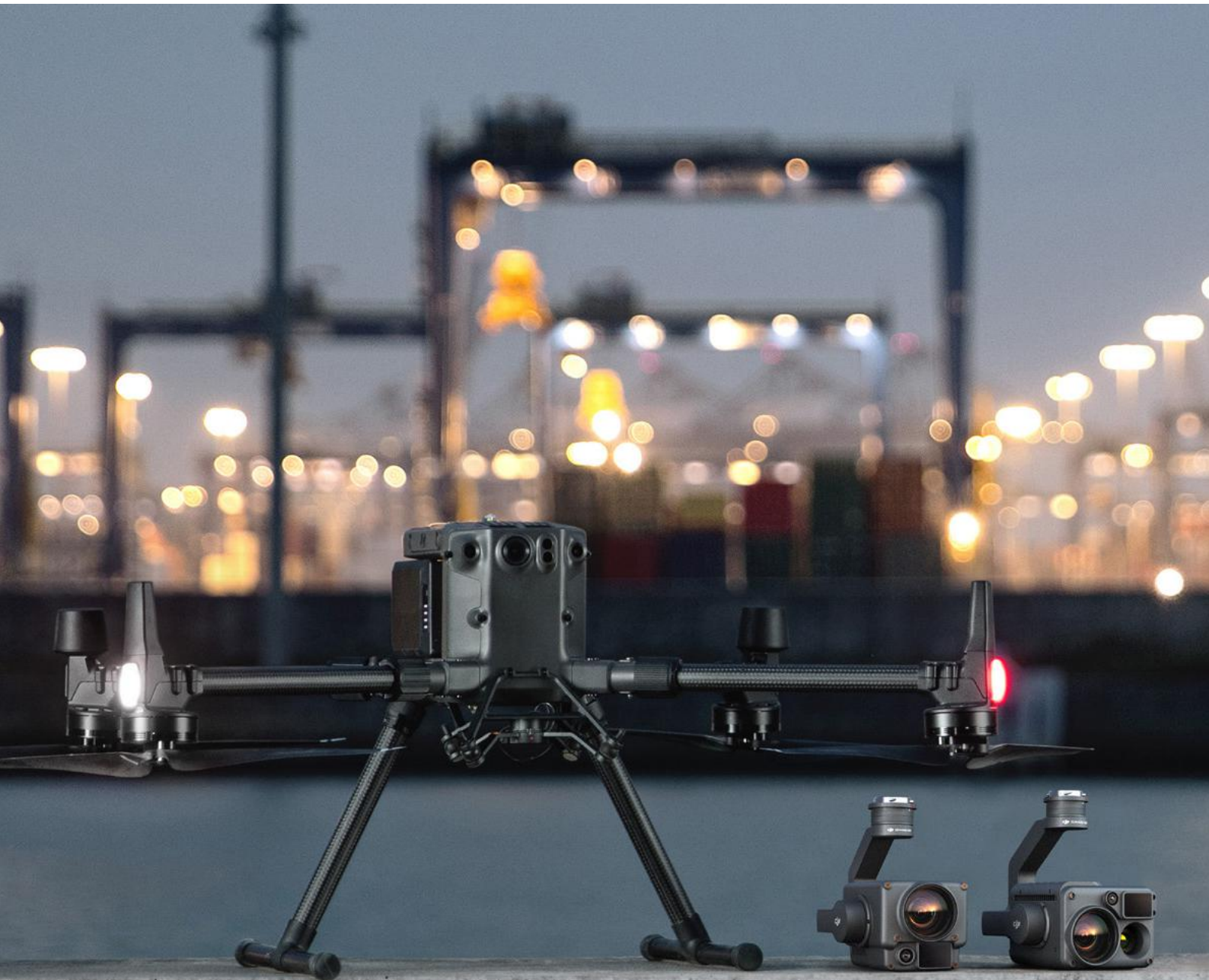




MATRICE 300 RTK

TECHNICAL SPECIFICATION



‘Built Tough.
Works Smart’

