

Technical details:

DJI Air 3S

General

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

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

* 19 m/s in the EU region.

Max Takeoff Altitude

6000 m

Max Flight Time

45 minutes

Aircraft Max Hovering Time

41 minutes

Aircraft Max Flight Distance

32 km

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

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)

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

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 ∞

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: 1/8000-2 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

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@24/25/30/48/50/60/120fps

FHD: 1920×1080@24/25/30/48/50/60/120/240fps

2.7K Vertical Shooting: 1512×2688@24/25/30/48/50/60fps

Video Format

MP4 (MPEG-4 AVC/H.264, HEVC/H.265)

Max Video Bitrate

H.264/H.265: 130 Mbps

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 \leq 14 m/s

FOV: Horizontal 90°, Vertical 72°

Upward

Measurement Range: 0.5-18 m

Effective Sensing Speed: Flight Speed \leq 6 m/s

FOV: Front and Back 72°, Left and Right 90°

Downward

Measurement Range: 0.3-14 m

Effective Sensing Speed: Flight Speed \leq 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

System

O4

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

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)

Max Transmission Distance (unobstructed, free of interference)

FCC: 20 km

CE: 10 km

SRRC: 10 km

MIC: 10 km

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

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

Max Download Speed

O4:

10 MB/s (with DJI RC-N3)

10 MB/s (with DJI RC 2)

Wi-Fi 5: 30 MB/s

Lowest Latency

Aircraft + Remote Controller: Approx. 120 MS

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)

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

Video Transmission Operating Frequency

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5.170-5.250 GHz

5.725-5.850 GHz

Video Transmission Transmitter Power (EIRP)

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< 33 dBm (FCC)

< 14 dBm (CE)

< 30 dBm (SRRC)