

# Specs

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## Camera

<b>Sensor</b>	1/1.7-inch CMOS Effective Pixels: 48 MP
<b>Lens</b>	FOV: 155° Equivalent Focal Length: 12.7 mm Focal Length: 2.34 mm Aperture: f/2.8 Focus Mode: FF Focus Range: 0.6 m to ∞
<b>ISO Range</b>	100-6400 (Auto) 100-25600 (Manual)
<b>Shutter Speed</b>	Video: 1/8000-1/50 s Photo: 1/8000-1/50 s
<b>Still Photography Mode</b>	Single Shot
<b>Max Image Size</b>	4000×3000
<b>Photo Format</b>	JPEG
<b>Video Resolution</b>	With DJI Goggles 2: 4K@50/60fps 2.7K@50/60/100fps 1080p@50/60/100fps  With DJI FPV Goggles V2: 4K@50/60fps 2.7K@50/60/100/120fps 1080p@50/60/100/120fps
<b>Video Format</b>	MP4
<b>Max Video Bitrate</b>	150 Mbps
<b>Color Mode</b>	Standard D-Cinelike
<b>EIS</b>	Supports RockSteady and HorizonSteady Can be disabled
<b>Distortion Correction</b>	Supports Normal Mode, Wide Mode, and Ultra Wide Mode
<b>Supported File System</b>	exFAT (recommended) FAT32

## Gimbal

<b>Mechanical Range</b>	Tilt: -95° to 75°
<b>Controllable Range</b>	Tilt: -80° to +65°
<b>Stabilization</b>	Single-Axis (tilt)
<b>Max Control Speed</b>	60°/s
<b>Angular Vibration Range</b>	±0.01°

## Electronic Roll Axis

Real-time screen correction is unavailable during recording, but can be applied to the footage recorded on the drone.

## Aircraft

<b>Model</b>	QF2W4K
<b>Takeoff Weight</b>	Approx. 410 g
<b>Dimensions (L×W×H)</b>	180×180×80 mm
<b>Diagonal Distance</b>	120 mm
<b>Max Ascent Speed</b>	6 m/s (Normal Mode, Sport Mode)
<b>Max Descent Speed</b>	6 m/s (Normal Mode, Sport Mode)
<b>Max Speed <sup>[1]</sup></b>	8 m/s (Normal Mode) 14 m/s (Sport Mode) 27 m/s (Manual Mode)
<b>Maximum Takeoff Altitude</b>	5000 m
<b>Max Hover Time</b>	Approx. 18 mins <sup>[2]</sup>
<b>Max Flight Distance</b>	11.6 km
<b>Max Wind Speed Resistance</b>	10.7 m/s (Level 5)
<b>Operating Temperature Range</b>	-10° to 40° C (14° to 104° F)
<b>Transmission Power (EIRP)</b>	FCC: < 33 dBm CE: < 14 dBm SRRC: < 30 dBm
<b>Antennas</b>	Dual Antennas, 2T2R
<b>GNSS</b>	GPS + Galileo + BeiDou
<b>Hovering Accuracy Range</b>	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)
<b>Supported SD Cards</b>	microSD (up to 256 GB)
<b>Recommended microSD Cards</b>	SanDisk Extreme U3 V30 A1 32GB microSDXC SanDisk Extreme Pro U3 V30 A1 32GB microSDXC Kingston Canvas Go!Plus U3 V30 A2 64GB microSDXC Kingston Canvas React Plus U3 V90 A1 64GB microSDXC Kingston Canvas React Plus U3 V90 A1 128GB microSDXC Kingston Canvas React Plus U3 V90 A1 256GB microSDXC Samsung PRO Plus U3 V30 A2 256GB microSDXC
<b>Internal Storage</b>	20 GB

## Sensing System

<b>Downward (Binocular Vision and ToF) <sup>[3]</sup></b>	ToF Effective Measurement Height: 10 m Precise Hovering Range: 0.5-10 m Vision Sensor Hovering Range: 0.5-20 m
<b>Operating Environment</b>	Diffuse reflective surfaces with a clear pattern > 20% (such as walls, trees, or people) Adequate lighting (lux > 15, normal indoor lighting conditions)

## Intelligent Flight Battery

Battery Capacity	2420 mAh
Voltage	14.76 V
Charging Voltage Limit	17 V
Type	Li-ion
Chemical System	LiNiMnCoO <sub>2</sub>
Energy	35.71 Wh@0.5C
Discharge Rate	Typical: 7C
Weight	Approx. 162 g
Charging Temperature Range	5° to 40° C (41° to 104° F)

