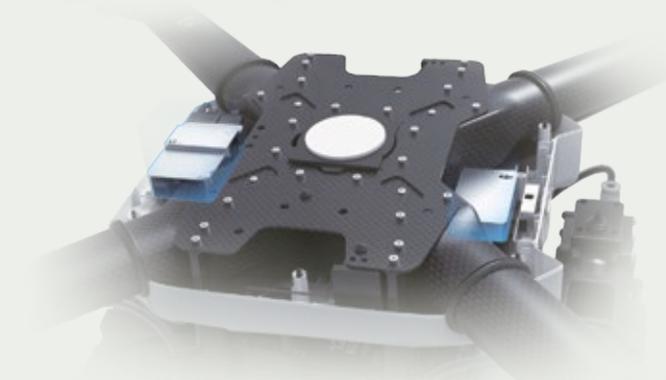


## A3 Flight Controller

Equipped with DJI's advanced A3 Flight Controller, the MG-1S is capable of high levels of reliability. Its algorithm has been optimized for agricultural spraying, ensuring stable flight even with sloshing liquids. In addition, the redundant design of the A3 includes dual barometers and dual compasses. If an error occurs in one sensor, the system will automatically switch to the other sensor to continue safe, reliable flight.



## Radar Sensing

Three high-precision, millimeter wave radars are placed on the front slope, rear slope and the bottom of the spray tank. Radars on front and rear slopes detect the terrain, allowing the aircraft to adjust its height approximately. The downward radar then provides high-precision height. As the radars scan, the MG-1S is able to perceive the change of terrain, adjust its altitude and maintain its altitude above the crops.

## Precision Spraying

A new spraying system enables more accurate spraying. With two pumps controlling the front pair and rear pair of nozzles separately, and there are now three spraying modes available: forward spraying, backward spraying and full spraying. A new pressure sensor and flow sensor monitors the spraying rate in real-time, realizing dynamic control over spray speed and amount during operation. Nozzles with extended spray booms have been used to make better use of downward airflows. This spraying system now responds more accurately to commands, adding accuracy and effectiveness to spraying operations

## Optimized Mechanical Structure

The frame arm of the MG-1S is detachable, and the landing gear is optimized, lowering potential maintenance costs. A water-resistant film has been added to protect the ESCs. The liquid valve has been placed on the side of delivery pump, and the delivery pump is located above the spray tank, making liquid injection, demounting and cleaning more convenient.



## MG Intelligent Operation Planning System

Plan and edit flight paths intelligently with the MG-1S. When you set the liquid amount for per area, the aircraft will calculate the remaining parameters for you, enhancing convenience. You can also choose between Efficient Mode and Intensive Spraying Mode for different operational needs.

The availability of the features in your region is subject to local laws and regulations and your choice.

## DJI Agriculture Management Platform

DJI provides a comprehensive spraying management platform along with the MG-1S. Use the platform to supervise the flight status of every aircraft, master spraying status and manage your spraying team to improve working efficiency. You can also assign fields to each operator and check deployed fields. By sharing intelligent planning with operators, management for spraying operations is more efficient and effective.

## Intelligent Flight Battery

The MG-1S uses an intelligent battery with a capacity of 12000mAh, it can hover for 22 minutes\* without load. A high-strength protective shell and dampers are applied outside the battery, and the cables are also well-protected for safety and reliability. In addition, the battery provides more stable voltage, extending its lifespan.

\*Hovering time acquired around sea level, with wind speeds lower than 3m/s.



## Professional Controller

The MG-1S controller includes a bright 5.5 inch/1080p display that is visible even under strong sunlight. With a built-in operation planning system, users can use the controller to increase working efficiency. The controller battery works for up to 5 Hours for long outdoor operations.



Professional App



Bright Display



5-hour Working Time

## ACCESSORIES

### High-precision RTK System

The high-precision RTK System provides centimeter-level accuracy, making it ideal for precise, targeted spraying. It also supports precision field mapping and enhanced flight reliability. When flown single pilot, waypoint information can be uploaded to the MG Intelligent Operation Planning System, so it is very easy to use.

### Droplet Analyzer

With a dedicated smartphone App, the portable Droplet Analyzer can take pictures of droplets on water-sensitive test paper, giving the operator feedback of ongoing operations.

### Battery Charging Hub

A specially designed Charging Hub connects up to 6 batteries, and each intelligent balancing charger can connect 2 charging hubs. In total 12 batteries can be connected and charged in sequence, saving you the trouble of replacing batteries for charging. It can balance the voltages of each battery when charging, allowing longer battery life.



Battery Charging Hub



Droplet Analyzer



High-precision RTK System





## AGRAS MG-1S

The Agras MG-1S integrates a number of cutting-edge DJI technologies, including the new A3 Flight Controller, and a Radar Sensing System that provides additional reliability during flight. The spraying system and flow sensor ensure accurate operations. When used with the MG Intelligent Operation Planning System and the DJI Agriculture Management Platform, a user can plan operations, manage flights in real-time, and closely monitor aircraft operating status. The MG-1S is a high performance aircraft capable of offering comprehensive solutions for agricultural care.



THE FUTURE OF POSSIBLE



UK DEALERS

### A note on UK legislation

As it stands now in 2017, using drone based spraying systems on a commercial basis is not legal in the UK. As dealers for the Agras, both Drone AG and Crop Angel are currently conducting trials with the goal of commercial operations being allowed in 2018.

Courses designed to get you up-to-date and ready for the coming spraying revolution will be available soon. Course fees will then be discounted from the cost of a final system purchase. All systems will be sold with full training and certification courses included.

[FIND OUT MORE](#)

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# AGRAS MG-1S