

Swift Series

<

AGRICULTURE DRONES

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Tyrant UAV Technology

(Focus on UAV Manufacture & Export from China)

Swift Series UAV save the farm cost

Plantation L**lin in Thailand, which grows a lot of fruit, about 40mile², requires crop monitoring, pesticide spraying and so on, uses 5 Swift 16 and saves \$150,000 a year.

Effective and precise pesticide spraying and timely crop monitoring data also increased yields by 3%



Corn



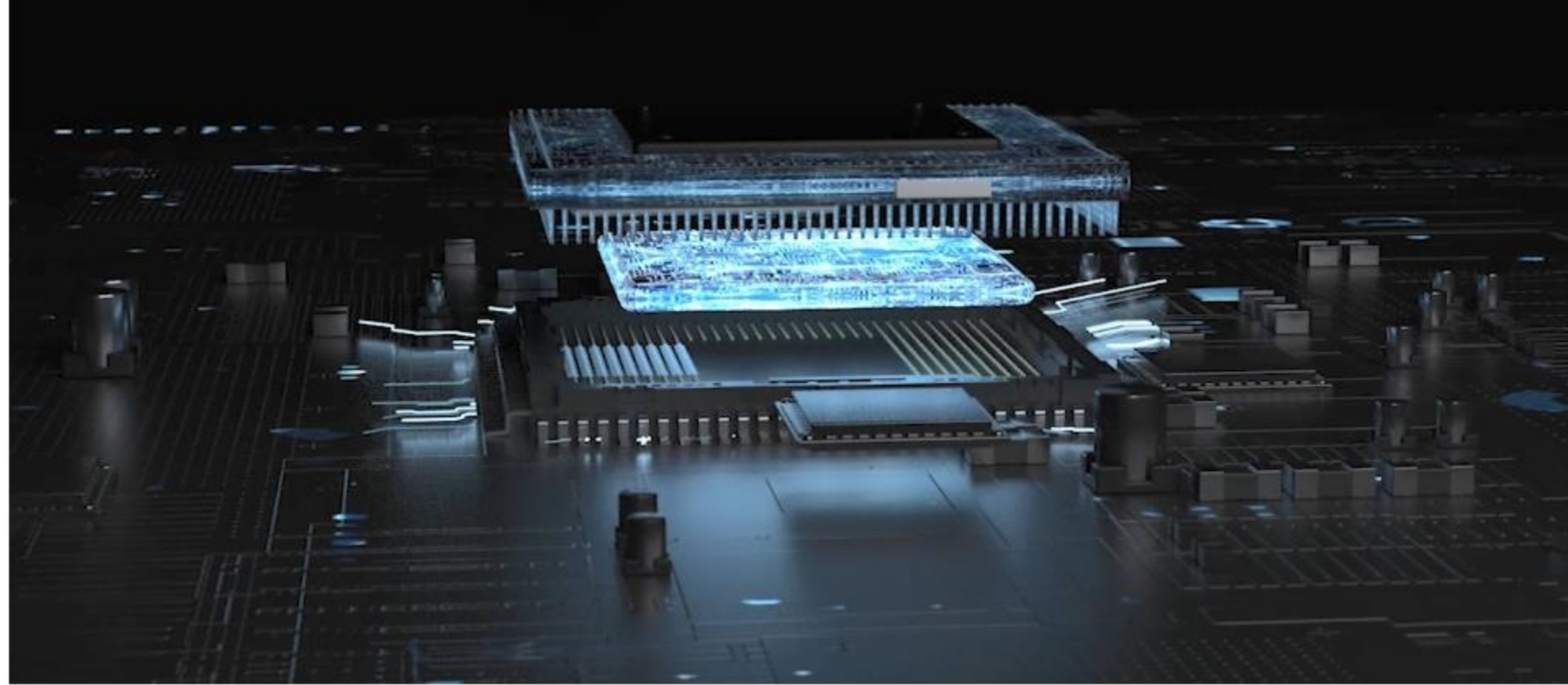
Tea



Rice



