# Specs Mavic 3 PRO



# **Aircraft**

# Takeoff Weight

Mavic 3 Pro: 958 gMavic 3 Pro Cine: 963 g

#### Dimensions

• Folded (without propellers): 231.1×98×95.4 mm (L×W×H)
Unfolded (without propellers): 347.5×290.8×107.7 mm (L×W×H)

# • Max Ascent Speed

• 8 m/s

# • Max Descent Speed

• 6 m/s

# Max Horizontal Speed (at sea level, no wind)

• 21 m/s

#### Max Takeoff Altitude

• 6000 m

#### Max Flight Time

43 minutes

Measured in a controlled test environment. Specific test conditions are as follows: flying at a constant speed of 32.4 kph in a windless environment at sea level, with APAS off, AirSense off, camera parameters set to 1080p/24fps, video mode off, and from 100% battery level until 0%. Results may vary depending on the environment, actual use, and firmware version.

# Max Hovering Time

• 37 minutes

Measured in a controlled test environment. Specific test conditions are as follows: hovering in a windless environment at sea level, with APAS off, AirSense off, camera parameters set to 1080p/24fps, video mode off, and from 100% battery level until 0%. Results may vary depending on the environment, actual use, and firmware version.

# Max Flight Distance

28 km

The flight distance is different from the video transmission distance. The data was tested in a controlled environment, under the following specific test conditions: flying at a constant speed of 50.4 kph in a windless environment at sea level, with APAS off, AirSense off, camera parameters set to 1080p/24fps, video mode off, and from 100% battery level until 0%. Results may vary depending on the environment, actual use, and firmware version.

# Max Wind Speed Resistance

• 12 m/s

#### Max Pitch Angle

• 35°

#### 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

Mavic 3 Pro: 8 GB (approx. 7.9GB available space)
 Mavic 3 Pro Cine: 1 TB (approx. 934.8GB available space)

#### Class

• C2 (EU)

# Camera

# Image Sensor

• Hasselblad Camera: 4/3 CMOS, Effective Pixels: 20 MP

Medium Tele Camera: 1/1.3" CMOS, Effective Pixels: 48 MP

Tele Camera: 1/2" CMOS, Effective Pixels: 12 MP

#### Lens

• Hasselblad Camera

FOV: 84°

Format Equivalent: 24mm

Aperture: f/2.8-f/11

Focus: 1 m to  $\infty$ 

Medium Tele Camera

FOV: 35°

Format Equivalent: 70mm

Aperture: f/2.8 Focus: 3 m to  $\infty$ 

Tele Camera

FOV: 15°

Format Equivalent: 166mm

Aperture: f/3.4 Focus: 3 m to ∞

## ISO Range

Video

Normal and Slow Motion:

100-6400 (Normal)

400-1600 (D-Log)

100-1600 (D-Log M)

100-1600 (HLG)

Night:

800-12800 (Normal)

Photo

100-6400

# Shutter Speed

• Hasselblad Camera: 8-1/8000 s

Medium Tele Camera: 2-1/8000 s

Tele Camera: 2-1/8000 s

# Max Image Size

Hasselblad Camera: 5280×3956

Medium Tele Camera: 8064×6048

Tele Camera: 4000×3000

# Still Photography Modes

• Hasselblad Camera

Single Shot: 20 MP

Burst Shooting: 20 MP, 3/5/7 frames

Automatic Exposure Bracketing (AEB): 20 MP, 3/5 frames at 0.7 EV step

Timed: 20 MP, 2/3/5/7/10/15/20/30/60 s

Medium Tele Camera

Single Shot: 12 MP or 48 MP

Burst Shooting: 12 MP or 48 MP, 3/5/7 frames

Automatic Exposure Bracketing (AEB): 12 MP or 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: 7/10/15/20/30/60 s

Tele Camera

Single Shot: 12 MP

Burst Shooting: 12 MP, 3/5/7 frames

Automatic Exposure Bracketing (AEB): 12 MP, 3/5 frames at 0.7 EV step Timed: 12 MP, 2/3/5/7/10/15/20/30/60 s

#### Photo Format

• JPEG/DNG (RAW)

#### Video Resolution

• Hasselblad Camera

Apple ProRes 422 HQ/422/422 LT

5.1K: 5120×2700@24/25/30/48/50fps

DCI 4K: 4096×2160@24/25/30/48/50/60/120\*fps 4K: 3840×2160@24/25/30/48/50/60/120\*fps

H.264/H.265

5.1K: 5120×2700@24/25/30/48/50fps

DCI 4K: 4096×2160@24/25/30/48/50/60/120\*fps 4K: 3840×2160@24/25/30/48/50/60/120\*fps

FHD: 1920×1080@24/25/30/48/50/60/120\*/200\*fps

\* Recording frame rates. The corresponding video plays as slow-motion video.

Medium Tele Camera

Apple ProRes 422 HQ/422/422 LT

4K: 3840×2160@24/25/30/48/50/60fps

H.264/H.265

4K: 3840×2160@24/25/30/48/50/60fps FHD: 1920×1080@24/25/30/48/50/60fps

Tele Camera

Apple ProRes 422 HQ/422/422 LT

4K: 3840×2160@24/25/30/48/50/60fps

H.264/H.265

4K: 3840×2160@24/25/30/50/60fps FHD: 1920×1080@24/25/30/50/60fps

Only the Cine version supports ProRes recording

#### Video Format

MP4/MOV (MPEG-4 AVC/H.264, HEVC/H.265)
 MOV (Apple ProRes 422 HQ/422/422 LT)

Only the Cine version supports ProRes recording

#### Max Video Bitrate

• Hasselblad Camera:

H.264/H.265: 200 Mbps ProRes 422 HQ: 3772 Mbps ProRes 422: 2514 Mbps ProRes 422 LT: 1750 Mbps

Medium Tele Camera: H.264/H.265: 160 Mbps ProRes 422 HQ: 1768 Mbps ProRes 422: 1178 Mbps ProRes 422 LT: 821 Mbps

Tele Camera:

H.264/H.265: 160 Mbps ProRes 422 HQ: 1768 Mbps ProRes 422: 1178 Mbps ProRes 422 LT: 821 Mbps

Only the Cine version supports ProRes recording.

