

# WHAT DO I NEED TO LEGALLY FLY MY DRONE?

There are a number of federal, state and local requirements to legally operate an agricultural drone in the United States. **Bestway Ag and its authorized sub-dealers are ready to assist you in obtaining all of the required licenses/exemptions.**

## FAA PART 107 DRONE PILOT LICENSE

This license indicates you have a solid foundation and working knowledge of the FAA's regulations, operating requirements and safety protocols for drone operations.

- Test must be taken at a FAA facility. Cost is \$175.
- Must score 70% to pass. Test is 60 questions.
- Night operations are covered.

For more information on the Part 107, please visit:  
[www.faa.gov/uas/commercial\\_operators](http://www.faa.gov/uas/commercial_operators)

## FAA PART 137 AERIAL APPLICATOR LICENSE

This license allows you to legally dispense chemicals from a drone. Note that not ALL substances fall under this regulation, so you should first check to see if the substance you intend to spray falls under the scope of Part 137. Also note, that not ALL areas of part 137 will apply to drone operations.

For more information, visit:  
[www.faa.gov/uas/advanced\\_operations/dispensing\\_chemicals](http://www.faa.gov/uas/advanced_operations/dispensing_chemicals)

## HEAVY DRONE EXEMPTION

If you will be flying a T20P, T25, T40 or T50 drone, you will need to apply for the heavy exemption (FAA Section 44807 certification). This is for drones weighing 55 lbs or over, either dry or loaded. **The T10 does not require this exemption.**

## FAA 3RD CLASS MEDICAL CERTIFICATE

If you will be flying a T20P, T25 ,T40 or T50, you will need to obtain the 3rd class medical certificate. This is basically a physical administered by a FAA-designated Aviation Medical Examiner (AME).

For information on how to schedule, visit:  
[www.faa.gov/pilots/medical\\_certification/get](http://www.faa.gov/pilots/medical_certification/get)

## STATE AND LOCAL APPLICATOR LICENSES

You will need to check with your state and local authorities to obtain the proper chemical application licenses.

## INSURANCE

If you are going to be engaged in commercial spray operations, such as custom application for hire, you will need to carry chemical and liability insurance. It is a good idea to carry this coverage even if you are using the drone on your own property. We highly recommend VT Insurance Agency ([vtinsuranceagency.com](http://vtinsuranceagency.com)).

## FAA REGISTRATION



All DJI Agras drones will require registration with the FAA. Think of it like the tail number of an airplane.

Your drone(s) will be **registered under part 107**, and will be valid for a period of **three (3) years** from the date of registration and will cost **\$5 per drone**.

After your drone is registered, you will receive a FAA registration certificate. **You must have this certificate, or a digital copy, in your possession when you fly.**

You will also be **required** to affix the registration number assigned to your aircraft in a conspicuous location using either adhesive labels, permanent marker or engraving. You can see a sample of how to display this identifier in the photo above.

For details, as well as instructions on how to register, visit:  
[www.faa.gov/uas/getting\\_started/register\\_drone](http://www.faa.gov/uas/getting_started/register_drone)

## OPTIONAL EXEMPTIONS

Depending on your usage, there may be additional exemptions you wish to explore. Some of these include:

- **Swarm/multi-drone exemption** - If you plan on a single pilot operating multiple drones, you will need to file this exemption with the FAA.
- **Beyond visual line of sight exemption (BVLOS)**



# MUDDY FIELDS? NOT A PROBLEM!

While you can't control mother nature, you can say goodbye to waiting on ideal field conditions to spray your crops with the help of Bestway Ag and DJI Agricultural drones.

Contact your local Bestway Ag location to learn how this emerging technology can help improve your overall efficiency.

**CONTACT YOUR LOCAL WADE, INC., SALESMAN OR VISIT [WADEINC.COM](http://WADEINC.COM) TO LEARN MORE!**

Team  
**BESTWAY AG**

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**dji AGRICULTURE**



# AGRAS T50



## HEAVY PAYLOAD

- 10.57-gallon liquid tank
- 88.18 pounds liquid capacity
- 110.23 granular capacity

## HIGH FLOW RATE

- 4.23 GPM spraying
- OPTIONAL four nozzle kit available: Increases rate to 6.34 GPM

## LEAK-FREE, ATOMIZED SPRAY

- Magnetic drive impeller pump
- NEW solenoid valves ensure leak-free operation
- Atomizing centrifugal spray heads with fully adjustable droplet size

## EFFICIENT SPREADING

- Up to 238.1 pounds/minute
- New spreader features double the torque over T40
- Spiral channel disk ensures uniform spreading
- Small hopper gates available for low rate spreading
- Real-time weight reporting

## SPRAY, SPREAD, MAP

- High-resolution FPV gimbal camera enables real-time image collection
- Can survey slopes of up to 20°

## SIGNAL STABILITY

- Offline operations with up to 1.24-mile O3 video transmission
- Optional DJI relay available