Sorghum

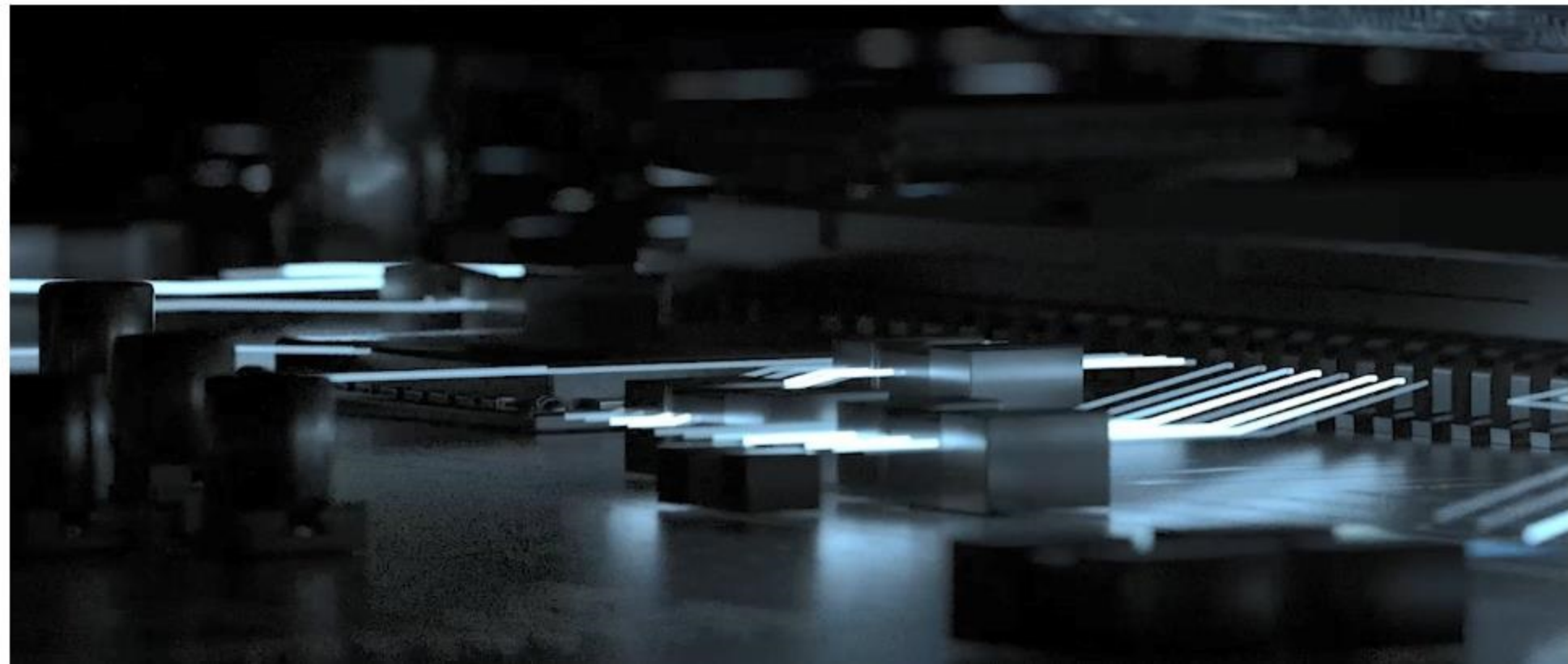


Unique Technology - Control System

Undergone multi-version application optimization and iterative upgrades, advocates a motherboard-style integrated design and reaches IP67 protection level.

Multi-function

More concise, lighter, and more compatible, functional extension interfaces for secondary development function. Three Redundant IMU, dual redundant GNSS and multiple sets of safety mechanism algorithms ensure the stability and reliability of plant protection operations.





