

DJI Matrice 300 RTK Specs

Aircraft

Dimensions	Unfolded, propellers excluded, 810×670×430 mm (L×W×H) Folded, propellers included, 430×420×430 mm (L×W×H)
Diagonal Wheelbase	895 mm
Weight (with single downward gimbal)	Approx. 3.6 kg (without batteries) Approx. 6.3 kg (with two TB60 batteries)
Single Gimbal Damper's Max Payload	930 g
Max Takeoff Weight	9 kg
Operating Frequency	2.4000-2.4835 GHz 5.725-5.850 GHz
EIRP	2.4000-2.4835 GHz: 29.5 dBm (FCC); 18.5dBm (CE); 18.5 dBm (SRRC); 18.5dBm (MIC) 5.725-5.850 GHz: 28.5 dBm (FCC); 12.5dBm (CE); 28.5 dBm (SRRC)
Hovering Accuracy (P-mode with GPS)	Vertical: ±0.1 m (Vision System enabled); ±0.5 m (GPS enabled); ±0.1 m (RTK enabled) Horizontal: ±0.3 m (Vision System enabled); ±1.5 m (GPS enabled); ±0.1 m (RTK enabled)
RTK Positioning Accuracy	When RTK enabled and fixed: 1 cm +1 ppm (Horizontal) 1 cm + 1 ppm (Vertical)
Max Angular Velocity	Pitch: 300°/s, Yaw: 100°/s
Max Pitch Angle	30° (P-mode, Forward Vision System enabled: 25°)
Max Ascent Speed	S mode: 6 m/s P mode: 5 m/s
Max Descent speed (vertical)	S mode: 5 m/s P mode: 4 m/s
Max Descent speed (tilt)	S mode: 7 m/s
Max Speed	S mode: 23 m/s P mode: 17 m/s
Service Ceiling above Sea Level	5000 m (with 2110 propellers, takeoff weight ≤ 7 kg) / 7000 m (with 2195 propellers, takeoff weight ≤ 7 kg)
Max Wind Resistance	15 m/s (12 m/s when taking off or landing)
Max Flight Time	55 min
Supported DJI Gimbals	Zenmuse XT2/XT S/Z30/H20/H20T/DJI P1/DJI L1
Supported Gimbal Configurations	Single Downward Gimbal, Dual Downward Gimbals, Single Upward Gimbal, Upward and Downward Gimbals, Triple Gimbals
Ingress Protection Rating	IP45
GNSS	GPS + GLONASS + BeiDou + Galileo
Operating Temperature	-4°F to 122°F (-20°C to 50°C)

Remote Controller

Operating Frequency	2.4000-2.4835 GHz 5.725-5.850 GHz
Max Transmitting Distance (unobstructed, free of interference)	NCC/FCC: 15 km; CE/MIC: 8 km; SRRC: 8 km
EIRP	2.4000-2.4835 GHz: 29.5 dBm (FCC); 18.5dBm (CE); 18.5 dBm (SRRC); 18.5dBm (MIC) 5.725-5.850 GHz: 28.5 dBm (FCC); 12.5dBm (CE); 20.5 dBm (SRRC)
External Battery	Name: WB37 Intelligent Battery Capacity: 4920 mAh Voltage: 7.6V

	Type: LiPo Energy: 37.39Wh Charging time (using BS60 Intelligent Battery Station): 70 minutes (15°C to 45°C); 130 minutes(0°C to 15°C)
Built-in Battery	Type: 18650 lithium ion battery (5000 mAh @ 7.2 V) Charging: Use a USB charger with specification of 12V / 2A Rated Power: 17 W Charging Time: 2 hours & 15 minutes (Using a USB charger with specification of 12V / 2A)
Battery Life	Built-in battery: Approx 2.5h Built-in battery + External battery: Approx 4.5h
USB Power Supply	5 V / 1.5 A
Operating Temperature	-4°F to 104°F (-20°C to 40°C)

Vision System

Obstacle Sensing Range	Forward/Backward/Left/Right: 0.7-40m Upward/Downward: 0.6-30m
FOV	Forward/Backward/Downward: 65° (H), 50° (V)
Operating Environment	Left/Right/Upward: 75° (H), 60° (V)

Infrared ToF Sensing System

Obstacle Sensing Range	0.1-8m
FOV	30° (±15°)
Operating Environment	Large, diffuse and reflective obstacles (reflectivity > 10%)

Top and bottom auxiliary light

Effective lighting distance	5 m
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FPV Camera

Resolution	960p
FOV	145°
Frame Rate	30 fps

Intelligent Flight Battery

Name	TB60
Capacity	5935mAh
Voltage	52.8 V
Battery Type	LiPo 12S
Energy	274 Wh
Net Weight	Approx 1.35 Kg
Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Ideal Storage Temperature	71.6°F to 86°F (22°C to 30°C)
Charging Temperature	-4°F to 104°F (-20°C to 40°C) When the temperature is < 5°C, the self-heating function will be automatically enabled. Charging in low temperature may shorten the lifetime of the battery.
Charging Time	Using BS60 Intelligent Battery Station: 220V input: 60 min. (fully charging two TB60 batteries), 30 min. (charging two TB60 batteries from 20% to 90%) 110V input: 70 min. (fully charging two TB60 batteries), 40 min. (charging two TB60 batteries from 20% to 90%)

BS60 Intelligent Battery Station

Dimensions	501 x 403 x 252 mm
Net Weight	8.37 kg
Maximum Capacity	TB60 Intelligent Flight Battery x 8; WB37 Intelligent Battery x 4
Input	100-120 VAC, 50-60 Hz / 220-240 VAC, 50-60 Hz
Max Input Power	1070W
Output Power	100-120 V: 750 W 220-240 V: 992 W
Operating Temperature	-4°F to 104°F (-20°C to 40°C)