

# **DATA SHEET**

## **MATRICE 350 RTK**



#### **Fully Powered to Forge Ahead**

The Matrice 350 RTK sets a new benchmark for the industry. This next-generation drone platform features an all-new video transmission system and control experience, a more efficient battery system, and more comprehensive safety features, as well as robust payload and expansion capabilities.

## **AIRCRAFT**

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

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

**Diagonal Wheelbase:** 895 mm Max Take-off Weight: 9,2 kg Single Gimbal Damper's Max Payload: Weight: without batteries ± 3.77 kg 960 g

> with 2x TB65 batteries  $\pm 6.47 \, kg$

**Operating Frequency:** 

2.4000 - 2.4835 GHz < 33 dBm FCC 2.400 GHz - 2.483 GHz

5.150 GHz - 5.250 GHz (CE: 5.150 GHz - 5.250 GHz) < 20 dBm CE/SRRC/MIC

5.725 GHz - 5.850 GHz 5.150 - 5.250 GHz <23 dBm

<33 dBm FCC/SRRC 5.725 - 5.850 GHz

> <14 dBm CF

**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

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

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

**Supported DJI Gimbals:** 

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

> Tilt: 7 m/s

Max Speed: 23 m/s **Max Wind Resistance:** 12 m/s

> **Max Flight Time:** 55 min

Max Flight Altitude: Above Sea Level

Zenmuse H20 / H20T / H20N / P1 / L1 5 000 m [with 2110 propellers, take-off weight  $\leq$  7.4 kg] 7 000 m [with 2112 propellers, take-off weight  $\leq$  7.2 kg]

**Supported Gimbal Configurations:** 

Dual Downward + single upward gimbal

IP55 **Environmental Rating:** Single Downward Gimbal, Dual Downward Gimbals, **GNSS:** 

GPS+GLONASS+BeiDou+Galileo Single Downward + single upward gimbal, **Operating Temperature:** -20° to 50°C

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## **REMOTE CONTROLLER**

Type:

**Screen:** 7.02-inch LCD touchscreen

Resolution: 1920×1200 Max brightness: 1200 nits Weight: Approx. 1.25 kg (without WB37 battery)

Approx. 1.42 kg (with WB37 battery)

Global Navigation Satellite System: GPS+Galileo+BeiDou Ingress Protection Rating: IP54

External WB37 Intelligent Battery: Built-in battery:

Capacity: 4920 mAh Type: Li-on (6500 mAh @ 7.2 V)

Voltage: 7.6V Charging Type: Battery station or USB-C fast charger

Li-on max 65W / 20V

Energy: 37.39Wh Charging time: 2 HRS
Chemical System: LiCoO2 Chemical System: LiNiCoAlO2

Operating Frequency: Transmission Power (EIRP):

2.400 GHz to 2.483 GHz 2.4000 - 2.4835 GHz < 33 dBm FCC

5.725 GHz to 5.850 GHz < 20 dBm CE/SRRC/MIC

5.725 - 5.850 GHz < 33 dBm FCC

< 14 dBm CE < 23 dBm SRRC

Wi-Fi Protocol: Wi-Fi 6 Operating Time:

Wi-Fi Operating Frequency: 2.4000-2.4835 GHz Built-in battery: ± 3.3 hrs

5.150-5.250 GHz Built-in battery + Ext battery: ±6 hrs

5.725-5.850 GHz

**Bluetooth Protocol:** Bluetooth 5.1

**Bluetooth Frequency:** 2.4000-2.4835 GHz **Operating Temperature:** -20° to 50°C

## **VIDEO TRANSMISSION**

**Video Transmission System: Antenna:**DJI O3 Enterprise Transmission
4 video transmission antennas, 2T4R

**Max Transmission Distance** 

Un-obstructed, free of interference: 20 km (FCC) | 8 km (CE/SRRC/MIC)

With interference: Low Interference and Obstructed by Buildings: approx. 0-0.5 km

Low Interference and Obstructed by Trees: approx. 0.5-3 km

Strong Interference and Unobstructed: urban landscape, approx. 1.5-3 km Medium Interference and Unobstructed: suburban landscape, approx. 3-9 km

Low Interference and Unobstructed: suburb/seaside, approx. 9-20 km

## **VISION SYSTEM**

Obstacle Sensing Range: FOV:

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

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

## **INFRARED SENSING SYSTEM**

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

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

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**LED AUXILIARY LIGHT** 

Effective lighting distance: 5 m Illumination Type: 60 Hz, solid glow

**FPV CAMERA** 

Resolution: 10800p Field of View: 142° Frame Rate: 30 fps

**INTELLIGENT FLIGHT BATTERY (TB65)** 

**Capacity:** 5880 mAh **Voltage | Energy:** 11.76 V | 263.2 Wh

Battery Type:Li-onCharging Temperature:-20° to 40°CNet Weight:± 1.35 kgOperating Temperature:-20° to 50°C

**Charging Time:** Using BS65 220V Intelligent Battery Station 60 MIN (fully charging two TB65 batteries)

30 MIN (charging two TB65 batteries from 20% to 90%)

**INTELLIGENT BATTERY STATION** 

**Dimensions:** 580 x358 x 254mm **Net Weight:** 8.98kg

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

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