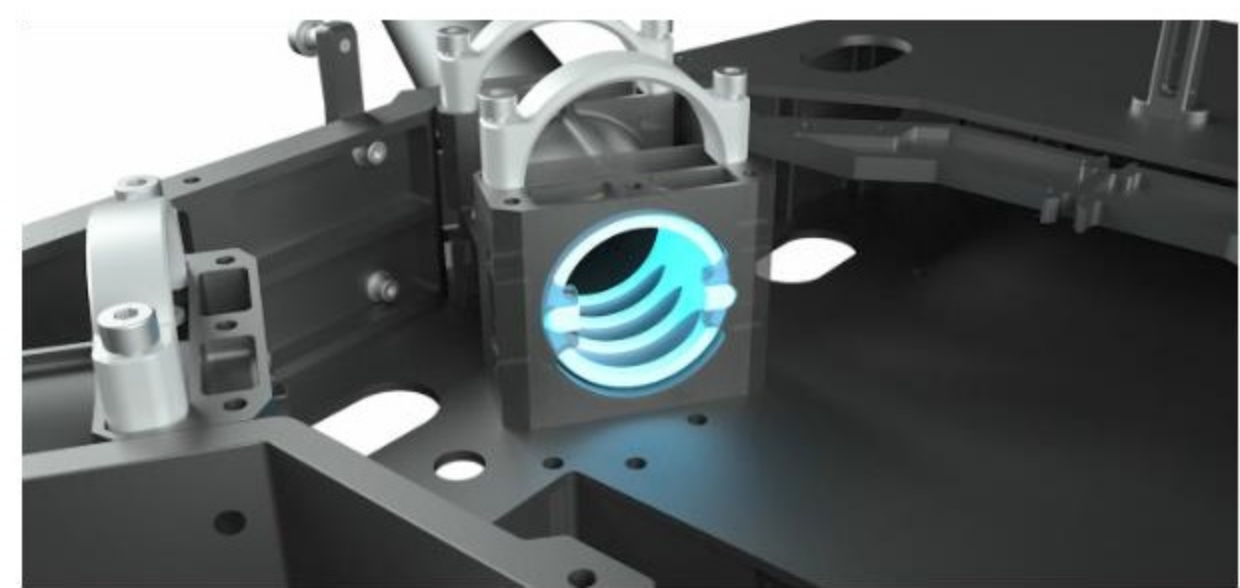
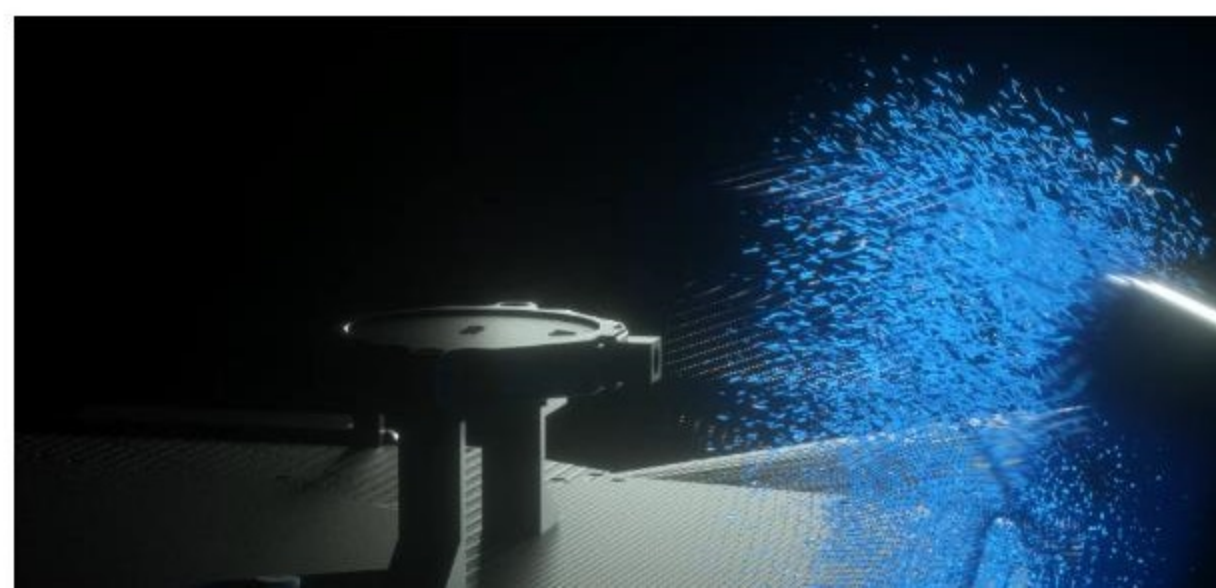
Main Board

- More concise
- Lighter,
- More compatible
- Functional extension interfaces for secondary development function
- Three Redundant IMU
- Dual redundant GNSS
- Multiple sets of safety mechanism algorithms ensure the stability and reliability of plant protection operations.