AIRCRAFT

Dimensions	Unfolded, propellers excluded: 810×670×430mm (L×W×H) Folded, propellers and landing gears included: 430×420×430mm (L×W×H)
Diagonal Wheelbase	895mm
Weight (Batteries excluded)	3600g
Max Payload	2700g
Max Take off Weight	9000g
Operating Frequency	2.4000-2.4835 GHz; 5.725-5.850 GHz
EIRP	2.400-2.4835 GHz: 29.5 dBm (FCC); 18.5 dBm (CE); 18.5 dBm (SRRC); 18.5 dBm (MIC) 5.725-5.850 GHz: 28.5 dBm (FCC); 12.5 dBm (CE); 28.5 dBm (SRRC)
Hovering Accuracy (Windless or breezy)	±0.1 m (Vision System enabled); ±0.5 m (P-mode with GPS); ±0.1 m (RTK functioning properly) ±0.3 m (Vision System enabled); ±1.5 m (P-mode with GPS); ±0.1 m (RTK functioning properly)
Max Angular Velocity	Pitch: 300°/s, Yaw: 100°/s
Max Pitch Angle	30° (P-mode and Forward Vision System enabled: 25°)
Max Ascent Speed/Max Descent Speed (vertical)	6 m/s; 5 m/s
Max Descent Speed (tilt)	7 m/s
Max Horizontal Speed	23 m/s
Service Ceiling	5000 m (2110 propellers, takeoff weight ≤ 7 kg) 7000 m (2195 High-Altitude Low-Noise Propellers, takeoff weight ≤ 7kg)
Max Wind Resistance	15 m/s
Max Flight Time (Sea level)	55 minutes
Supported DJI Gimbals	Zenmuse XT2/XT S/Z30/H20/H20T
Supported Gimbal Configurations	Dual Downward Gimbals, Single Upward Gimbal, Single Downward Gimbal, Single Upward + Single Downward Gimbals, Triple Gimbals
Other Supported DJI Products	CMS Radar, Manifold 2
Ingress Protection Rating	IP45
GNSS	GPS+GLONASS+BeiDou+Galileo
Operating Temperature	-4° F to 122° F (-20°C to 50°C)

SMART CONTROLLER ENTERPRISE

OcuSync Enterprise Operation Frequency Range	2.400-2.4835 GHz; 5.725-5.850 GHz ¹³	
Max Transmission Distance (Unobstructed, free of interference)	NCC/FCC: 15 km CE/MIC: 8 km SRRC: 8 km	
Transmitter Power (EIRP)	2.400-2.4835 GHz: 29.5 dBm (FCC); 18.5 dBm (CE); 18.5 dBm (SRRC); 18.5 dBm (MIC) 5.725-5.850 GHz: 28.5 dBm (FCC); 12.5 dBm (CE); 20.5 dBm (SRRC)	
External Battery	Name	WB37 Intelligent Battery
	Capacity	4920 mAh
	Voltage	7.6 V
	Battery Type	LiPo
	Energy	37.39 Wh
	Charge Time (Using BS60 Intelligent Battery Station)	70 min (15°C to 45°C); 130 min (0° to 15°C)
Built-in Battery	Battery Type	18650 Li-ion (5000 mAh @ 7.2 V)
	Charge Type	Supports USB charger rated 12 V / 2 A
	Rated Power	17 W
	Charge Time	2 hours and 15 minutes (Using a USB charger rated 12 V / 2 A)
Working Time¹⁴	Built-in battery: Approx. 2.5 hours Built-in Battery + External Battery: Approx. 4.5 hours	
Power Supply Voltage / Current (USB-A port)	5 V / 1.5 A	
Operation Temperature Range	-4°F to 104°F (-20°C to 40°C)	

VISION SYSTEM

Obstacle Sensing Range	Forward / Backward / Left / Right: 0.7 - 40 m Upward / Downward: 0.6 - 30 m
FOV	Forward / Backward / Downward: 65°(H), 50°(V) Left / Right / Upward: 75°(H), 60°(V)
Operating Environment	Surfaces with clear patterns and adequate lighting (> 15 lux, the equivalent of an environment with normal exposure levels such as indoors with a fluorescent light)

¹³ Local regulations in some countries prohibit the use of the 5.8 GHz and 5.2 GHz frequencies and in some regions the 5.2 GHz frequency band is only allowed for indoor use.

¹⁴ The Smart Controller Enterprise will supply power for the mobile device installed, which may affect the above-mentioned specifications.



INFRARED ToF SENSING SYSTEM

Obstacle Sensing Range	0.1 -8 m
FOV	30°
Operating Environment	Large obstacles with diffuse reflection and a high reflectivity (reflectivity> 10%)

INTELLIGENT FLIGHT BATTERY

Capacity	5935 mAh
Voltage	52.8 V
Battery Type	LiPo 12S
Energy	274 Wh
Net Weight (Each)	Approx. 1.35 kg
Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Optimal Storage Temperature	71.6° to 86°F (22°C to 30°C)
Charging Temperature	41°F to 104°F (5°C to 40°C)
Charging Time	When using the Battery Station, Using a 220 V power supply: It takes about 60 minutes to fully charge two TB60 Intelligent Flight Batteries, and it takes about 30 minutes to charge from 20% to 90% Using a 110 V power supply: It takes about 70 minutes to fully charge two TB60 Intelligent Flight Batteries, and it takes about 40 minutes to charge from 20% to 90%

FPV CAMERA

Resolution	960p
FOV	145°
Frame Rate	30 fps

BATTERY STATION

Maximum Capacity	8 TB60 Intelligent Flight Batteries 4 WB37 Batteries
Input Voltage	100-120VAC, 50-60Hz / 220-240VAC, 50-60Hz
Output Power	100 V-120 V: 750 W 220 V-240 V: 992 W
Operating Temperature	-20°C to 40°C

E & O E. All specifications subject to change without prior notice.





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