DJI Avata 2 (Drone Only) Specification

DJI Avata 2

Specifications

Aircraft

Takeoff Weight:	Approx. 377 g
Dimensions:	185×212×64 mm (L×W×H)
Max Ascent Speed:	6 m/s (Normal mode)
	9 m/s (Sport mode)
Max Descent Speed:	6 m/s (Normal mode)
	9 m/s (Sport mode)
Max Horizontal Speed (near sea level, no wind)	8 m/s (Normal mode)
	16 m/s (Sport mode)
	27 m/s (Manual mode)*

* No faster than 19 m/s with the Manual mode in the EU regions.

Max Takeoff Altitude:	5000 m

Measured in a windless environment when taking off from an altitude of 5000 m and ascending vertically by 500 m, using Sport mode, and from 100% battery level until 20%. Data is for reference only. Always pay attention to reminders on the goggles' screens during your flight.

Max Flight Time:	Approx. 23 mins

Measured when flying forward at a speed of 21.6 kph in a windless environment at sea level, with camera parameters set to 1080p/30fps, video mode off, and from 100% battery level until 0%. Data is for reference only. Always pay attention to reminders on the goggles' screens during your flight.

Max Hovering Time:	Approx. 21 mins

Measured when hovering in a windless environment at sea level, with camera parameters set to 1080p/30fps, video mode off, and from 100% battery level until 0%. Data is for reference only. Always pay attention to reminders on the goggles' screens during your flight.

Max Flight Distance:	13.0 km

Measured when flying forward at a speed of 43.2 kph in a windless environment at sea level, with camera parameters set to 1080p/30fps, video mode off, and from 100% battery level until 0%. Data is for reference only. Always pay attention to reminders on the goggles' screens during your flight.

Max Wind Speed Resistance:	10.7 m/s (Level 5)
Operating Temperature:	-10° to 40° C (14° to 104° F)

Global Navigation Satellite System:	GPS + Galileo + BeiDou
Hovering accuracy range:	Vertical:
	±0.1 m (with vision positioning)
	±0.5 m (with GNSS positioning)
	Horizontal:
	±0.3 m (with vision positioning)
	±1.5 m (with GNSS positioning)
Internal Storage:	46 GB

Camera

Image Sensor:	1/1.3-inch image sensor
Effective Pixels:	12 MP
Lens:	FOV: 155°
Format Equivalent:	12 mm
Aperture:	f/2.8
Focus:	0.6 m to ∞
ISO Range:	100-25600 (Auto)
	100-25600 (Manual)
Shutter Speed:	Video: 1/8000-1/30 s
	Photo: 1/8000-1/50 s
Max Image Size:	4000×2256 (16:9)
	4000×3000 (4:3)
Still Photography Mode:	Single shot
Photo Format:	JPEG
Video Resolution:	4K (4:3): 3840×2880@30/50/60fps
	4K (16:9): 3840×2160@30/50/60fps
	2.7K (4:3): 2688×2016@30/50/60fps
	2.7K (16:9): 2688×1512@30/50/120fps
	1080p (4:3): 1440×1080@30/50/120fps
	1080p (16:9): 1920×1080@30/50/120fps

Video Format:	MP4 (H.264/H.265)
Max Video Bitrate:	130 Mbps
Supported File System:	exFAT
Color Mode:	Standard
	D-Log M
Camera FOV:	Supports normal mode, wide-angle mode, and ultra-wide-angle mode.
EIS:	Supports RockSteady 3.0+ and HorizonSteady
	Can be disabled*

* When stabilisation is turned off, footage captured with the wide-angle view supports offline stabilization Gyroflow.

Gimbal

Stabilisation:	Single-axis mechanical gimbal (tilt)
Mechanical Range:	Tilt: -95° to 90°
Controllable Range:	Tilt: -85° to 80°
Max Control Speed (tilt):	100°/s
Angular Vibration Range:	±0.01°
Electronic Roll Axis:	Real-time screen correction is unavailable during recording, but can be applied to the footage recorded on the drone.

Sensing

Sensing Type:	Downward and backward visual positioning
Downward:	ToF Effective Measurement Height: 10 m
	Precise Hovering Range: 0.3-10 m
	Measurement Range: 0.3-20 m
	FOV: Horizontal 78°, Vertical 78°
Backward:	Measurement Range: 0.5-20 m
	FOV: Horizontal 78°, Vertical 78°
Operating Environment:	Diffuse reflective surfaces with discernible patterns, diffuse reflectivity > 20% (such as concrete pavement)
	Adequate lighting (lux > 15, normal indoor lighting conditions)

Video Transmission

Video Transmission System:	O4

Live View Quality:	1080p@30/50/60/100fps
Operating Frequency:	2.400-2.4835 GHz
	5.170-5.250 GHz*
	5.725-5.850 GHz*

* 5.170-5.250 GHz and 5.725-5.850 GHz can be used only in countries and regions where permitted by local laws and regulations.