Tyrant UAV - Swift Series

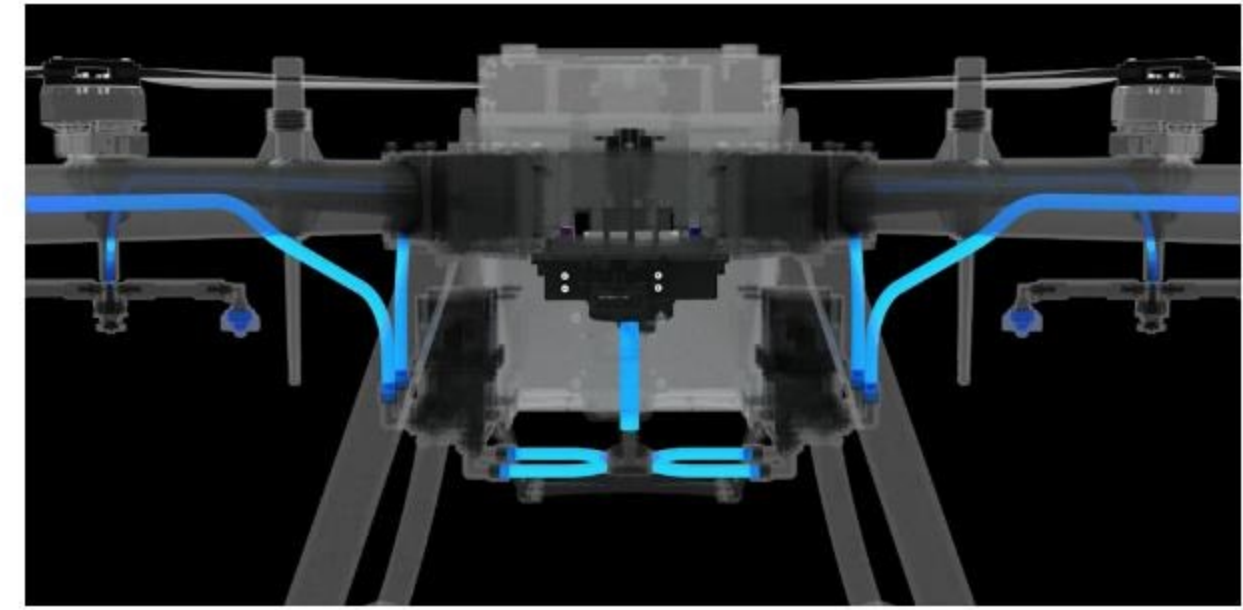
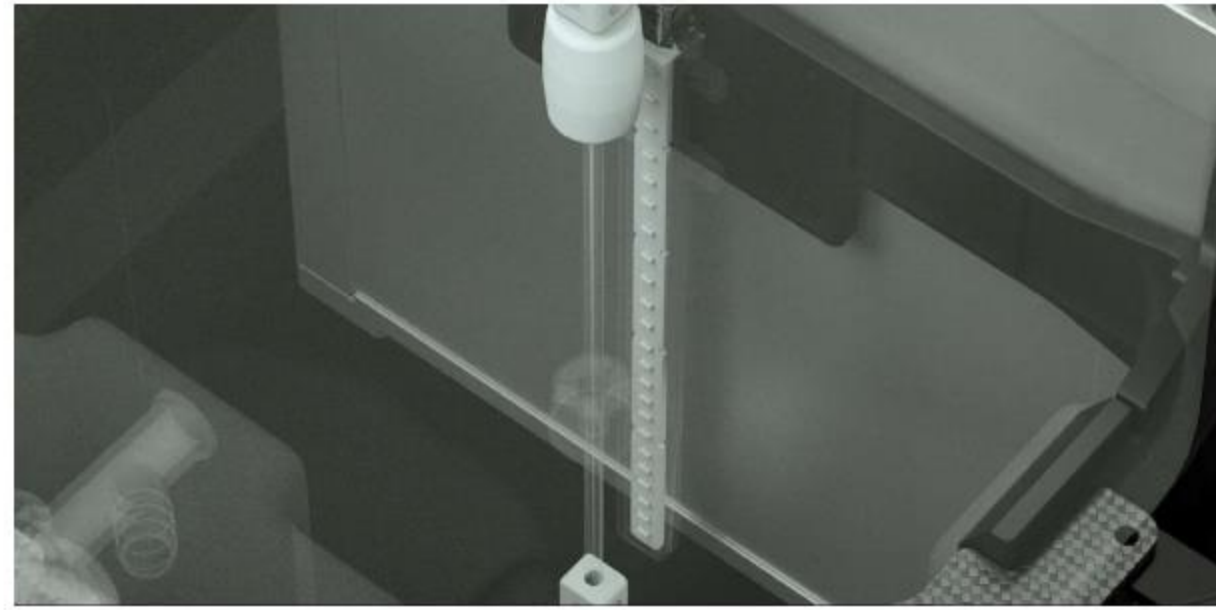
Strong body with Super Alloy and Assembly Design