## MULTIDIRECTIONAL OBSTACLE SENSING

- Multidirectional obstacle sensing and avoidance with automatic obstacle bypassing
- Front and rear active phased array radars and two sets of binocular sensors for superior awareness
- Terrain following of up to 50°

## RC PLUS CONTROLLER

- Familiar RC Plus controller, same as T40
- Updated software unique to T50/T25
- Quad-antenna O3 transmission
- 7-inch screen and 8-core processor for smooth operation



# AGRAS T25



## PAYLOAD

- 5.28-gallon liquid tank
- 44.09 pounds liquid capacity
- 55.12 pounds granular capacity

## HIGH FLOW RATE

- 4.23 GPM spraying
- OPTIONAL four nozzle kit available: Increases rate to 6.34 GPM

## LEAK-FREE, ATOMIZED SPRAY

- Magnetic drive impeller pump
- NEW solenoid valves ensure leak-free operation
- Atomizing centrifugal spray heads with fully adjustable droplet size

## EFFICIENT SPREADING

- Up to 158.7 pounds/minute
- Spiral channel disk ensures uniform spreading
- Small hopper gates available for low rate spreading
- Real-time weight reporting

## SPRAY, SPREAD, MAP

- High-resolution FPV gimbal camera enables real-time image collection
- Can survey slopes of up to 20°

## SIGNAL STABILITY

- Offline operations with up to 1.24-mile O3 video transmission
- Optional DJI relay available

## MULTIDIRECTIONAL OBSTACLE SENSING

- Multidirectional obstacle sensing and avoidance with automatic obstacle bypassing
- Front and rear active phased array radars and two sets of binocular sensors
  - Terrain following of up to 50°

## RC PLUS CONTROLLER

- Familiar RC Plus controller, same as the T40
- Updated software unique to T50/T25
- Quad-antenna O3 transmission
- 7-inch screen and 8-core processor for smooth operation



# AGRAS T40



- 10.57 gallon liquid tank
- Unpressurized spray system
- Dual centrifugal spray heads create consistent droplet size, reduce drift
- Approximately 30' spray swath with a three GPM output
- 40 acres at two GPA
- Live level weight scale and empty tank float sensor
- Optional 18.5 gallon spreader tank holds approximately 110 pounds of dry material, increasing efficiency
- On-board scale system, used in conjunction with the spreader, helps keep rate accurate while displaying live tank weight
- Auto-adjusting spreader gate
- Active phased array omnidirectional radar detects obstacles around the aircraft, aiding in avoidance and minimizing crashes
- Built-in mapping capabilities
- 12 mega-pixel camera on front gimbal mount
- All new controller with 7" display
- IPX6 rating throughout the aircraft ensures protection against moisture and dust intrusion

# AGRAS T10



- 2.64 gallon liquid tank
- Electromagnetic flow meter ensures even and accurate spraying
- TeeJet tips allow the T10 to cover a 16-foot swath
- Up to 15 acres per hour at two GPA and 20 acres per hour at one GPA
- 2.64 gallon spreader tank holds approximately 20 pounds of material with a spreading width of up to 23 feet
- Anti-rotation sensor assists with accurate refill alerts when using solid spreader system
- Industry leading 360° spherical radar detects objects in any direction around the aircraft, aiding in avoidance and minimizing crashes
- IP67 rating throughout the aircraft ensures protection against moisture and dust intrusion, increasing the aircraft's durability
- Autonomous mission planning makes the T10 efficient and easy to operate, even for novice pilots

# MAVIC 3M



The DJI Mavic 3M Multispectral brings advanced productivity tools to farms engaged in precision agriculture operations.



Equipped with a multispectral imaging system, the DJI Mavic 3M Multispectral can quickly capture crop growth information to achieve more effective crop production...making it a must-have solution for a broad scope of application scenarios.

The heart of this ability is a two-in-one camera system that allows the DJI Mavic 3M Multispectral to view and collect a wide array of information. The RGB component of the camera is equipped with a 4/3 format CMOS sensor rated at 20 megapixels and incorporates a mechanical shutter with a maximum speed of 1/2000 second.

In addition to the RGB camera, the DJI Mavic 3M Multispectral carries a four-lens multispectral camera that provides more accurate, detailed information by sensing details the human eye cannot detect. Each of the four multispectral cameras can capture 5 million pixels and scan the following wavelengths:

- Green (G): 560 nm  $\pm$  16 nm
- Red (R): 650 nm  $\pm$  20 nm
- Red Edge (RE): 730  $\pm$  20 nm
- Near-Infrared (NIR): 860 nm  $\pm$  26 nm

The DJI Mavic 3M Multispectral includes an RTK module that achieves half-inch level positioning. All parts of the UAV (unmanned aerial vehicle, or drone) are synchronized at the microsecond level to accurately obtain the positional information of the imaging center of each camera, allowing the Mavic 3M Multispectral to perform high-precision aerial surveying without the use of ground-control points.

Extended battery life of up to 43 minutes allows the DJI Mavic 3M Multispectral to complete survey operations over an area of approximately .77 square miles in a single flight.

