sensitivity
Digital Zoom
640 x 512 FPA

PAYLOAD CONFIGURATIONS

The imaging platform that adapts to your needs.



SINGLE DOWNWARD GIMBAL

- M200 V2
- M210 V2
- M210 RTK V2



DUAL DOWNWARD GIMBALS

- M210 V2
- M210 RTK V2



SINGLE UPWARD GIMBAL

- M210 V2
- M210 RTK V2



THIRD PARTY SENSORS

- M200 V2
- M210 V2
- M210 RTK V2

EXPLORE LIMITLESS PAYLOAD SOLUTIONS

Bring your tools to the sky by integrating third party payloads – sensors, robotic components and more – to the M200 Series V2 platform.

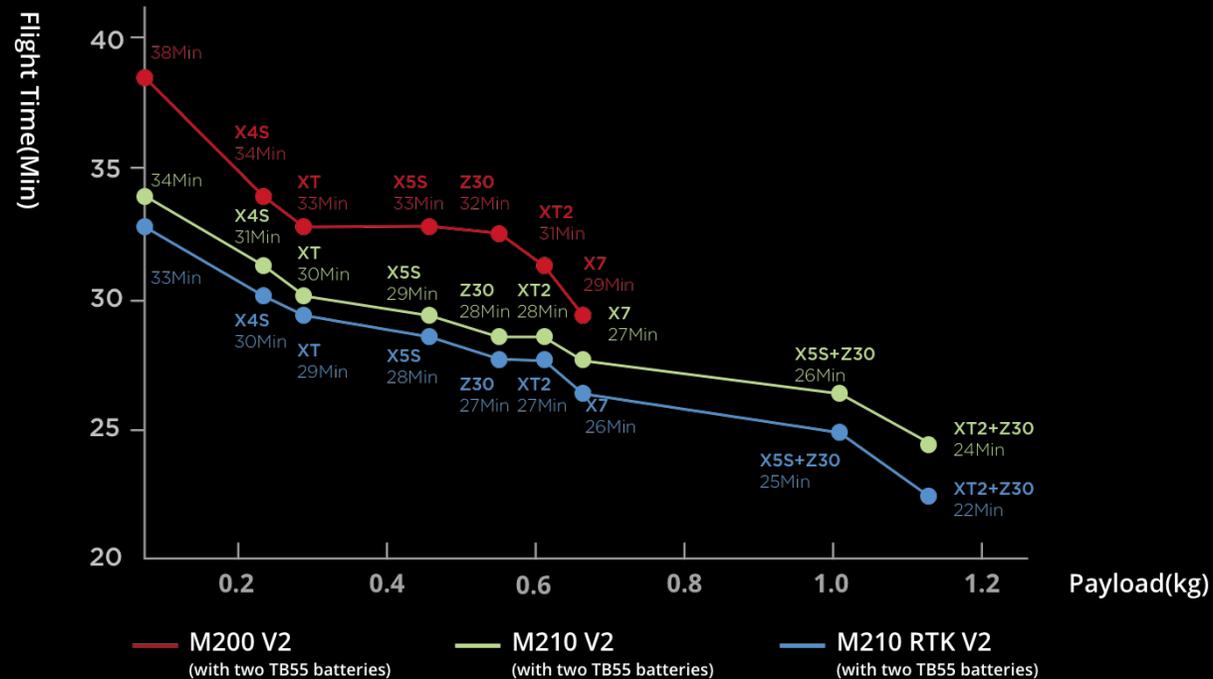


POWERED BY
DJI SKYPORT



FLIGHT TIME

Estimate your M200 Series V2 drone's flight time based on the payload configuration.



OPTIONAL ACCESSORIES TO ENHANCE PERFORMANCE



Manifold 2

Turn your vision into reality using DJI's onboard computer – the Manifold 2. Leverage its flexibility and expandability to build customized drone solutions and bring your robotics operations to the edge.



D-RTK 2 Mobile Station For Matrice Series⁶

Gain improved relative accuracy with centimeter-level precision positioning data using the D-RTK 2 Mobile Station, which supports all major global satellite navigation systems and provides real-time differential corrections.



Upward Gimbal Connector

Connect any compatible payload above your M210 V2 and M210 RTK V2 drone using the upward gimbal to capture data from a different aerial perspective.



External GPS Module

Enhance positioning accuracy by using an external GPS module, especially when using an upward gimbal on the M210 V2, or when attaching onboard devices or payloads.

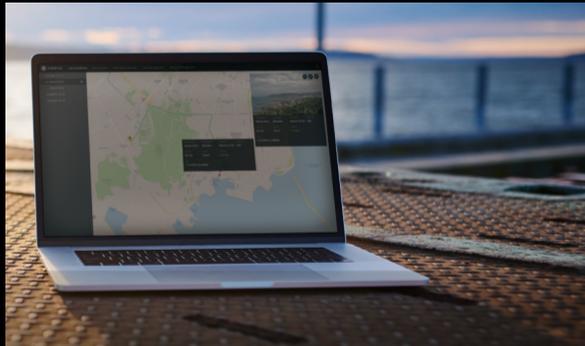
⁶Note: the M210 RTK V2 is only compatible with the D-RTK 2 High Precision GNSS Mobile Station For Matrice Series.

