Clifton Cameras Product Specification

DJI Air 3S Full Spec

item_title	spec_key	spec_value
Aircraft	Takeoff Weight	724 g
Aircraft	Dimensions	Folded (without propellers): 214.19×100.63×89.17 mm (L×W×H) Unfolded (without propellers): 266.11×325.47×106.00 mm (L×W×H)
Aircraft	Max Ascent Speed	10 m/s
Aircraft	Max Descent Speed	10 m/s
Aircraft	Max Horizontal Speed	At sea level, in windless conditions: 21 m/s At sea level, with 6 m/s tailwind, while flying in the same direction as the wind: 27 m/s ^{* Measured in a wind tunnel test environment when taking off from an altitude of 0 meter and ascending vertically to a height of 1.5 meters above the ground in the Sport mode, and is for reference only. Always pay attention to reminders on the camera view during your flight.} ^{* 19 m/s in the EU region.}
Aircraft	Max Takeoff Altitude	6000 m
Aircraft	Max Flight Time	45 minutes ^{Measured by DJI Air 3S flying forward at a constant speed of 32.4 kph in a windless environment at sea level, with Obstacle Avoidance Action set to Brake, in photo mode, and from 100% battery level until 0%. Data is for reference only. Always pay attention to reminders in the app during your flight.}
Aircraft	Max Hovering Time	41 minutes ^{Measured by DJI Air 3S hovering in a windless environment at sea level, with Obstacle Avoidance Action set to Brake, in photo mode, and from 100% battery level until 0%. Data is for reference only. Always pay attention to reminders in the app during your flight.}
Aircraft	Max Flight Distance	32 km ^{Measured by DJI Air 3S flying forward at a constant speed of 48.6 kph in a windless environment at sea level, with Obstacle Avoidance Action set to Brake, in photo mode, and from 100% battery level until 0%. Data is for reference only. Always pay attention to reminders in the app during your flight.}
Aircraft	Max Wind Speed Resistance	12 m/s
Aircraft	Max Pitch Angle	36°
Aircraft	Operating Temperature	-10° to 40° C (14° to 104° F)
Aircraft	Global Navigation	GPS + Galileo + BeiDou

	Satellite System	
Aircraft	Hovering Accuracy Range	Vertical: ±0.1 m (with vision positioning) ±0.5 m (with satellite positioning) Horizontal: ±0.3 m (with vision positioning) ±0.5 m (with satellite positioning)
Aircraft	Internal Storage	42 GB
Aircraft	Class	C1 (EU)
Camera	Image Sensor	Wide-Angle Camera: 1-inch CMOS, 50MP Effective Pixels Medium Tele Camera: 1/1.3-inch CMOS, 48MP Effective Pixels
Camera	Lens	Wide-Angle Camera FOV: 84° Format Equivalent: 24 mm Aperture: f/1.8 Focus: 0.5 m to ∞ Medium Tele Camera FOV: 35° Format Equivalent: 70 mm Aperture: f/2.8 Focus: 3 m to ∞
Camera	ISO Range	Video Normal: 100-12800 (Normal) 100-3200 (D-Log M) 100-3200 (HLG) Slow Motion: 100-6400 (Normal) 100-3200 (D-Log M) 100-3200 (HLG) Photo 100-6400 (12 MP) 100-3200 (48 MP and 50 MP)
Camera	Shutter Speed	Wide-Angle Camera 12MP Photo: 1/8000-2 s (2.5-8 s for simulated long exposure) 50MP Photo: 1/8000-2 s Medium Tele Camera 12MP Photo: 1/16000-2 s (2.5-8 s for simulated long exposure) 48MP Photo: 1/16000-2 s
Camera	Max Image Size	Wide-Angle Camera: 8192×6144 Medium Tele Camera: 8064×6048
Camera	Still Photography Modes	Wide-Angle Camera Single Shot: 12 MP and 50 MP Burst Shooting: 12 MP, 3/5/7 frames; 50 MP, 3/5 frames Automatic Exposure Bracketing (AEB): 12 MP, 3/5/7 frames; 50 MP, 3/5 frames at 0.7 EV step Timed: 12 MP, 2/3/5/7/10/15/20/30/60 s; 50 MP, 5/7/10/15/20/30/60 s Medium Tele Camera

