



## 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:** 810x670x430 mm [Unfolded, propellers excluded]  
430x420x430 mm [Folded, propellers included]

**Diagonal Wheelbase:** 895 mm  
**Max Payload:** 2.7 kg

**Max Take-off Weight:** 9 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)  
5.725 GHz - 5.850 GHz (United States, China)

**Transmission Power (EIRP):**  
2.4000 - 2.4835 GHz 29.5 dBm FCC  
18.5 dBm CE/SRRC/MIC  
5.725 - 5.850 GHz 28.5 dBm FCC/SRRC  
12.5 dBm CE

**Hovering Accuracy:** (P-mode with GPS)  
Vertical: ±0.1 m (Vision System enabled)  
±0.5 m (GPS enabled)  
±0.1 m (RTK enabled)

**RTK Positioning Accuracy:** (When RTK enabled and fixed)  
1cm + 1ppm Horizontal  
1.5cm + 1ppm Vertical

Horizontal: ±0.3 m (Vision System enabled)  
±1.5 m (GPS enabled)  
±0.1 m (RTK enabled)

**Max Angular Velocity:** Pitch: 300°/s | Yaw: 100°/s  
**Max Pitch Angle:** 30° P-mode  
25° Forward Vision System enabled

**Max Ascent Speed:** S mode: 6 m/s  
P mode: 5 m/s

**Max Decent Speed:** Vertical S mode: 5 m/s  
P mode: 3 m/s  
Tilt S mode: 7 m/s

**Max Speed:** S mode: 23 m/s  
P mode: 17 m/s

**Max Wind Resistance:** 15 m/s  
**Max Flight Time:** 55 min

**Max Service Ceiling:** Above Sea Level  
5 000 m [with 2110 propellers, take-off weight ≤ 7 kg]  
7 000 m [with 2195 propellers, take-off weight ≤ 7 kg]

**Supported DJI Gimbals:**  
Zenmuse XT2/XTS/Z30/H20/H20T

**Supported Gimbal Configurations:**  
Single Downward Gimbal, Dual Downward Gimbals,  
Single Upward Gimbal, Upward & Downward Gimbals,  
Triple Gimbals

**Environmental Rating:** IP43  
**GNSS:** GPS+GLONASS+BeiDou+Galileo  
**Operating Temperature:** -20° to 50°C

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## REMOTE CONTROLLER

### Operating Frequency:

2.400 GHz to 2.483 GHz (Europe, Japan, Korea)  
5.725 GHz to 5.850 GHz (United States, China)

### Transmission Power (EIRP):

2.4000 - 2.4835 GHz	29.5 dBm	FCC
	18.5 dBm	CE/SRRC/MIC
5.725 - 5.850 GHz	28.5 dBm	FCC
	12.5 dBm	CE
	20.5 dBm	SRRC

### Max Transmission Distance:

NCC/FCC:	15 km
CE / MIC:	8 km
SRRC:	8 km

### Battery Life:

Built-in battery:	± 2.5h
Built-in battery + Ext battery:	±4.5h

### External battery:

Name:	WB37 Intelligent Battery
Capacity:	4920 mAh
Voltage:	7.6V
Type:	LiPo
Energy:	37.39Wh
Charging time:	
With 12V/2A USB Charger -	70 MIN (15°C to 45°C)
With BS60 Battery Station -	130 MIN (0°C to 15°C)

### Built-in battery:

Type:	18650 lithium-ion (5000 mAh @ 7.2 V)
Charging:	12V/2A USB Charger
Rated power:	17 W
Charging time:	2 HRS 15 MIN

### USB Power Supply:

5V / 1.5A

### Operating Temperature:

-20° 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)
Left/Right/Upward:	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°)

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

## TOP AND BOTTOM AUXILIARY LIGHT

**Effective lighting distance:** 5 m

## FPV CAMERA

<b>Resolution:</b>	960p	<b>Field of View:</b>	145°	<b>Frame Rate:</b>	30 fps
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## INTELLIGENT FLIGHT BATTERY (TB60)

<b>Capacity:</b>	5935 mAh
<b>Battery Type:</b>	LiPo 12S
<b>Net Weight:</b>	± 1.35 kg

<b>Voltage   Energy:</b>	52.8 V   274 Wh
<b>Charging Temperature:</b>	-20° to 40°C
<b>Operating Temperature:</b>	-20° to 50°C

**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

<b>Dimensions:</b>	501 x403 x 252mm
<b>Maximum Capacity:</b>	TB60 Intelligent Flight Battery × 8 WB37 Intelligent Battery × 4
<b>Input:</b>	220-240 VAC, 50-60 Hz

<b>Net Weight:</b>	8.37kg
<b>Operating Temperature:</b>	-20°C to 40°C
<b>Max. Input Power:</b>	1070 W
<b>Output Power:</b>	220-240 V: 992 W

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