PURPOSE-BUILT APPLICATIONS



DJI PILOT

DJI Pilot is an app developed specifically for enterprise users to control and customize their DJI drones. With development made specifically for the M200 Series V2, DJI Pilot optimizes your flight capability for peak performance.



DJI FLIGHTHUB

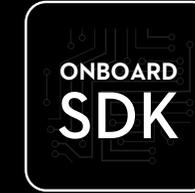
DJI FlightHub is a one-stop solution for managing your drone operations, supporting large organizations to effectively scale their aerial operations. Compatible with the M200 Series V2, you can integrate FlightHub directly into your existing fleet of DJI drones and leverage its aerial intel across your organization.

DEVELOP YOUR FLEET



Payload SDK

Build imaging or robotic tools for your specific workflow needs and integrate them seamlessly on the M200 Series V2 drones. Thanks to the TimeSync feature, third-party payloads can have the position data fixed to the center of the gimbal connector for precise geotagging.



Onboard SDK

Integrate an onboard computer to analyze in-flight data, or connect third party devices.



Mobile SDK

Develop personalized mobile apps to make flight planning and on-site data collection simpler, faster and repeatable.

A PLATFORM FOR DIVERSE APPLICATIONS

The M200 Series V2 drone platforms can be easily configured to serve in a variety of application scenarios.



Applications	Scouting	Aerial Overviews	Forensics
Solution	Mission Operations	Mission Operations	Mapping Solution
Configuration	M210 V2 Z30 XT2	M210 V2 Z30 XT2	M210 RTK V2 X7



Applications	Asset Inspection	Emergency Response	Surveying
Solution	Inspection	Inspection	Mapping Solution
Configuration	M210 V2 Z30	M210 V2 Z30	M210 RTK V2 X7



Applications	Vertical Asset Inspection	Defect Detection	Site Mapping
Solution	Thermal Inspection	Inspection	Mapping Solution
Configuration	M210 V2 / M210 RTK V2 Z30 XT2	M210 V2 / M210 RTK V2 Z30	M210 RTK V2 X7



Applications	Planning	Workflow management	Inspection
Solution	Mapping Solution	Mapping Solution	Inspection
Configuration	M210 RTK V2 X7	M210 RTK V2 X7	M210 V2 Z30

SPECIFICATIONS: AIRCRAFT

	Matrice 200 V2	Matrice 210 V2	Matrice 210 RTK V2
Dimensions	Unfolded, propellers and landing gears included: 883×886×398 mm Folded, propellers and landing gears excluded: 722×247×242 mm	Unfolded, propellers and landing gears included: 883×886×398 mm Folded, propellers and landing gears excluded: 722×282×242 mm	Unfolded, propellers and landing gears included: 883×886×427 mm Folded, propellers and landing gears excluded: 722×282×242 mm
Diagonal Wheelbase	643 mm		
Weight	Approx. 4.69 kg (with two TB55 batteries)	Approx. 4.8 kg (with two TB55 batteries)	Approx. 4.91 kg (with two TB55 batteries)
Max Takeoff Weight	6.14 kg		
Max Payload	1.45 kg	1.34 kg	1.23 kg
Operating Frequency	2.4000-2.4835 GHz; 5.725-5.850 GHz		
EIRP	2.4 GHz: ≤ 26 dBm (NCC/FCC); ≤ 20 dBm (CE/MIC); ≤ 20 dBm (SRRC) 5.8 GHz: ≤ 26 dBm (NCC/FCC); ≤ 14 dBm (CE); ≤ 26 dBm (SRRC)		
Hovering Accuracy (P-mode with GPS)	Vertical: ±1.64 feet (±0.5 m) or ±0.33 feet (±0.1 m, Downward Vision System enabled) Horizontal: ±4.92 feet (±1.5 m) or ±0.98 feet (±0.3 m, Downward Vision System enabled)		
Hovering Accuracy (D-RTK, M210 RTK V2)			Vertical: ±0.33 feet (±0.1 m); Horizontal: ±0.33 feet (±0.1 m)
Max Angular Velocity	Pitch: 300°/s, Yaw: 120°/s		

