DJI Air 3S

1" CMOS Primary Camera | Dual-Camera 4K/60fps HDR Video & 14 Stops of Dynamic Range | Free Panorama, Seamless and Detailed | Nightscape Omnidirectional Obstacle Sensing | Next-Gen Smart RTH With Enhanced Precision | 45-Min Flight Time, 20km Video Transmission

Aircraft

Takeoff Weight	724 g
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)
Max Ascent Speed	10 m/s
Max Descent Speed	10 m/s
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 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.
Max Takeoff Altitude	6000 m

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.
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.
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.
Max Wind Speed Resistance	12 m/s
Max Pitch Angle	36°
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 satellite positioning) Horizontal: ±0.3 m (with vision positioning) ±0.5 m (with satellite positioning)
Internal Storage	42 GB

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
Lens	Wide-Angle Camera FOV: 82° 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 ∞
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)
Shutter Speed	Wide-Angle Camera 12MP Photo: 1/18000-2 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: 1/8000-2 s
Max Image Size	Wide-Angle Camera: 8192×6144 Medium Tele Camera: 8064×6048
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
Photo Format	JPEG/DNG (RAW)

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.
Video Format	MP4 (MPEG-4 AVC/H.264, HEVC/H.265)
Max Video Bitrate	H.264/H.265: 130 Mbps* * When shooting 4K/120fps video in D-Log M mode with the DJI Air 3S, the video encoding bitrate can reach up to 130Mbps, corresponding to a video stream frame rate of 120fps. However, since slow-motion video files are encapsulated at 30fps, the video length displayed on the player is four times the recording duration, and the bitrate of the parsed encapsulated file is approximately one-fourth of the original encoding bitrate.
Supported File System	exFAT
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)
Digital Zoom	Wide-Angle Camera: 1-2.9x Medium Tele Camera: 3-9x

Gimbal

Stabilization	3-axis mechanical gimbal (tilt, roll, pan)
Mechanical Range	Tilt: -135° to 70° Roll: -50° to 50° Pan: -27° to 27°
Controllable Range	Tilt: -90° to 60° Pan: -5° to 5°
Max Control Speed (tilt)	100°/s
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
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°
Backward	Measurement Range: 0.5-18 m Effective Sensing Speed: Flight Speed ≤ 14 m/s FOV: Horizontal 90°, Vertical 72°

Lateral	Measurement Range: 0.5-30 m Effective Sensing Speed: Flight Speed ≤ 14 m/s FOV: Horizontal 90°, Vertical 72°
Upward	Measurement Range: 0.5-18 m Effective Sensing Speed: Flight Speed ≤ 6 m/s FOV: Front and Back 72°, Left and Right 90°
Downward	Measurement Range: 0.3-14 m Effective Sensing Speed: Flight Speed ≤ 6 m/s FOV: Front and Back 106°, Left and Right 90°
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)
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

Live View Quality	Remote Controller: 1080p/30fps, 1080p/60fps
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.
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)
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.
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.
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.
Max Download Speed	O4: 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.
Lowest Latency	Aircraft + Remote Controller: Approx. 120 ms Depending on the actual environment and mobile device.
Antenna	6 antennas, 2T4R

Wi-Fi

Protocol	802.11 a/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 5.2
Operating Frequency	2.400-2.4835 GHz
Transmitter Power (EIRP)	< 10 dBm

Battery

Capacity	4276 mAh
Weight	Approx. 247 g
Nominal Voltage	14.6 V
Max Charging Voltage	17.2 V
Type	Li-ion 4S

Energy	62.5 Wh
Charging Temperature	5° to 40° C (41° to 104° F)
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
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.
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
Output (power accumulation)	Battery Port: 12-17.2 V, 3.5 A
Output (charging)	Battery Port: 12-17.2 V, max 5 A
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
Charging Type	Three batteries charged in sequence
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)
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
Rated Power	65 W
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
Max Supported Mobile Device Size	180×86×10 mm (L×W×H)
Operating Temperature	-10° to 40° C (14° to 104° F)
Charging Temperature	5° to 40° C (41° to 104° F)
Charging Time	2 hours
Charging Type	It is recommended to use a 5V/2A charger.
Battery Capacity	9.36 Wh (3.6 V, 2600 mAh)
Weight	Approx. 320 g
Dimensions	104.2×150×45.2 mm (L×W×H)
Supported Mobile Device Port Type	Lightning, USB-C, Micro-USB Using a mobile device with Micro-USB port requires the DJI RC-N RC Cable (Standard Micro USB Connector), which is sold separately.

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) < 14 dBm (CE) < 30 dBm (SRRC)