· Wind / · Dust / · Water / · Rain Resistance

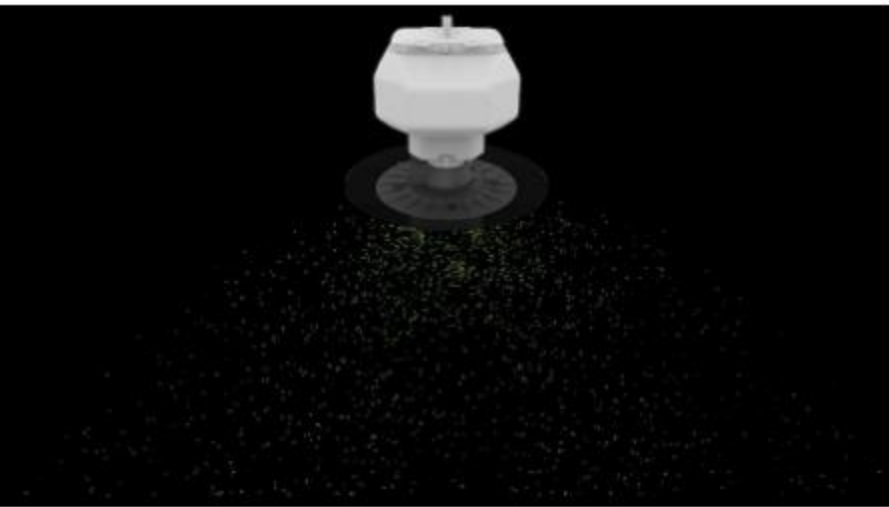


Self-designed Spraying System

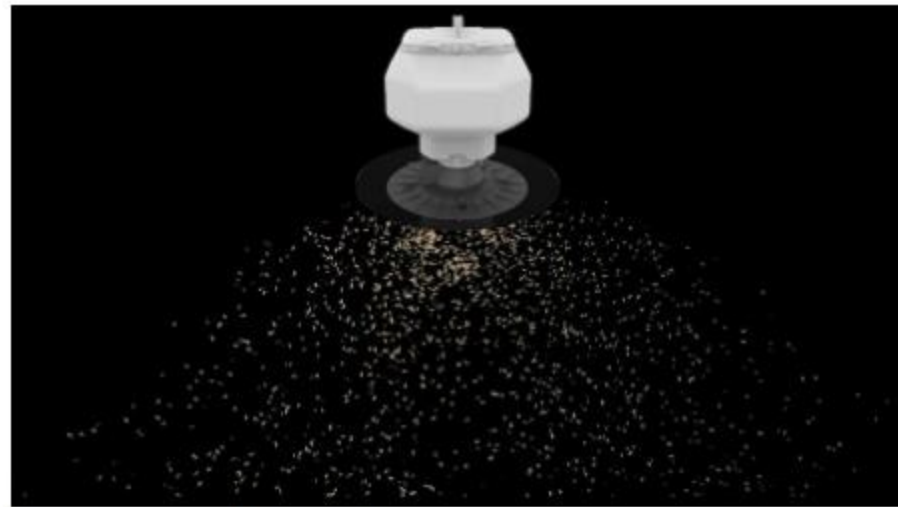


Tyrant UAV - Swift Series

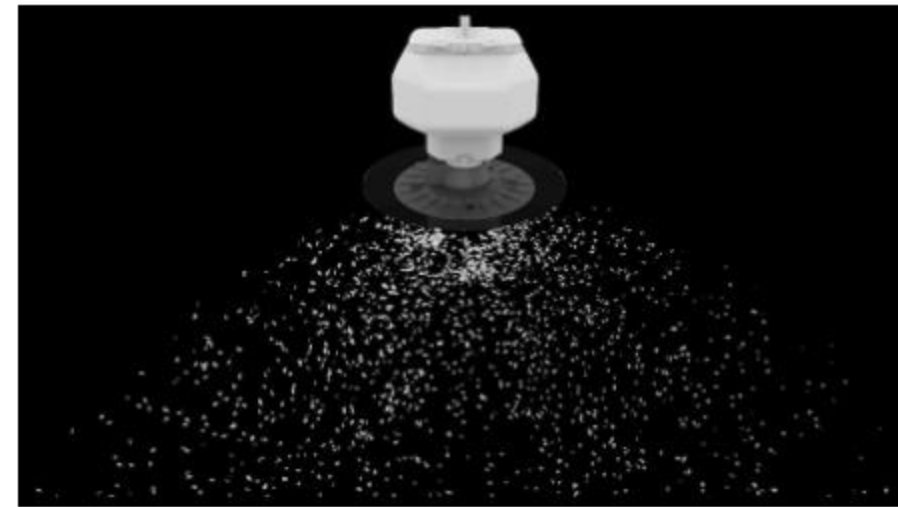
Muilti-Spraying Mode - Almost all-round



Fertilizer



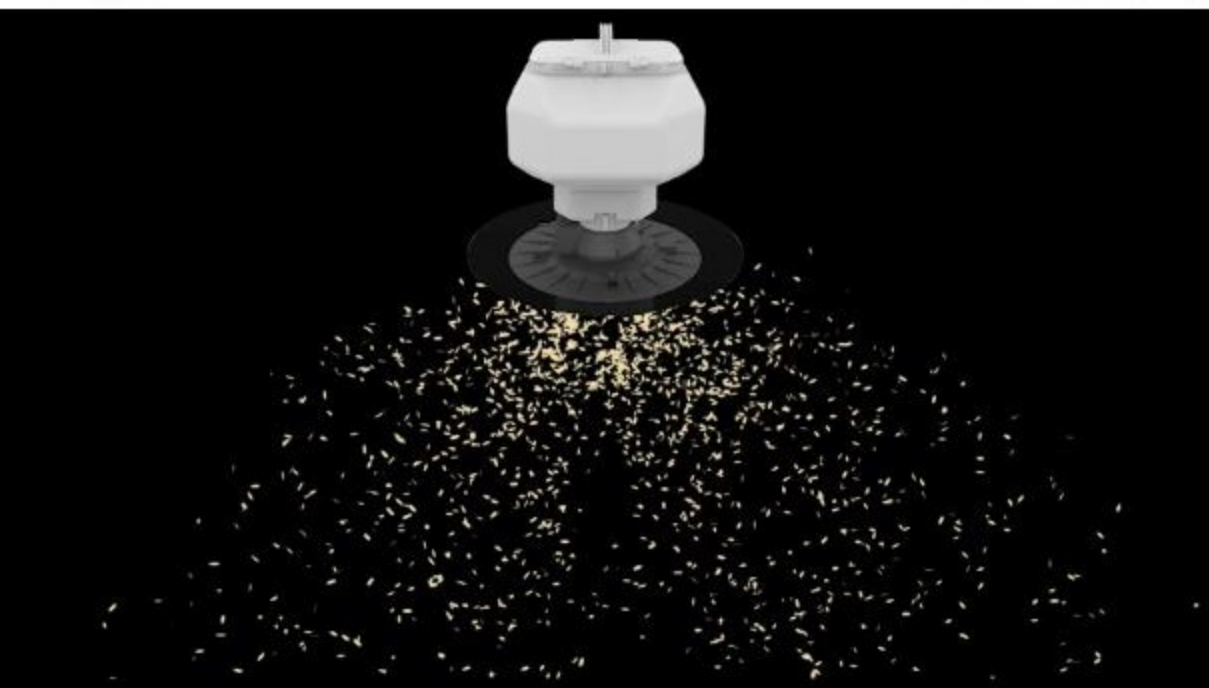
Chemicals / Pesticide



Dissolvant



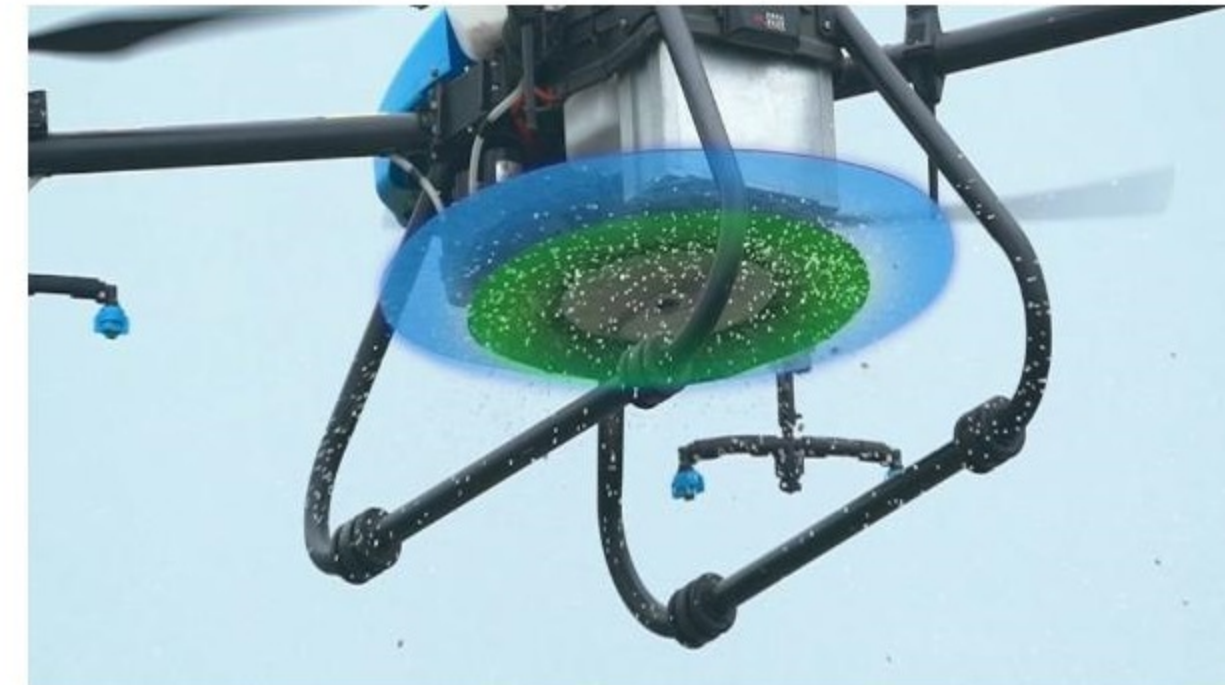
Water



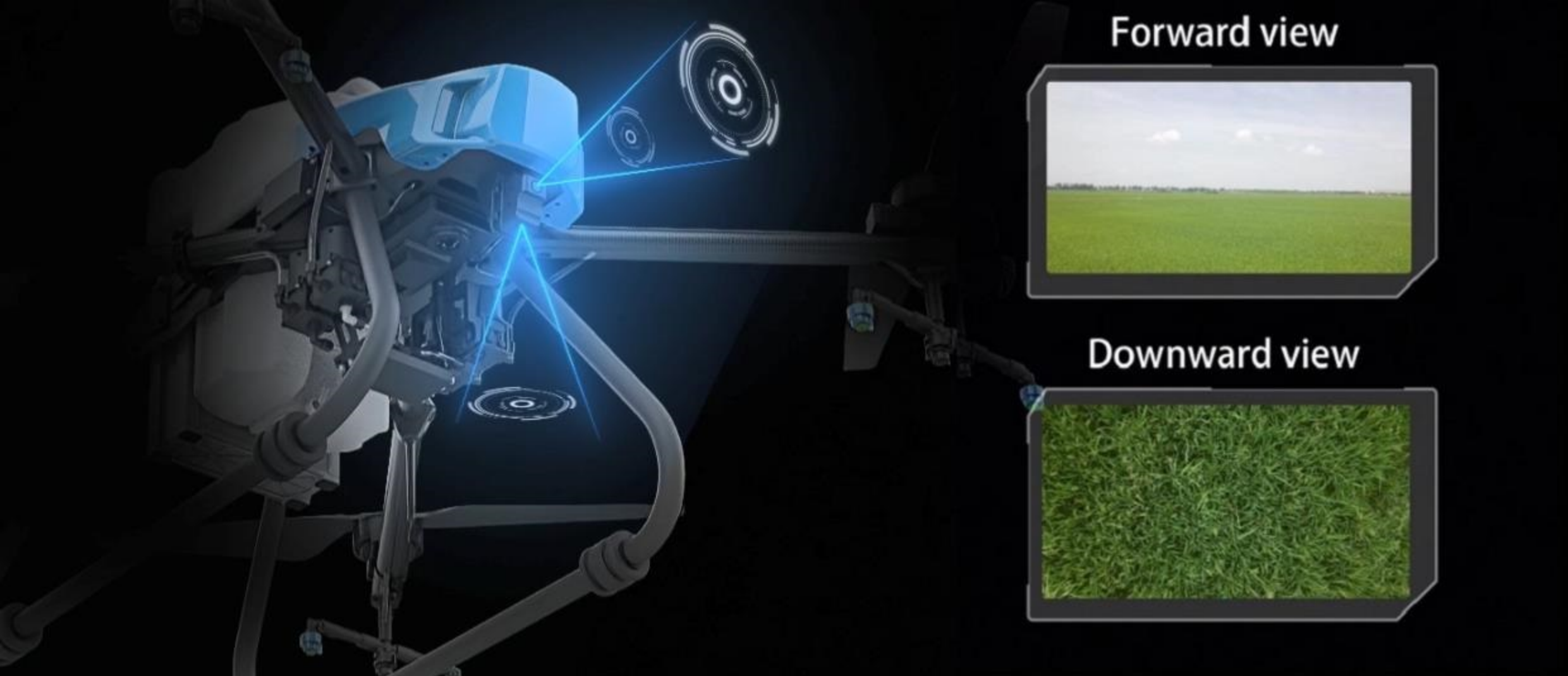
