dji.com/mg-1p/info

MG-1PSpecs

Aircraft Frame

Diagonal Wheelbase:	1500 mm
Frame Arm Length:	619 mm
Dimensions:	MG-1P: 1460×1460×578 mm (arms unfolded, without propellers) 780×780×578 mm (arms folded) MG-1P RTK: 1460×1460×616 mm (arms unfolded, without propellers) 780×780×616 mm (arms folded)

Flight Parameters

Total Weight (without battery):	9.7 kg
Standard Takeoff Weight:	23.8 kg (MG-1P) 23.9 kg (MG-1P RTK)
Max Takeoff Weight:	24.8 kg (at sea level)
Max Thrust-to-Weight Ratio:	1.71 (with 23.8 kg takeoff weight)
Power Battery:	Designated DJI Battery (MG-12000P)
Max Power Consumption:	6400 W
Hovering Power Consumption:	3800 W (with 23.7 kg takeoff weight)
Hovering Time*:	20min (@12000 mAh & 13.7 kg takeoff weight) 9 min (@12000 mAh & 23.7 kg takeoff weight) *Hovering time acquired at sea level, with wind speeds lower than 3m/s.
Max Operating Speed:	7 m/s

Max Flying Speed:	12 m/s（P & F mode, with GPS）， 15 m/s （A mode）
Max Service Ceiling Above Sea Level:	2000 m
Recommended Operating Temperature:	0 to 40°C

Aircraft RTK

Positioning System:	GPS+GLONASS (global) or GPS+Beidou (Asia-Pacific)
Frequency Point:	GPS L1&L2, GLONASS F1&F2 Asia-Pacific: GPS L1&L2, Beidou B1&B2
Positioning Accuracy:	Flat Surface: 1 cm + 1 ppm
Height:	2 cm + 1 ppm
Orientation Accuracy:	(0.2/R) °R is the distance between two antennas and the unit is meter.
Velocity Measurement Accuracy:	0.03 m/s

Remote Controller Charger

Model:	A14-057N1A
Voltage:	17.4 V
Rated Power:	57 W

Battery

Battery Model:	MG-12000P
Voltage:	44.4 V
Discharge Rate:	20 ℃
Protection Rating:	IP54
Capacity:	12,000 mAh
Weight:	4.0 kg

High-Precision Radar Module

Model:	RD2412R

Working Frequency:	MIC & KCC: 24.05 GHz - 24.25 GHz SRRC & CE & FCC: 24.00 GHz - 24.25 GHz
Equivalent Isotropic Radiated Power (EIRP):	MIC/KCC/FCC/CE: 20dBm; SRRC: 13dBm
Radar Format:	FMCW
Operating Temperature:	-10 to 40°C
Accuracy Range	0.10 m
Radar Dimensions:	109×152 mm
Power Input:	DC 12 V – 30 V
Radar Weight:	406 g
Power Consumption:	12 W
Storage Temperature:	If storing < 3 months: -20 to 45°C; If storing > 3 months: -0 to 28°C
Hold Altitude & Terrain Follow:	Altitude Measurement Range: 1-30 m; Hold Altitude Range: 1.5-3.5 m
Obstacle Sensory Range:	1.5-30 m (Varies according to the material, position, shape, and other properties of the obstacle)
Working Condition:	The aircraft's relative altitude is greater than 1.5 m and flying speed is less than 7 m/s.
Safety Distance:	2.5 m
Obstacle Avoidance Direction:	Forward and backward obstacle avoidance according to flying directions
Protection Rating:	IP67

Spray System

LIQUID TANK	
Volume:	10 L
Standard Operating Payload:	10 kg
Max Battery Size:	151×195×70 mm
NOZZLE	
Model:	XR11001VS (0.379 L/min)
Recommend Model:	TX-VK8 (0.525L/min)

Quantity:	4
Droplet Size (XR11001VS):	130 - 250 μm (subject to working environment and spraying speed）

Remote Controller

Model:	GL300N
Operating Frequency:	2.400 - 2.483 GHz (Europe, Japan, South Korea) 5.725 - 5.850 GHz (China, USA)
Max Transmission Range:	NCC/FCC: 5 km; SRRC/CE/MIC/KCC: 3 km
EIRP:	2.4GHz: CE/MIC/KCC:<20 dBm; 5.8GHz: SRRC/NCC/FCC:<26 dBm;
Remote Controller Battery:	External Battery 4920mAh, 2s LiPo Built-in Battery 320mAh, 2s LiPo
Output Power:	16W
Operating Temperature Range:	-10 to 40°C
Storage Temperature Range:	If storing < 3 months: -20 to 45°C If storing > 3 months: 22 to 28°C
Charging Temperature Range:	5 to 40°C

Remote Controller Charging Hub

Model:	WCH2
Output Voltage:	8.7V
Max Output Current:	6A

MG Intelligent Battery Charger

Rated Input Voltage:	100-240 V
Max Input Current:	15A
Number of Batteries Available for Simultaneous Charging:	2
Charging Mode:	CC/CV
Rated Output Voltage:	50.4 V
Total Output Power:	2400 W

MG-1PDownloads

MG-1PFAQ

1.How can a single controller be used to control multiple MG-1P aircrafts?
Link a RC with up to 5 aircraft in the app and edit flight paths in the Multi-Aircraft Control interface. The process is the same as Auto Operation mode. Users can also choose one aircraft and make it controllable in the app or with a RC. Afterwards the aircraft can be controlled with the control sticks and buttons and the FPV camera feed of this aircraft will also be shown on the screen.

2.What aircraft models are compatible with Multi-Aircraft Control mode?
Currently, only the MG-1P series are compatible with Multi-Aircraft Control mode.

3.Is there any possibility of collision when multiple aircraft are being controlled by a single controller?
No. The aircraft support flight status broadcasting, where aircraft can actively avoid each other during flight without the risk of collision.

4.What are the advantages of having an FPV camera?
By providing clear video feeds, FPV cameras not only help users to avoid obstacles in the distance, but also records waypoints and A/B points on the flight to replace the less efficient manual waypoint recording.

5.Can the FPV camera videos be saved?
No. The video transmissions are displayed to users in real time and cannot be saved.

6.How can the FPV camera be used to record flight waypoints?
In the app, tap "Waypoint Recording", fly the drone to the edge of a field, and finish waypoint recording. After all the waypoints have been recorded, fly the drone back to the recorded calibration point. The process is similar to Field Plan mode, except that the drone has replaced manual waypoint recording.

7.What’s the difference between the battery/charger for the MG-1P and MG-1S? Are they cross-compatible?
The battery plugs have been combined from two into one, making the battery easier to use. The battery plug and charge balancing plug can both be replaced on the battery. If any problems occur with the plugs, they can be replaced easily. The plugs’ protection has also been improved, protecting them from chemical erosion to improve their service life. Once the new battery has been fitted with a balancing cable, the MG-1S charger can be used to charge it.

8.What are the differences between the MG-1P and MG-1S remote controllers? Are they cross-compatible?

The MG-1P remote controller extends the controllable range to 3 km, with 4G connectivity, interchangeable batteries and redesigned antennas for convenient operation and maintenance. Moreover, the Operation Mode Switch and C3/C4 buttons have been removed, and there have been additional changes to both the appearance and hardware inside the remote controller. The two remote controllers are not cross-compatible.

9.What's the difference between the MG-1P RTK and MG-1P?

The MG-1P RTK brings positioning precision to a centimeter-level and thus delivers better spraying results. Dual-antenna technology brings strong electromagnetic interference resistance and ensures flight safety even when the MG-1P is flying in complex environments, such as near high-voltage power lines.