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)
	＜30 dBm (SRRC)
	< 14 dBm (CE)
Communication Bandwidth:	Max 60 MHz

Max Transmission Distance (unobstructed, free of interference):

FCC: 13 km (subject to the aircraft's max flight distance)

CE: 10 km

SRRC: 10 km

MIC: 10 km

Measured in an unobstructed outdoor environment free of interference. The above data shows the farthest communication range for one-way, non-return flights under each standard. Always pay attention to RTH reminders on the goggles screen during your flight.

Max Transmission Distance (unobstructed, with interference):

Strong Interference: Urban landscape, approx. 1.5-4 km

Medium Interference: Suburban landscape, approx. 4-10 km

Low Interference: Suburb/seaside, approx. 10-13 km

Data tested under FCC standard in unobstructed environments with typical interference. Used for reference purposes only and provides no guarantee for actual transmission distance.

Max Transmission Distance (obstructed, with interference):

	Low Interference and Obstructed by Buildings: approx. 0-0.5 km
	Low Interference and Obstructed by Trees: approx. 0.5-3 km

Data tested under FCC standard in environments with typical low interference. Used for reference purposes only and provides no guarantee for actual transmission distance.

Max Download Speed:	Wi-Fi: 30 MB/s*

* 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:	With DJI Goggles 3:
	1080p/100fps Video Transmission Quality: 24 ms
	1080p/60fps Video Transmission Quality: 40 ms
Max Video Bitrate:	60Mbps
Antennas:	4 antennas, 2T4R

Wi-Fi

Protocol:	802.11a/b/g/n/ac
Operating Frequency:	2.400-2.4835 GHz
	5.725-5.850 GHz
Transmitter Power (EIRP):	2.4 GHz:
	<20 dBm (FCC／CE／SRRC／MIC)
	5.8 GHz:
	<20 dBm (FCC／SRRC)
	< 14 dBm (CE)

Bluetooth

Protocol:	Bluetooth 5.0
Operating Frequency:	2.400-2.4835 GHz
Transmitter Power (EIRP):	<10 dBm

Intelligent Flight Battery

Capacity:	2150 mAh
Weight:	Approx. 145 g
Standard Voltage:	14.76 V
Max Charging Voltage:	17 V

Battery Type:	Li-ion
Energy:	31.7 Wh@0.5C
Charging Temperature:	5° to 40° C (41° to 104° F)
Charging Time:	With Charging Hub (60W max charging power):
	From 0 to 100%: approx. 45 min
	From 10 to 90%: approx. 30 min
	Directly Charging the Drone (30 W max charging power):
	From 0 to 100%: approx. 88 min
	From 10 to 90%: approx. 60 min

Charger

Recommended Charger:	DJI 65W Portable Charger
	DJI 65W Car Charger
	USB Power Delivery charger

Battery Charger Hub

Input:	5-20 V, max 3 A
Output (power accumulation):	Max 65 W
Output (charging):	Max 17 V
Output (USB):	5 V, 2 A
Charging Type:	Three batteries charged in sequence.
Compatibility:	DJI Avata 2 Intelligent Flight Battery

Storage

Recommended microSD Cards:	SanDisk Extreme PRO 32GB U3 A1 V30 microSDHC
	Lexar Professional 1066x 64GB U3 A2 V30 microSDXC
	Lexar Professional 1066x 128GB U3 A2 V30 microSDXC
	Lexar Professional 1066x 256GB U3 A2 V30 microSDXC
	Lexar Professional 1066x 512GB U3 A2 V30 microSDXC
	Kingston CANVAS Go! Plus 64GB U3 A2 V30 microSDXC
	Kingston CANVAS Go! Plus 128GB U3 A2 V30 microSDXC
	Kingston CANVAS React Plus 64GB U3 A1 V90 microSDXC

	Kingston CANVAS React Plus 128GB U3 A1 V90 microSDXC
	Kingston CANVAS React Plus 256GB U3 A1 V90 microSDXC
	Samsung EVO Plus 512GB U3 A2 V30 microSDXC

DJI FPV Remote Control

Max Operating Time:	Approx. 10 hours
Operating Temperature:	-10° to 40° C (14° to 104° F)
Charging Temperature:	0° to 50° C (32° to 122° F)
Charging Time:	2 hours
Charging Type:	5 V, 2 A
Battery Capacity:	2600 mAh
Weight:	Approx. 240 g
Dimensions:	165×119×62 mm (L×W×H)
Operating Frequency:	2.400-2.4835 GHz
Transmitter Power (EIRP):	2.400 GHz:
	＜26 dBm (FCC)
	＜20 dBm (CE/SRRC/MIC)