

DATA SHEET

MATRICE 300 RTK

A New Standard for the Commercial Drone Industry.

The Matrice 300 RTK is DJI's latest commercial drone platform that takes Inspiration from modern aviation systems and sets a whole new standard, by combining intelligence with high-performance and unrivalled reliability.



AIRCRAFT

Dimensions: 810×670×430 mm [Unfolded, propellers excluded]

430×420×430 mm [Folded, propellers included]

895 mm **Diagonal Wheelbase:** Max Take-off Weight: 9 kg **Max Payload:** 2.7 kg Weight: without batteries ± 3.6 kg

> with 2x TB60 batteries ± 6.3 kg

Operating Frequency:

2.400 GHz - 2.483 GHz (Europe, Japan, Korea) 2.4000 - 2.4835 GHz 29.5 dBm FCC

18.5 dBm CE/SRRC/MIC 5.725 GHz - 5.850 GHz (United States, China)

> 5.725 - 5.850 GHz 28.5 dBm FCC/SRRC

12.5 dBm CE

IP43

Hovering Accuracy: (P-mode with GPS)

±0.1 m (RTK enabled)

RTK Positioning Accuracy: (When RTK enabled and fixed) Vertical: ±0.1 m (Vision System enabled) 1cm + 1ppm Horizontal

±0.5 m (GPS enabled) 1.5cm + 1ppm Vertical

Transmission Power (EIRP):

Horizontal: ±0.3 m (Vision System enabled) **Max Angular Velocity:** Pitch: 300°/s | Yaw: 100°/s

> ±1.5 m (GPS enabled) Max Pitch Angle: 30° P-mode

±0.1 m (RTK enabled) 25° Forward Vision System enabled

5 m/s Max Ascent Speed: S mode: 6 m/s Max Decent Speed: Vertical S mode:

> P mode: 5 m/s P mode: 3 m/s

> > **Environmental Rating:**

Tilt S mode: 7 m/s

S mode: 23 m/s **Max Wind Resistance:** 15 m/s Max Speed: **Max Flight Time:** P mode: 17 m/s 55 min

Max Service Ceiling: Above Sea Level Supported DJI Gimbals:

5 000 m [with 2110 propellers, take-off weight ≤ 7 kg] Zenmuse XT2/XTS/Z30/H20/H20T 7 000 m [with 2195 propellers, take-off weight ≤ 7 kg]

Supported Gimbal Configurations:

Single Downward Gimbal, Dual Downward Gimbals, **GNSS:** GPS+GLONASS+BeiDou+Galileo Single Upward Gimbal, Upward & Downward Gimbals, **Operating Temperature:** -20° to 50°C

Triple Gimbals

REMOTE CONTROLLER

Operating Frequency:

Transmission Power (EIRP):

2.400 GHz to 2.483 GHz (Europe, Japan, Korea) 2.4000 - 2.4835 GHz 29.5 dBm FCC

5.725 GHz to 5.850 GHz (United States, China) 18.5 dBm CE/SRRC/MIC

> FCC 5.725 - 5.850 GHz 28.5 dBm

Max Transmission Distance:

12.5 dBm CE

SRRC

20.5 dBm

CE / MIC: **Battery Life:** 8 km

15 km

SRRC: 8 km ± 2.5h Built-in battery:

> Built-in battery + Ext battery: ±4.5h

External battery: Built-in battery:

4920 mAh

WB37 Intelligent Battery 18650 lithium-ion Name: Type:

(5000 mAh @ 7.2 V)

7.6V 12V/2A USB Charger Voltage: Charging:

Type: LiPo Rated power: 17 W

37.39Wh **2 HRS 15 MIN** Energy: Charging time:

Charging time:

NCC/FCC:

Capacity:

5V / 1.5A With 12V/2A USB Charger - 70 MIN (15°C to 45°C) **USB Power Supply:** With BS60 Battery Station - 130 MIN (0°C to 15°C) **Operating Temperature:** -20° to 40°C

VISION SYSTEM

Obstacle Sensing Range: FOV:

Forward/Backward/Left/Right: 0.7-40m Forward/Backward/Downward: 65° (H) / 50° (V) Upward/Downward: Left/Right/Upward: 0.6-30m 75° (H) / 60° (V)

Operating Environment: Surfaces with clear patterns and adequate lighting (> 15 lux)

INFRARED TOF SENSING SYSTEM

Obstacle Sensing Range: 0.1 - 8m Field of View: 30° (± 15°)

Large, diffuse and reflective obstacles (reflectivity >10%) **Operating Environment:**

TOP AND BOTTOM AUXILIARY LIGHT

Effective lighting distance: 5 m

FPV CAMERA

Resolution: Field of View: 145° Frame Rate: 30 fps 960p

INTELLIGENT FLIGHT BATTERY (TB60)

Capacity: 5935 mAh Voltage | Energy: 52.8 V | 274 Wh -20° to 40°C **Battery Type:** LiPo 12S **Charging Temperature:** Operating Temperature: -20° to 50°C **Net Weight:** ± 1.35 kg

Charging Time: Using BS60 220V Intelligent Battery Station -60 MIN (fully charging two TB60 batteries)

30 MIN (charging two TB60 batteries from 20% to 90%)

BS60 INTELLIGENT BATTERY STATION

501 x403 x 252mm **Dimensions: Net Weight:** 8.37kg

TB60 Intelligent Flight Battery × 8 **Operating Temperature:** -20°C to 40°C **Maximum Capacity:** WB37 Intelligent Battery × 4 Max. Input Power: 1070 W

Input: 220-240 VAC, 50-60 Hz **Output Power:** 220-240 V: 992 W