		Single Shot: 12 MP and 48 MP Burst Shooting: 12 MP, 3/5/7 frames; 48 MP, 3/5 frames Automatic Exposure Bracketing (AEB): 12 MP, 3/5/7 frames; 48 MP, 3/5 frames at 0.7 EV step Timed: 12 MP, 2/3/5/7/10/15/20/30/60 s; 48 MP, 5/7/10/15/20/30/60 s
Camera	Photo Format	JPEG/DNG (RAW)
Camera	Video Resolution	Wide-Angle Camera/Medium Tele Camera: H.264/H.265 4K: 3840×2160@24/25/30/48/50/60/120*fps FHD: 1920×1080@24/25/30/48/50/60/120*/240*fps 2.7K Vertical Shooting: 1512×2688@24/25/30/48/50/60fps ^{* Recording frame rates. The corresponding video plays as a slow-motion video. Slow-motion videos and 4K video recordings only support H.265 encoding.}
Camera	Video Format	MP4 (MPEG-4 AVC/H.264, HEVC/H.265)
Camera	Max Video Bitrate	H.264/H.265: 130 Mbps
Camera	Supported File System	exFAT
Camera	Color Mode and Sampling Method	Wide-Angle/Medium Tele Camera Normal (FHD/2.7K): 8-bit 4:2:0 (H.264) Normal (FHD/2.7K): 10-bit 4:2:0 (H.265) HLG/D-Log M (FHD/2.7K): 10-bit 4:2:0 (H.264/H.265) Normal/HLG/D-Log M (4K): 10-bit 4:2:0 (H.265)
Camera	Digital Zoom	Wide-Angle Camera: 1-2.9x Medium Tele Camera: 3-9x
Gimbal	Stabilization	3-axis mechanical gimbal (tilt, roll, pan)
Gimbal	Mechanical Range	Tilt: -135° to 70° Roll: -50° to 50° Pan: -27° to 27°
Gimbal	Controllable Range	Tilt: -90° to 60° Pan: -5° to 5°
Gimbal	Max Control Speed (tilt)	100°/s
Gimbal	Angular Vibration Range	±0.0037°
Sensing	Sensing Type	Omnidirectional binocular vision system, supplemented with forward-facing LiDAR and an infrared sensor at the bottom of the aircraft
Sensing	Forward	Measurement Range: 0.5-18 m Detection Range: 0.5-200 m Effective Sensing Speed: Flight Speed ≤ 15 m/s FOV: Horizontal 90°, Vertical 72°
Sensing	Backward	Measurement Range: 0.5-18 m Effective Sensing Speed: Flight Speed ≤ 14 m/s FOV: Horizontal 90°, Vertical 72°
Sensing	Lateral	Measurement Range: 0.5-30 m Effective Sensing Speed: Flight Speed ≤ 14 m/s FOV: Horizontal 90°, Vertical 72°
Sensing	Upward	Measurement Range: 0.5-18 m Effective Sensing Speed: Flight Speed ≤ 6 m/s FOV: Front and Back 72°, Left and Right 90°
Sensing	Downward	Measurement Range: 0.3-14 m Effective Sensing Speed: Flight Speed ≤ 6 m/s FOV: Front and Back 106°, Left and Right 90°

Sensing	Operating Environment	Forward, Backward, Left, Right, and Upward: Surfaces with discernible patterns and adequate lighting (lux > 1) Downward: Surfaces with discernible patterns, diffuse reflectivity > 20% (e.g., walls, trees, people), and adequate lighting (lux > 1)
Sensing	3D Infrared Sensor	Forward-Facing LiDAR Measurement Range (nighttime): 0.5-25 m (reflectivity > 10%) FOV: Up and Down 60°, Left and Right 60° Downward-Facing Infrared Sensor Measurement Range: 0.3-8 m (reflectivity > 10%) FOV: Front and Back 60°, Left and Right 60°
Video Transmission	Video Transmission System	O4
Video Transmission	Live View Quality	Remote Controller: 1080p/30fps, 1080p/60fps
Video Transmission	Operating Frequency	2.4000-2.4835 GHz 5.170-5.250 GHz 5.725-5.850 GHz ^{Operating frequency allowed varies among countries and regions. Refer to local laws and regulations for more information.}
Video Transmission	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)
Video Transmission	Max Transmission Distance (unobstructed, free of interference)	FCC: 20 km 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 in the app during your flight.}
Video Transmission	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. 10-20 km ^{Measured under FCC standard in unobstructed environments with typical interference. Used for reference purposes only and provides no guarantee for actual transmission distance.}
Video Transmission	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 ^{Measured under FCC standard in obstructed environments with typical low interference. Used for reference purposes only and provides no guarantee for actual transmission distance.}
Video	Max Download	O4:

Transmission	Speed	10 MB/s (with DJI RC-N3) 10 MB/s (with DJI RC 2) Wi-Fi 5: 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.}
Video Transmission	Lowest Latency	Aircraft + Remote Controller: Approx. 120 ms ^{Depending on the actual environment and mobile device.}
Video Transmission	Antenna	6 antennas, 2T4R
Wi-Fi	Protocol	802.11 a/b/g/n/ac
Wi-Fi	Operating Frequency	2.400-2.4835 GHz 5.725-5.850 GHz
Wi-Fi	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 5.2
Bluetooth	Operating Frequency	2.400-2.4835 GHz
Bluetooth	Transmitter Power (EIRP)	< 10 dBm
Battery	Capacity	4276 mAh
Battery	Weight	Approx. 247 g
Battery	Nominal Voltage	14.6 V
Battery	Max Charging Voltage	17.2 V
Battery	Type	Li-ion 4S
Battery	Energy	62.5 Wh
Battery	Charging Temperature	5° to 40° C (41° to 104° F)
Battery	Charging Time	Approx. 80 minutes (with DJI 65W Portable Charger) Approx. 60 minutes (with DJI 100W USB-C Power Adapter and Battery Charging Hub)
Charger	Input	DJI 65W Portable Charger: 100-240 V (AC), 50-60 Hz, 2 A DJI 100W USB-C Power Adapter: 100-240 V (AC), 50-60 Hz, 2.5 A
Charger	Output	DJI 65W Portable Charger: USB-C 5 V, 5 A 9 V, 5 A 12 V, 5 A 15 V, 4.3 A 20 V, 3.25 A 5-20 V, 3.25 A USB-A

		5 V, 2 A DJI 100W USB-C Power Adapter: Max 100 W (total) ^{When both ports are used, the max output power of one port is 82 W, and the charger will dynamically allocate the output power of the two ports according to the power load.}
Charger	Rated Power	DJI 65W Portable Charger: 65 W DJI 100W USB-C Power Adapter: 100 W
Battery Charging Hub	Input	USB-C: 5-20 V, max 5 A
Battery Charging Hub	Output (power accumulation)	Battery Port: 12-17.2 V, 3.5 A
Battery Charging Hub	Output (charging)	Battery Port: 12-17.2 V, max 5 A
Battery Charging Hub	Output (USB)	USB-C: 5 V, 3 A 9 V, 5 A 12 V, 5 A 15 V, 5 A 20 V, 4.1 A
Battery Charging Hub	Charging Type	Three batteries charged in sequence
Battery Charging Hub	Compatibility	DJI Air 3 Intelligent Flight Battery DJI Air 3S Intelligent Flight Battery
Car Charger	Input	Car Power Input: 12.7-16 V, 6.5 A, rated voltage 14 V (DC)
Car Charger	Output	USB-C: 5 V, 5 A 9 V, 5 A 12 V, 5 A 15 V, 4.3 A 20 V, 3.25 A 5-20 V, 3.25 A USB-A: 5 V, 2 A
Car Charger	Rated Power	65 W
Car Charger	Charging Temperature	5° to 40° C (41° to 104° F)
Storage	Recommended microSD Cards	Lexar 1066x 64GB V30 U3 A2 microSDXC Lexar 1066x 128GB V30 U3 A2 microSDXC Lexar 1066x 256GB V30 U3 A2 microSDXC Lexar 1066x 512GB V30 U3 A2 microSDXC Kingston Canvas GO! Plus 64GB V30 U3 A2 microSDXC Kingston Canvas GO! Plus 128GB V30 U3 A2 microSDXC Kingston Canvas GO! Plus 256GB V30 U3 A2 microSDXC Kingston Canvas GO! Plus 512GB V30 U3 A2 microSDXC
DJI RC-N3 Remote Controller	Max Operating Time	Without Charging Any Mobile Device: 3.5 hours When Charging a Mobile Device: 1.5 hours
DJI RC-N3 Remote	Max Supported Mobile Device Size	180×86×10 mm (L×W×H)

Controller		
DJI RC-N3 Remote Controller	Operating Temperature	-10° to 40° C (14° to 104° F)
DJI RC-N3 Remote Controller	Charging Temperature	5° to 40° C (41° to 104° F)
DJI RC-N3 Remote Controller	Charging Time	2 hours
DJI RC-N3 Remote Controller	Charging Type	It is recommended to use a 5V/2A charger.
DJI RC-N3 Remote Controller	Battery Capacity	9.36 Wh (3.6 V, 2600 mAh)
DJI RC-N3 Remote Controller	Weight	Approx. 320 g
DJI RC-N3 Remote Controller	Dimensions	104.2×150×45.2 mm (L×W×H)
DJI RC-N3 Remote Controller	Supported Mobile Device Port Type	Lightning, USB-C, Micro-USB ^{Using a mobile device with a Micro-USB port requires the DJI RC-N Series RC Cable (Standard Micro USB Connector), which is sold separately.}
DJI RC-N3 Remote Controller	Video Transmission Operating Frequency	2.4000-2.4835 GHz 5.170-5.250 GHz 5.725-5.850 GHz ^{Operating frequency allowed varies among countries and regions. Refer to local laws and regulations for more information.}
DJI RC-N3 Remote Controller	Video Transmission 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) < 14 dBm (CE) < 30 dBm (SRRC)