## Video Transmission

Communication Frequency	2.400-2.4835 GHz (RX only) 5.725-5.850 GHz (RX and TX) <sup>[4]</sup>
Communication Bandwidth	Max 40 MHz
Live View Quality and Latency <sup>[5]</sup>	With DJI FPV Goggles V2: 810p/120fps Video Transmission Quality: The video transmission latency is lower than 28 ms. 810p/60fps Video Transmission Quality: The video transmission latency is lower than 40 ms.  With DJI Goggles 2: 1080p/100fps Video Transmission Quality: The video transmission latency is as low as 30 ms. 1080p/60fps Video Transmission Quality: The video transmission latency is as low as 40 ms.
Max Video Transmission Bitrate <sup>[6]</sup>	50 Mbps
Max Video Transmission Range <sup>[7]</sup>	10 km (FCC), 2 km (CE), 6 km (SRRC)
Audio Transmission	N/A

## DJI Goggles 2

Model	RCDS18
Weight	Approx. 290 g (headband included)
Dimensions (L×W×H)	With antennas folded: 167.40×103.90×81.31 mm With antennas unfolded: 196.69×103.90×104.61 mm
Screen Size (single screen)	0.49-inch
Resolution (single screen)	1920×1080
Refresh Rate	Up to 100 Hz
Interpupillary Distance Range	56-72 mm
Diopter Adjustment Range	-8.0 D to +2.0 D
FOV (single screen)	51°
Communication Frequency	2.400-2.4835 GHz 5.725-5.850 GHz <sup>[4]</sup>
Transmission Power (EIRP)	2.4 GHz: < 30 dBm (FCC), < 20 dBm (CE/SRRC/KC)

	5.8 GHz <sup>[4]</sup> : < 30 dBm (FCC), < 23 dBm (SRRC), < 14 dBm (CE/KC)
<b>Wi-Fi Protocol</b>	Wi-Fi 802.11b/a/g/n/ac
<b>Wi-Fi Communication Frequency</b>	2.400-2.4835 GHz 5.150-5.250 GHz (indoor use only) <sup>[8]</sup> 5.725-5.850 GHz <sup>[4]</sup>
<b>Wi-Fi Transmission Power (EIRP)</b>	2.4 GHz: < 20 dBm (FCC/CE/SRRC/KC) 5.1 GHz <sup>[8]</sup> : < 20 dBm (FCC/CE/KC) 5.8 GHz <sup>[4]</sup> : < 20 dBm (FCC/SRRC/KC), < 14 dBm (CE)
<b>Bluetooth Protocol</b>	Bluetooth 5.2
<b>Bluetooth Communication Frequency</b>	2.400-2.4835 GHz
<b>Bluetooth Transmission Power (EIRP)</b>	< 8 dBm
<b>Max Video Transmission Bitrate <sup>[6]</sup></b>	50 Mbps
<b>Video Recording Format</b>	MOV
<b>Supported Video and Audio Playback Formats</b>	MP4 and MOV (video coding formats: H.264 and H.265; audio format: ACC, PCM)
<b>Wi-Fi Wireless Streaming</b>	Supports DLNA Protocol
<b>Operating Temperature Range</b>	-10° to 40° C (14° to 104° F)
<b>Power Input</b>	DJI Goggles 2 Battery
<b>Supported SD Cards</b>	microSD (up to 256 GB)

## DJI Goggles 2 Battery

<b>Capacity</b>	1800 mAh
<b>Voltage</b>	7-9 V (1.5 A)
<b>Type</b>	Li-ion
<b>Chemical System</b>	LiNiMnCoO <sub>2</sub>
<b>Energy</b>	18 Wh
<b>Charging Temperature Range</b>	0° to 45° C (32° to 113° F)
<b>Max Charging Power</b>	12.6 W (5 V/2 A, 9 V/1.4 A)
<b>Weight</b>	Approx. 122 g
<b>Dimensions (L×W×H)</b>	73.04×40.96×26 mm
<b>Operating Time</b>	Approx. 2 hours

## DJI FPV Goggles V2

<b>Model</b>	FGDB28
<b>Weight</b>	Approx. 420 g (headband and antennas included)
<b>Supported Video and Audio Playback Formats</b>	MP4, MOV, MKV (video coding format: H.264; audio formats: AAC-LC, AAC-HE, AC-3, MP3)
<b>Operating Temperature Range</b>	0° to 40° C (32° to 104° F)

