

MATRICE 30 SERIES

POWER IN PORTABILITY



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The Matrice 30 Series is the perfect balance between power and portability, resulting in higher operational efficiency.

AIRCRAFT

Dimensions: [Folded] 365x215x195 mm

[Unfolded, propellers excluded] 470x585x215 mm

Diagonal Wheelbase: 668 mm

Max Take-off Weight: 4 kg

Weight: Incl. 2 batteries 3770 ± 10 kg

Operating Frequency:

Transmission Power (EIRP):

2.400 GHz - 2.4835 GHz

2.4 GHz: < 33 dBm (FCC) | < 20 dBm (CE/SRRC/MIC)

5.725 GHz - 5.580 GHz

5.8 GHz: < 33 dBm (FCC/SRRC) | < 14 dBm (CE)

Hovering Accuracy:

RTK Positioning Accuracy: 1cm + 1ppm Horizontal

Vertical: ±0.1 m (Vision System enabled)

1.5cm + 1ppm Vertical

±0.5 m (N-mode with GPS)

±0.1 m (RTK)

Max Horizontal Speed: 23 m/s

Horizontal: ±0.3 m (Vision System enabled)

Max Angular Velocity: Pitch: 150°/s | Yaw: 100°/sec

±1.5 m (N-mode with GPS)

Max Tilt Angle: 35°

±0.1 m (RTK)

25° N-mode & Forward Vision

Max Ascent Speed: 6 m/s ; 5 m/s

Max Tilt Decent Speed: 7 m/s

Max Service Ceiling:

Max Wind Resistance: 15 m/s

[with 1671 propellers] 5 000 m

[without other payload ;1671 propellers] 7 000 m

During take-off and landing 12 m/s

Max Hover Time: 36 min

Motor Model: 3511

Max Flight Time: 41 min

Propeller Model: 1671 / 1676 (High Altitude)

Environmental Rating: IP55

GNSS: GPS+GLONASS+BeiDou+Galileo

Operating Temperature: -20° to 50°C

GIMBAL

Angular Vibration Range $\pm 0.01^\circ$

Mechanical Range: Pan: $\pm 105^\circ$

Controllable Range Pan: $\pm 0.01^\circ$

Tilt: -135° to $+60^\circ$

Tilt: -120° to $+45^\circ$

Roll: $\pm 45^\circ$

ZOOM CAMERA

Sensor 1/2" CMOS, Effective pixels: 48M

Lens Focal length: 21-75 mm (equivalent: 113-405 mm)

Aperture: f/2.8-f/4.2

Focus: 5 m to ∞

WIDE CAMERA

Sensor 1/2" CMOS, Effective pixels: 12M

Lens DFOV: 84°

Focal length: 4.5 mm (equivalent: 24 mm)

Aperture: f/2.8

Focus: 1 m to ∞

THERMAL CAMERA

Thermal Imager: Uncooled VOx Microbolometer

Lens DFOV: 64°

Focal length: 9.1 mm (equivalent: 40 mm)

Aperture: f/1.0

Infrared Temperature:

$\pm 2^\circ\text{C}$ or $\pm 2\%$ (using the larger value)

Focus: 5 m to ∞

FPV CAMERA

Resolution	1920×1080	DFOV:	84°
Frame Rate:	30 fps		

LASER MODULE

Wavelength	905 nm	Max Laser Power:	3.5mW
Single Pulse Width	6 nm	Measurement Accuracy:	± (0.2 m + D × 0.15%)
Measurement Range:	3-1,200 m (0.5×12 m vertical surface with 20% reflectivity)		

VISION SYSTEM

Obstacle Sensing Range:		Field of View:	65° (H) / 50° (V)
Forward:	0.6-38m	Operating Environment:	Surfaces with clear patterns and adequate lighting (> 15 lux)
Upward/Downward/ Backward/Sideward):	0.5-33m		

INFRARED SENSING SYSTEM

Obstacle Sensing Range:	0.1 - 10m	Field of View:	30°
Operating Environment:	Large, diffuse and reflective obstacles (reflectivity >10%)		

AUXILIARY LIGHTS

Effective lighting distance:	5 m	Illumination Type:	60 Hz ; Solid Glow
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INTELLIGENT FLIGHT BATTERY (TB30)

Capacity:	5880 mAh	Voltage Energy:	26.1 V 131.6 Wh
Battery Type:	Li-ion 6S	Charging Temperature:	-20° to 40°C
Net Weight:	± 685 g	Operating Temperature:	-20° to 50°C

REMOTE CONTROLLER

Screen: 7.02" LCD touchscreen ; Resolution 1920×1200 pixels ; High brightness of 1200 cd/m2

External battery:

Name:	WB37 Intelligent Battery
Capacity:	4920 mAh
Voltage:	7.6V
Type:	Li-ion
Energy:	37.39Wh

Internal battery:

Type:	Li-ion (6500 mAh @ 7.2 V)
Charge Type:	Battery Station / USB-C Charger Max 20V/65W
Rated power:	17 W
Charging time:	2 HRS

Operating Time:

Built-in battery: ± 3 hrs 18 min

Built-in battery + Ext battery: ± 6 hrs

Environmental Rating: IP55

GNSS: GPS ; Galileo ; BeiDou

Operating Temp: -20° to 50°C

O3 ENTERPRISE

Operating Frequency: 2.4000-2.4835 GHz, 5.725-5.850 GHz

Maximum Transmission Distance: Un-obstructed 15 km (FCC); 8 km (CE/SRRC/MIC)
With light interference 9-15 km (FCC); 6-8 km (CE/SRRC/MIC)
With medium interference 3-9 km (FCC); 3-6 km (CE/SRRC/MIC)

Transmitter Power (EIRP) 2.4 GHz: <33 dBm (FCC); <20 dBm (CE/SRRC/MIC)
5.8 GHz: <33 dBm (FCC); <14 dBm (CE); <23 dBm (SRRC)

Wi-Fi

Protocol: Wi-Fi 6
Operating Frequency: 2.4000-2.4835 GHz; 5.150-5.250 GHz; 5.725-5.850 GHz
Transmitter Power (EIRP) 2.4 GHz: <26 dBm (FCC); <20 dBm (CE/ SRRC/MIC)
5.1 GHz: <26 dBm (FCC); <23 dBm (CE/ SRRC/MIC)
5.8 GHz: <26 dBm (FCC/SRRC); <14 dBm(CE)

BLUETOOTH

Protocol: Bluetooth 5.1 Transmitter Power (EIRP): <10 dBm

Operating Frequency: 2.4000-2.4835 GHz

BS30 INTELLIGENT BATTERY STATION

Dimensions:	353×267×148 mm	Net weight	3.95 kg
Compatible Battery Type:	TB30 Intelligent Flight Battery WB37 Intelligent Battery	Input:	100-240 VAC, 50/60 Hz
Power Consumption:		Output:	2x TB30 Battery Ports: 26.1 V, 8.9 A WB37 Intelligent Battery: 8.7 V, 6 A
when not charging battery	< 8 W		
when warming up battery	Approx. 30 W		
USB-C port:	Max. output power of 65 W	Output power:	525 W
USB-A port:	Max. output power of 10 W (5V, 2A)		
Protection Features:	Anti-Backflow Protection Short Circuit Protection Over Voltage Protection Over Current Protection Temperature Protection	Charging Time:	30 min (TB30 Battery 20% – 90%) 50 min (TB30 Battery 0% – 100%)
		Operating Temperature:	-20° to 40° C
		Environmental Rating:	IP55