



Technical Description & Performance Limitations of DJI FPV

CAMERA	
Sensor	1/2.3" CMOS Effective pixels: 12 million
Lens	FOV: 150° 35mm Format Equivalent: 14.66 mm Aperture: f/2.8 Focus Mode: Fixed Focus Focus Range: 0.6 m to ∞
ISO	100-12800
Shutter Speed	1/50-1/8000 s
Still Photography Modes	Single shot
Max Image Size	3840x2160
Photo Format	JPEG
Video Resolution	4K: 3840x2160 at 50/60fps FHD: 1920x1080 at 50/60/100/120fps
Video Formats	MP4/MOV (H.264/MPEG-4 AVC, H.265/HEVC)
Max Video Bitrate	120 Mbps
Color Profile	Standard, D-Cineline
RockSteady EIS	Available
Distortion Correction	Available
Supported File Formats	exFAT (recommended)



	FAT32
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GIMBAL	
Mechanical Range	Tilt: -65° to 70°
Controllable Range	Tilt: -50° to 58°
Stabilization	Single-axis (tilt), electronic roll axis
Max Control Speed (tilt)	60°/s
Angular Vibration Range	±0.01° (N mode)
Electronic Roll Axis	Available (can stabilize footage when the aircraft is tilted at angles of up to 10°)
SENSING SYSTEM	
Forward	Precision Measurement Range: 0.5-18 m Obstacle Sensing: Available in N mode only FOV: 56° (horizontal), 71° (vertical)
Downward	ToF Effective Sensing Height: 10 m Hovering Range: 0.5-15 m Vision Sensor Hovering Range: 0.5-30 m
Downward Auxillary Light	Single LED
Operating Environment	Refers to non-reflective, discernible surfaces Diffuse reflectivity >20% (e.g. walls, trees, people) Adequate lighting conditions (lux >15 in normal indoor lighting conditions)
AIRCRAFT	
Takeoff Weight	Approx. 795 g
Dimensions	255x312x127 mm (with propellers) 178x232x127 mm (without propellers)
Diagonal Distance	245 mm
Max Ascent Speed	M mode: No limit S mode: 15 m/s N mode: 8 m/s
Max Descent Speed	M mode: No limit



	S mode: 10 m/s N mode: 7 m/s
Max Speed	140 kph; M mode: 39 m/s (27 m/s in Mainland China) S mode: 27 m/s N mode: 15 m/s
Max Acceleration	0-100 kph: 2 s (in ideal conditions while flying in M mode)
Max Service Ceiling Above Sea Level	6,000 m
Max Flight Time	Approx. 20 mins (measured while flying at 40 kph in windless conditions)
Max Hover Time	Approx. 16 mins (measured when flying in windless conditions)
Max Flight Distance	16.8 km (measured while flying in windless conditions)
Max Wind Speed Resistance	39-49 kph (25-31 mph)
Operating Temperature	-10° to 40° C (14° to 104° F)
Transmitter Power (EIRP)	2.400-2.4835 GHz FCC: ≤ 31.5dBm CE: ≤ 20 dBm SRRC: ≤ 20 dBm MIC: ≤ 20 dBm 5.725-5.850 Ghz FCC: ≤ 31.5 dBm CE: ≤ 14 dBm SRRC: ≤ 25.5 dBm
Number of Antennas	Four
GNSS	GPS+GLONASS+GALILEO
Hovering Accuracy Range	Vertical: ±0.1 m (with Vision Positioning) ±0.5 m (with GPS positioning) Horizontal:



	±0.3 m (with Vision Positioning) ±1.5 m (with GPS positioning)
Supported SD Cards	microSD (up to 256 GB)
Internal Storage	N/A
VIDEO TRANSMISSION	
Operating Frequency	2.400-2.4835 GHz 5.725-5.850 GHz
Communication Bandwidth	40 MHz (Max.)
Live View Mode	Low-Latency Mode: 810p/120fps ≤ 28ms High-Quality Mode: 810p/60fps ≤ 40ms
Max Video Bitrate	50 Mbps
Transmission Range	10 km (FCC), 6 km (CE), 6 km (SRRC), 6 km (MIC)
Audio Transmission Support	Yes
CHARGER	
Input	100-240 V, 50/60 Hz, 1.8 A
Output	Battery charging interface: 25.2 V ± 0.1 V 3.57 A ± 0.1 A (high current) 1 A ± 0.2 A (low current) USB Port: 5V/2A (x2)
Rated Power	86 W
INTELLIGENT FLIGHT BATTERY	
Battery Capacity	2000 mAh
Voltage	22.2 V
Charging Voltage Limit	25.2 V
Battery Type	LiPo 6S
Energy	44.4 Wh@0.5C
Discharge Rate	Standard: 10C
Weight	295 g
Charging Temperature	5° to 40° C (41° to 104° F)
Max Charging Power	90 W



