Technical Description & Performance Limitations of Matrice 300 RTK Fleet

RPAS Technical Description	
Airframe Type	MULTIROTOR
Manufacturer	DJI
Model of RPA	Matrice 300 RTK
Span / Diameter	Unfolded, propellers excluded – 810 x 670 x 430 mm Folded, propellers included – 430 x 420 x 430 mm
Maximum Take-Off Mass (kg)	9 kg
Propulsion Type	Electric Brushless Motor
Number of Motors	4 Motors
Flight Battery	DJI Smart Battery - TB60
Flight Control System (Autopilot)	DJI Flight Control System
Software / Firmware	Aircraft Firmware (Matrice 300RTK)
Transmitter	OcuSync Enterprise
Receiver	OcuSync Enterprise
RPA Control Frequency	2.400-2.4835 GHz 5.725-5.850 GHz
Remote Pilot Station (RPS)	DJI Smart Controller Enterprise
Remote Pilot Station Software	DJI Pilot App
RPAS Performance Characteristics	
Max Altitude	5000 m (with 2110 Propellers, and take-off weight ≤ 7kg) 7000 m (with 2195 High Altitude Low Noise Propellers, and take-off weight ≤ 7kg
Max Endurance	55 minutes
Max Range	NCC /FCC: 15 km CE / MIC: 8 km SRRC: 8 km
Airspeed	82.8 km/h (23 m/s) (S-Mode) 61.2 km/h (17 m/s) (P-Mode)
Max Ascent Speed	6 m/s
Max Descent Speed	7 m/s
Max Pitch Angle	30° (P-mode and Forward Vision System enabled: 25°)
RPAS Performance Limitations	
Max Wind Resistance	15 m/s
Turbulence restrictions	Turbulence and wind speed up to 15m/s won't trouble the M300 RTK thanks to its inverted propeller design, its powerful motors, and its optimized FC and ESC algorithms.
Minimum visibilities Conditions	Do not use the aircraft in severe weather conditions. These include wind speeds exceeding 15 m/s, snow, rain and fog
Outside air temp	-20° to 45°C
In-flight Icing	Do not use the aircraft in severe weather conditions. These include wind speeds exceeding 10m/s, snow, severe rain and temperature below -20°.