# • Supported File System

exFAT

#### Color Mode and Sampling Method

Hasselblad Camera

Normal:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

8-bit 4:2:0 (H.264/H.265)

D-Log:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

10-bit 4:2:0 (H.264/H.265)

HLG/D-Log M:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

10-bit 4:2:0 (H.265)

Medium Tele Camera

Normal:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

8-bit 4:2:0 (H.264/H.265)

HLG/D-Log M:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

10-bit 4:2:0 (H.265)

Tele Camera

Normal:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

8-bit 4:2:0 (H.264/H.265)

HLG/D-Log M:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

10-bit 4:2:0 (H.265)

Only the Cine version supports ProRes recording.

Digital Zoom (only in Normal Video Mode and Explore Mode)

• Hasselblad Camera: 1-3x

Medium Tele Camera: 3-7x

Tele Camera: 7-28x

# **Gimbal**

#### Stabilization

• 3-axis mechanical gimbal (tilt, roll, pan)

#### Mechanical Range

• Tilt: -140° to 50°

Roll: -50° to 50° Pan: -23° to 23°

# Controllable Range

• Tilt: -90° to 35°

Pan: -5° to 5°

# Max Control Speed (tilt)

• 100°/s

# Angular Vibration Range

• Hovering Without Wind: ±0.001°

Normal Mode: ±0.003° Sport Mode: ±0.005°

# Sensing

# Sensing Type

 Omnidirectional binocular vision system, supplemented with an infrared sensor at the bottom of the aircraft

#### Forward

• Measurement Range:

0.5-20 m

**Detection Range:** 

0.5-200 m

Effective Sensing Speed:

Flight Speed  $\leq 15 \text{ m/s}$ 

FOV:

Horizontal 90°, Vertical 103°

#### Backward

• Measurement Range:

0.5-16 m

Effective Sensing Speed:

Flight Speed ≤ 12 m/s

FOV:

Horizontal 90°, Vertical 103°

#### Lateral

• Measurement Range:

0.5-25 m

Effective Sensing Speed:

Flight Speed ≤ 15 m/s

FOV:

Horizontal 90°, Vertical 85°

#### Upward

• Measurement Range:

0.2-10 m

Effective Sensing Speed:

Flight Speed ≤ 6 m/s

FOV:

Front and Back 100°, Left and Right 90°

#### Downward

• Measurement Range:

0.3-18 m

**Effective Sensing Speed:** 

Flight Speed ≤ 6 m/s

FOV:

Front and Back 130°, Left and Right 160°

# Operating Environment

Forward, Backward, Left, Right, and Upward:

surfaces with discernible patterns and adequate lighting (lux > 15)

Downward:

surfaces with discernible patterns, diffuse reflectivity > 20% (e.g. walls, trees, people), and adequate lighting (lux > 15)

# **Video Transmission**

# Video Transmission System

• 03+

#### Live View Quality

• Remote Controller:

1080p/30fps, 1080p/60fps

# Operating Frequency

• 2.400-2.4835 GHz

5.725-5.850 GHz

#### Transmitter Power (EIRP)

• 2.4 GHz:

< 33 dBm (FCC)

< 20 dBm (CE/SRRC/MIC)

5.8 GHz:

< 33 dBm (FCC)

< 30 dBm (SRRC)

< 14 dBm (CE)

#### Max Transmission Distance (unobstructed, free of interference)

FCC: 15 km

CE: 8 km

SRRC: 8 km MIC: 8 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. During your flight, please pay attention to RTH reminders in the DJI Fly app.

# Max Transmission Distance (unobstructed, with interference)

Strong Interference: Urban landscape, approx. 1.5-3 km
 Medium Interference: Suburban landscape, approx. 3-9 km
 Low Interference: Suburb/seaside, approx. 9-15 km
 Data tested 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
 Data tested under FCC standard in environments with typical low interference. Used for reference purposes only and provides no guarantee for actual transmission distance.

# Max Download Speed

03+:

5.5 MB/s (with DJI RC-N1 Remote Controller)15 MB/s (with DJI RC Pro)5.5 MB/s (with DJI RC)

Wi-Fi 6: 80 MB/s\*

\* Measured in a laboratory environment with little interference in countries/regions that support both 2.4 GHz and 5.8 GHz, with footage saved to the internal storage. Download speeds may vary depending on the actual conditions

#### Lowest Latency

130 ms (with DJI RC-N1 Remote Controller)
 120 ms (with DJI RC Pro)
 130 ms (with DJI RC)
 Depending on the actual environment and mobile device.

#### Antenna

• 4 antennas, 2T4R

# **Battery**

- Capacity
  - 5000 mAh
- Weight
  - 335.5 g
- Nominal Voltage
  - 15.4 V
- Max Charging Voltage
  - 17.6 V
- Type
  - Li-ion 4S
- Energy
  - 77 Wh
- Charging Temperature
  - 5° to 40° C (41° to 104° F)
- Charging Time
  - Approx. 96 minutes
    Use the included data cable of the DJI 65W Portable Charger.

Approx. 70 minutes
Use the DJI 100W USB-C Power Adapter and DJI Mavic 3 Series 100W
Battery Charging Hub.