

DJI Matrice 4T – Technical Specifications



1 Aircraft (Frame)

- **Takeoff Weight:** 1219 g (with standard propellers, battery, microSD); 1229 g (with silent propellers)
- **Max Takeoff Weight:** 1420 g (standard propellers) / 1430 g (silent propellers)
- **Dimensions (L×W×H):**
 - Unfolded: 307.0 × 387.5 × 149.5 mm
 - Folded: 260.6 × 113.7 × 138.4 mm (excluding propellers)
- **Wheelbase (diagonal):** 438.8 mm
- **Propellers:** 1157F (standard), 1154F (silent); 10.8 in
- **Max Ascent Speed:** 10 m/s (6 m/s with accessories)
- **Max Descent Speed:** 8 m/s (6 m/s with accessories)
- **Max Horizontal Speed:** 21 m/s (forward, Sport mode); 18 m/s (lateral); 19 m/s (backward)
- **Max Flight Time (no wind):** 49 min (standard props) / 46 min (silent props)
- **Max Hover Time:** 42 min (standard) / 39 min (silent)
- **Max Range (no wind):** 35 km (standard) / 32 km (silent)
- **Max Wind Resistance:** 12 m/s
- **Max Takeoff Altitude:** 6000 m (4000 m with accessories)
- **Operating Temp:** -10 °C to 40 °C (no solar radiation)
- **GNSS:** GPS + Galileo + BeiDou + GLONASS (GLONASS only with RTK on)
- **Hovering Accuracy:**
 - Vertical: ±0.1 m (vision), ±0.5 m (GNSS), ±0.1 m (RTK)
 - Horizontal: ±0.3 m (vision), ±0.5 m (GNSS), ±0.1 m (RTK)
- **RTK Accuracy (Fixed):** Horizontal 1 cm + 1 ppm; Vertical 1.5 cm + 1 ppm
- **Sensing:** Omnidirectional binocular vision + downward 3D infrared sensor; 6× low-light fisheye lenses
- **Ports:** 1× E-Port, 1× E-Port Lite (USB)
- **Built-in:** Navigation lights



2 Gimbal

- **Stabilization:** 3-axis (tilt, roll, pan)
- **Mechanical Range:** Tilt -140° to 113°, Roll -52° to 52°, Pan -65° to 65°
- **Controllable Tilt:** -90° to 70°
- **Max Tilt Speed:** 100°/s
- **Angular Vibration:** ±0.007°



3 Cameras (Visible Light)

Wide-Angle

- **Sensor:** 1/1.3" CMOS, 48 MP
- **Lens:** 24 mm eq., f/1.7, FOV 82°, focus 1 m–∞
- **ISO:** 100–25600 (normal), 100–409600 (night)
- **Shutter:** 2 s – 1/8000 s
- **Photo:** 8064 × 6048, JPEG, 0.7 s interval

Medium Telephoto

- **Sensor:** 1/1.3" CMOS, 48 MP
- **Lens:** 70 mm eq., f/2.8, FOV 35°, focus 3 m–∞
- **ISO:** 100–25600 (normal), 100–409600 (night)
- **Photo:** 8064 × 6048

Telephoto

- **Sensor:** 1/1.5" CMOS, 48 MP
- **Lens:** 168 mm eq., f/2.8, FOV 15°, focus 3 m–∞
- **ISO:** 100–25600 (normal), 100–819200 (night)
- **Photo:** 8192 × 6144
- **Digital Zoom:** 16× (112× hybrid)

Video (all visible cameras)

- **4K** 3840×2160@30fps, FHD 1920×1080@30fps
- **Codec:** H.264 / H.265, CBR/VBR
- **Bitrate:** 60 Mbps (H.264) / 40 Mbps (H.265)
- **Format:** MP4, exFAT



8 Battery & Charger

- **Battery:** DJI Matrice 4 Intelligent Flight Battery
- **Charger Hub:** 100 W, USB-C 5–20 V / 5 A, sequential charging, 5–40 °C
- **Standby charge mode:** 90% SOC; full mode: 100% SOC



4 Thermal Camera (Uncooled VOx Microbolometer)

- **Resolution:** 640 × 512 (1280 × 1024 with Super-Resolution)
- **Pixel Pitch:** 12 μm; Wavelength 8–14 μm
- **Lens:** 53 mm eq., f/1.0, DFOV 45°, focus 5 m–∞
- **Frame Rate:** 30 Hz
- **Sensitivity:** ≤50 mK @ f/1.0
- **Temp. Range:** -20 to 150 °C (High Gain), 0 to 550 °C (Low Gain)
- **Accuracy:** ±2 °C or ±2% (High Gain); ±5 °C or ±3% (Low Gain)
- **Video:** 640×512@30fps or 1280×1024@30fps, MP4
- **Photo:** R-JPEG (16-bit), JPEG (8-bit)
- **Digital Zoom:** 28×
- **Palettes:** White Hot, Black Hot, Tint, Iron Red, Hot Iron, Arctic, Medical, Fulgurite, Rainbow 1/2



5 Laser Range Finder

- **Range:** 1800 m @1 Hz (normal incidence, 20% reflectivity); 600 m oblique (1:5)
- **Blind zone:** 1 m
- **Accuracy:** ±(0.2 + 0.0015×D) m



6 NIR Auxiliary Light

- **FOV:** 5.7° ±0.3° (≈6°)
- **Illumination distance:** 100 m



7 Remote Controller & Transmission

- **Controller:** DJI RC Plus 2 Enterprise
- **Video Transmission:** O4 Enterprise
- **Max Range:** 25 km (FCC), 12 km (CE/SRRC/MIC)
- **Radio Power:**
 - 2.4 GHz: <33 dBm (FCC), <20 dBm (CE/SRRC/MIC)
 - 5.8 GHz: <33 dBm (FCC), <30 dBm (SRRC), <14 dBm (CE)