

AGRICULTURE



DJI AGRAS T50

The Agras T50 elevates drone agricultural operations to new heights. It inherits a powerful coaxial twin-rotor propulsion system and a split-type torque resistant structure for next level stability when carrying 40 kg spraying^[1] or 50 kg spreading^[1] payloads. T50 leverages a Dual Atomizing Spraying System, Front and Rear Phased Array Radars, and a Binocular Vision System. T50 excels across multiple scenarios, from surveying^[2] to spraying and spreading, guaranteeing stable operations and steady performance.



Heavy Payload

40 kg Spraying^[1]
50 kg Spreading^[1]

All Scenario Adaptability

Automatic and Manual Orchard Mode Variable Rate Application

High Flow Rate

Spraying 16 L/min^[3] Spreading 108 kg/min^[4]

Multidirectional Obstacle Sensing^[6]

Multidirectional Obstacle Avoidance Terrain Following up to 50°

Signal Stability

Offline Operations 2 km O3 Video Transmission Optional DJI Relay

Four Sprinkler Kit (Optional)

Reverse Directional Spray
4-Sprinkler Spraying 24 L/min^[2] Flow Rate

High Rate, Atomized Spray, Leak Free

- Magnetic Drive Impeller Pump,
- Dual Pump Flow Rate of up to 24 L/min^[3]
- Dual Atomizing Centrifugal Sprinklers, Adjustable Droplet Size
- Brand-New Solenoid Valves, Leak Free
- Two centrifugal sprinklers can be incorporated to ensure an effective spray coverage on fruit trees. This process can be performed manually, eliminating the need for rotation during operation.

One Drone for Surveying^[2], Spraying, and Spreading

- High Resolution FPV Gimbal Camera
- The angle of the gimbal is adjustable and images can be collected in real time.
- Orchard Aerial Survey, 5 hectare orchardmapped in 10 minutes $^{[8]}$
- Field Aerial Survey, 13 hectare field mapped in 10 minutes $^{[8]}\,$
- Surveying of slopes up to 20°[9]

1,500 kg Spreading Per Hour

- Efficiency spreading, flow rate up to 108 kg/min^[4]
- Smooth spreading, doubled torque of the spreader
- Uniform spreading, spiral channel spinning disk
- Low rate spreading, small hopper gates
- Real-Time Weighing
- -Fast Disassembly and Cleaning

DJI RC Plus

- Quad-antenna O3 Transmission, up to 2 km range^[5]
- 7-inch high brightness screen
- 8 core processor for smooth operations
- Optional DJI Relay Module

Double Peace of Mind with Binocular Vision and Dual Radar

- Front and Rear Active Phased Array Radars
- Two Sets of Binocular Vision Sensors
- Multidirectional Obstacle Sensing and Avoidance $^{\left[6\right] }$
- Terrain Following up to 50°, Automatic Obstacle Bypassing^[7]

Fuel-Efficient Fast Charging

- 9-min ultra-fast charging^[10]
- 1,500 W AC output
- Warranty covers 1,500 charging cycles[11]
- 1.5 m extra-long charging cable

[1] Data was measured at sea level. The payload weight is greatly affected by the ambient temperature and altitude. The take-off payload weight needs to be reduced by 10 kg for every 1,000 m increase in altitude. The DJI Agras app will recommend the payload weight according to the current status and surroundings of the aircraft. When adding materials, the maximum weight should not exceed the recommended value, otherwise flight safety may be compromised.

[2] RTK is required.

[3] Maximum spraying flow rate with two sprinklers is 16 L/min. Maximum spraying flow rate with four sprinklers is 24 L/min.

[4] Data measured with 4 mm diameter urea. The maximum flow rate may vary depending on the granule size, density, and surface smoothness of different fertilizers.

[5] Measured at a flight altitude of 2.5 meters, without obstruction or electromagnetic interference.

[6] The effective sensing range and its ability to avoid and bypass obstacles will vary depending on the ambient light, rain, fog, and the material, position, shape, and other properties of the obstacles. Downward sensing is used for Terrain Follow and Altitude Stabilization. The sensing in other directions is used for Obstacle Avoidance.

[7] Obstacle Bypassing is supported in the forward direction. The Terrain Follow and Obstacle Bypassing features are not supported at night or in low light environments. Fly with caution. Obstacle Bypassing is not recommended around electric or guy wires.

[8] Refers to the mapping time after completing the aerial survey. Time varies depending on the firmware version, type of aerial survey, and other factors.

[9] To ensure a high success rate of surveying and mapping, T25 can automatically adjust its flight speed based on the hill slope. The steeper the slope, the slower its speed.

[10] Charging from 30% to 95% when paired with D12000iEP Generator or C10000 Intelligent Charger. Factors impacting charging time: Altitude of the charging station; Charging cable meets requirements for fast charging. Battery cell's temperature is in the range of 15° to 70° C (59° to 158° F)

[11] Batteries are covered by warranty for up to 1,500 charging cycles or 12 months, whichever ends first