SPECIFICATIONS: AIRCRAFT

	Matrice 200 V2	Matrice 210 V2	Matrice 210 RTK V2
Max Pitch Angle (Dual Downward Gimbal/Single Upward Gimbal)		S-mode: 30°; P-mode: 30° (Forward Vision System enabled: 25°); A-mode: 30°	
Max Pitch Angle [Single Downward Gimbal (Gimbal Port I on M210 V2 and M210 RTK V2)]	S-mode: 35°; P-mode: 30° (Forward Vision System enabled: 25°); A-mode: 30°		
Max Ascent Speed	16.4 ft/s (5 m/s)		
Max Descent Speed (vertical)	9.8 ft/s (3 m/s)		
Max Speed (Dual Downward Gimbal/Single Upward Gimbal)		S-mode/A-mode: 73.8 kph (45.9 mph); P-mode: 61.2 kph (38 mph)	
Max Speed [Single Downward Gimbal (Gimbal Port I on M210 V2 and M210 RTK V2)]	S-mode/A-mode 81 kph (50.3 mph); P-mode: 61.2 kph (38 mph)		
Max Service Ceiling Above Sea Level	9842 feet (3000 m, with 1760S propellers)		
Max Wind Resistance	39.4 ft/s (12 m/s)		

SPECIFICATIONS: AIRCRAFT

	Matrice 200 V2	Matrice 210 V2	Matrice 210 RTK V2
Max Flight Time (with two TB55 batteries)	38 min (no payload), 24 min (takeoff weight: 6.14 kg)	34 min (no payload), 24 min (takeoff weight: 6.14 kg)	33 min (no payload), 24 min (takeoff weight: 6.14 kg)
Supported DJI Gimbals	Zenmuse X4S/X5S/X7/XT/XT2/Z30		
Supported Gimbal Mounting	Single Gimbal, Downward	Single Downward Gimbal (Gimbal Connector I), Dual Downward Gimbals, Single Upward Gimbal	Single Downward Gimbal (Gimbal Connector I), Dual Downward Gimbals, Single Upward Gimbal
Ingress Protection Rating	IP43		
GNSS	GPS+GLONASS	GPS+GLONASS+BeiDou +Galileo	
Operating Temperature	-4° to 122° F (-20° to 50° C)		

SPECIFICATIONS: REMOTE CONTROLLER (GL900A)

	Matrice 200 V2	Matrice 210 V2	Matrice 210 RTK V2
Operating Frequency	2.4000-2.4835 GHz; 5.725-5.850 GHz		
Max Transmitting Distance (unobstructed, free of interference)	NCC/FCC: 5 mi (8 km); CE/MIC: 3.1 mi (5 km); SRRC: 3.1 mi (5 km)		
EIRP 2.4 GHz	2.4 GHz: ≤ 26 dBm (NCC/FCC); ≤ 20 dBm (CE/MIC); ≤ 20 dBm (SRRC) 5.8 GHz: ≤ 26 dBm (NCC/FCC); ≤ 14 dBm (CE); ≤ 26 dBm (SRRC)		
Power Supply	Extended Intelligent Battery (Model: WB37-4920mAh-7.6V)		
Output Power (max)	13 W (Without supplying power to monitor)		
USB Power Supply	1 A = 5.2 V (max)		
CrystalSky Monitor		DJI CrystalSky 7.85 inches, Resolution: 2048×1536; Brightness: 2000 cd/m2; Operating System: Android 5.1; Storage: ROM 128 GB	
Operating Temperature	-4° to 122° F (-20° to 50° C)		

SPECIFICATIONS: DOWNWARD VISION SYSTEM

	Matrice 200 V2	Matrice 210 V2	Matrice 210 RTK V2
Velocity Range	< 32.8 ft/s (10 m/s) at the height of 6.56 feet (2 m)		
Altitude Range	< 32.8 feet (10 m)		
Operating Range	< 32.8 feet (10 m)		
Operating Environment	Surfaces with clear patterns and adequate lighting (> 15 lux)		
Ultrasonic Sensor Operating Range	0.33-16.4 feet (0.1-5 m)		
Ultrasonic Sensor Operating Environment	Non-absorbing material, rigid surface (thick indoor carpeting will reduce performance)		

SPECIFICATIONS: FORWARD VISION SYSTEM

	Matrice 200 V2	Matrice 210 V2	Matrice 210 RTK V2
Obstacle Sensing Range	2.3-98.4 feet (0.7-30 m)		
FOV	Horizontal 60°; Vertical: 54°		
Operating Environment	Surfaces with clear patterns and adequate lighting (> 15 lux)		

SPECIFICATIONS: UPWARD INFRARED SENSING SYSTEM

	Matrice 200 V2	Matrice 210 V2	Matrice 210 RTK V2
Obstacle Sensing Range	0-16.4 feet (0-5 m)		
FOV	±5°		
Operating Environment	Large, diffuse and reflective obstacles (reflectivity > 10%)		

SPECIFICATIONS: OTHERS

Matrice 200 Series V2		
Intelligent Flight Battery (TB55-7660mAh-22.8V)	Capacity	7660 mAh
	Voltage	22.8 V
	Battery Type	LiPo 6S
	Energy	174.6 Wh
	Net Weight (Single One)	Approx. 885 g
	Operating Temperature	-4° to 122° F (-20° to 50° C)
	Charging Temperature	41° to 104° F (5° to 40° C)
	Max Charging Power	180 W
Charger (IN2C180)	Voltage	26.1 V
	Rated Power	180 W
Charging Hub (IN2CH)	Input Voltage	26.1 V
	Input Current	6.9 A