<b>Video Recording Format</b>	MOV (video coding format: H.264)
<b>FOV</b>	30° to 54°, adjustable Image Size: 50% to 100%
<b>Communication Frequency</b>	2.400-2.4835 GHz 5.725-5.850 GHz <sup>[4]</sup>
<b>Max Video Transmission Bitrate <sup>[6]</sup></b>	50 Mbps
<b>Dimensions (L×W×H)</b>	Without antennas: 184×122×110 mm With antennas: 202×126×110 mm
<b>Transmission Power (EIRP)</b>	2.400-2.4835 GHz FCC: ≤ 28.5 dBm CE: ≤ 20 dBm SRRC: ≤ 20 dBm  5.725-5.850 GHz <sup>[4]</sup> FCC: ≤ 31.5 dBm CE: ≤ 14 dBm SRRC: ≤ 19 dBm
<b>Screen Size (single screen)</b>	2-inch
<b>Power Input</b>	Dedicated DJI Goggles batteries
<b>Supported SD Cards</b>	microSD (up to 256 GB)
<b>Communication Bandwidth</b>	Max 40 MHz
<b>Interpupillary Distance Range</b>	58-70 mm
<b>Refresh Rate</b>	144 Hz
<b>Screen Resolution</b>	1440×810

## DJI FPV Goggles V2 Battery

<b>Weight</b>	Approx. 119 g
<b>Dimensions (L×W×H)</b>	73.04×40.96×26 mm
<b>Capacity</b>	1800 mAh
<b>Voltage</b>	Max 9 V
<b>Chemical System</b>	LiNiMnCoO <sub>2</sub>
<b>Type</b>	Li-Po 2S
<b>Energy</b>	18 Wh
<b>Charging Temperature Range</b>	0° to 45° C (32° to 113° F)
<b>Max Charging Power</b>	10 W
<b>Operating Time</b>	Approx. 110 mins

## DJI Motion Controller

<b>Model</b>	FC7BMC
<b>Weight</b>	Approx. 167 g
<b>Communication Frequency</b>	2.400-2.4835 GHz 5.725-5.850 GHz <sup>[4]</sup>

<b>Transmission Power (EIRP)</b>	2.4 GHz: ≤ 28.5 dBm (FCC), ≤ 20 dBm (CE/SRRC) 5.8 GHz <sup>[4]</sup> : ≤ 31.5 dBm (FCC), ≤ 19 dBm (SRRC), ≤ 14 dBm (CE)
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<b>Operating Temperature Range</b>	-10° to 40° C (14° to 104° F)
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<b>Operating Time</b>	Approx. 5 hours
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## DJI FPV Remote Controller 2

<b>Model</b>	FC7BGC
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<b>Weight</b>	Approx. 346 g
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<b>Communication Frequency</b>	2.400-2.4835 GHz 5.725-5.850 GHz <sup>[4]</sup>
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<b>Transmission Power (EIRP)</b>	2.4 GHz: ≤ 28.5 dBm (FCC), ≤ 20 dBm (CE/SRRC) 5.8 GHz <sup>[4]</sup> : ≤ 31.5 dBm (FCC), ≤ 19 dBm (SRRC), ≤ 14 dBm (CE)
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<b>Dimensions (L×W×H)</b>	190×140×51 mm
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<b>Operating Time</b>	Approx. 9 hours
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<b>Operating Temperature Range</b>	-10° to 40° C (14° to 104° F)
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<b>Charging Time</b>	2.5 hours
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## Other

### Footnotes

1. The max flight speed is subject to dynamic local restrictions. Please abide by local laws and regulations when flying.
2. Tested when hovering in an environment without wind or interference.
3. DJI Avata only supports downward obstacle sensing when used with DJI FPV Remote Controller 2, or DJI Motion Controller in N Mode and S Mode.
4. The 5.8 GHz frequency band is currently banned in certain countries or regions. For details, please refer to local laws and regulations.
5. Tested in an outdoor open environment without interference. The video transmission latency data varies with different models.
6. Tested in an outdoor open environment without interference. The video transmission bitrate varies with operating environments.
7. FCC compliant and tested in an outdoor open environment without interference. Data is tested under different standards in an outdoor open environment without interference. Only to serve as a reference for the max one-way communication distance without considering RTH. Please pay attention to the RTH prompts during actual flight. Max one-way communication distance of DJI Avata in countries/regions of different standards:  
FCC: United States, Australia, Canada, Hong Kong, Taiwan, Chile, Colombia, Puerto Rico, and other regions.  
SRRC: Mainland China.  
CE: UK, France, Germany, Portugal, Spain, Switzerland, Macau, New Zealand, UAE, and other regions.
8. The 5.1 GHz frequency band is currently banned in China and Thailand. For details, please refer to local laws and regulations.