DJI FPV GOGGLES V2	
Weight	Approx. 420 g (headband and antennas included)
Dimensions	184x122x110 mm (antennas excluded) 202x126x110 mm (antennas included)
Screen Size	2-inches (x2)
Screen Refresh Rate	144 Hz
Communication Frequency [1]	2.400-2.4835 GHz 5.725-5.850 GHz
Transmitter Power (EIRP)	2.400-2.4835 GHz FCC: ≤ 28.5 dBm CE: ≤ 20 dBm SRRC: ≤ 20 dBm MIC: ≤ 20 dBm 5.725-5.850 GHz FCC: ≤ 31.5 dBm CE: ≤ 14 dBm SRRC: ≤ 19 dBm
Communication Bandwidth	40 MHz (Max.)
Live View Mode	Low-Latency Mode: 810p/120fps ≤ 28ms* High-Quality Mode: 810p/60fps ≤ 40ms* * A 150° FOV is available when shooting at 50 or 100 fps. For other frame rates, the FOV will be 142°.
Max Video Bitrate	50 Mbps
Transmission Range [2]	10 km (FCC), 6 km (CE), 6 km (SRRC), 6 km (MIC)
Video Format	MOV(Video format: H.264)
Supported Video and Audio Playback Formats	MP4, MOV, MKV (Video format: H.264; Audio format: AAC-LC, AAC-HE, AC-3, MP3)
Operating Temperature	0° to 40° C (32° to 104° F)
Power Input	Dedicated DJI Goggles batteries



FOV	FOV: 30° to 54°; Image size: 50-100%
Interpupillary Distance Range	58-70 mm
Supported microSD Cards	microSD (up to 256 GB)
DJI FPV GOGGLES BATTERY	
Capacity	1800 mAh
Voltage	9 V (Max.)
Type	LiPo 2S
Energy	18 Wh
Charging Temperature	0° to 45° C (32° to 113° F)
Max Charging Power	10 W
Battery Life	Approx. 110 minutes (measured in an environment of 25°C at maximum brightness level)
DJI FPV REMOTE CONTROLLER 2	
Operating Frequency	2.400-2.4835 GHz 5.725-5.850 GHz
Transmitter Power (EIRP)	2.400-2.4835 GHz FCC: ≤ 28.5 dBm CE: ≤ 20 dBm SRRC: ≤ 20 dBm MIC: ≤ 20 dBm 5.725-5.850 GHz FCC: ≤ 31.5 dBm CE: ≤ 14 dBm SRRC: ≤ 19 dBm
Max. Transmission Distance	10 km (FCC), 6 km (CE), 6 km (SRRC), 6 km (MIC)
Dimensions	190x140x51 mm
Weight	346 g
Battery Life	Approx. 9 hours
Charging Time	2.5 hours
MOTION CONTROLLER	
Model	FC7BMC



Weight	167 g
Operating Frequency Range	2.400-2.4835 GHz; 5.725-5.850 GHz
Max Transmission Distance (unobstructed, free of interference)	10 km (FCC), 6 km (CE/SRRC/MIC)
Transmitter Power (EIRP)	2.4 GHz: ≤28.5 dBm (FCC), ≤20 dBm (CE/SRRC/MIC) 5.8 GHz: ≤31.5 dBm (FCC), ≤19 dBm (SRRC), ≤14 dBm (CE)
Operating Temperature Range	-10° to 40° C (14° to 104° F)
Battery Life	300 minutes
MICROSD CARD	
Supported microSD cards	Max 256 GBUHS-I Speed Grade 3
Recommended microSD cards	SanDisk High Endurance U3 V30 64GB microSDXC SanDisk Extreme PRO U3 V30 A2 64GB microSDXC SanDisk Extreme U3 V30 A2 64GB microSDXC SanDisk Extreme U3 V30 A2 128GB microSDXC SanDisk Extreme U3 V30 A2 256GB microSDXC Lexar 667x V30 128GB microSDXC Lexar High Endurance 128GB U3 V30 microSDXC Samsung EVO U3 (Yellow) 64GB microSDXC Samsung EVO Plus U3 (Red) 64GB microSDXC Samsung EVO Plus U3 256GB microSDXC Netac 256GB U3 A1 microSDXC