Seed



Grass Seed



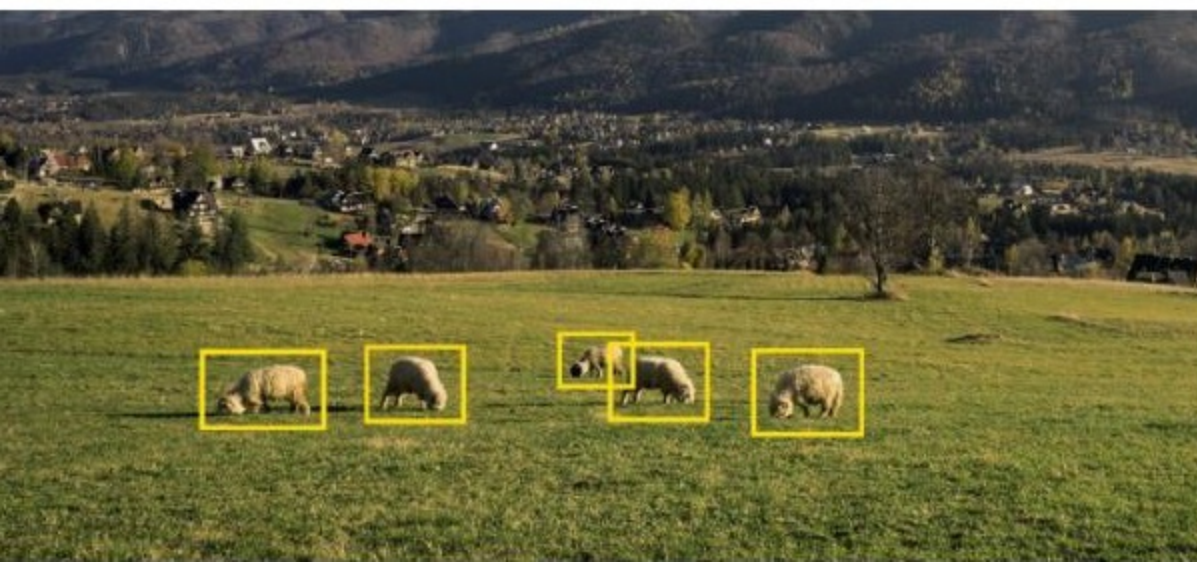
Others

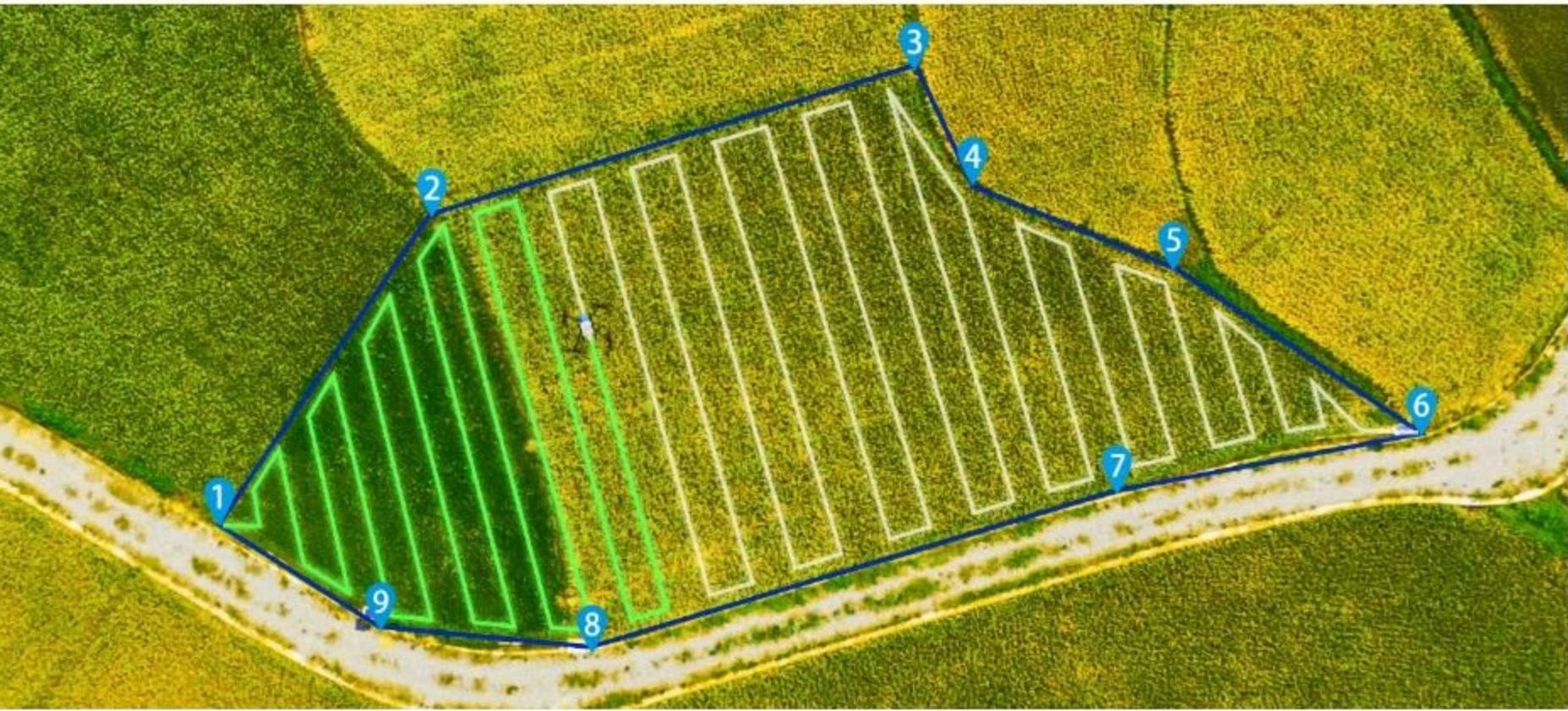


Camera & Obstacle avoidance system

The Swift series drones come with built-in cameras and obstacle avoidance systems, which can not only be used to view flight conditions and monitor crop conditions, but also automatically sense obstacles and bypass them during flight.

- Crop Monitoring
- Animal Monitoring
- Automatic Obstacle Avoidance





3 intelligent Flying Mode

Due to high-end flight control systems, the Swift series offers 3 flight modes that are suitable for all scenarios.

- Man-Control Mode
- A-B Point Mode
- Automatic Mode

Swift 10

- 10kg



SPEC

Wheelbase	1350mm
Cruising speed	5-10m/s
Take-off weight	<22.9kg
Empty weight	12.2kg
Working altitude	0.5-5m
Tank capacity	10L
Wind Resistance	5 level
Endurance	10-15min
Working Temperature	-15°C-50°C
Spray range	4-6m
Nozzle Type	Pressure Nozzle
Recommend battery	12S12000mAh smart battery* 1

Note: Just for your reference because of the continuous updating. We reserve the right to explain the spec.

FEATURES



Modular quick
disassembly design



Automatic route
planning



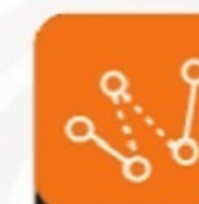
Empty tank
warning



Nozzles
replaceable



Controllable
spraying rate



Breakpoint
intelligent record



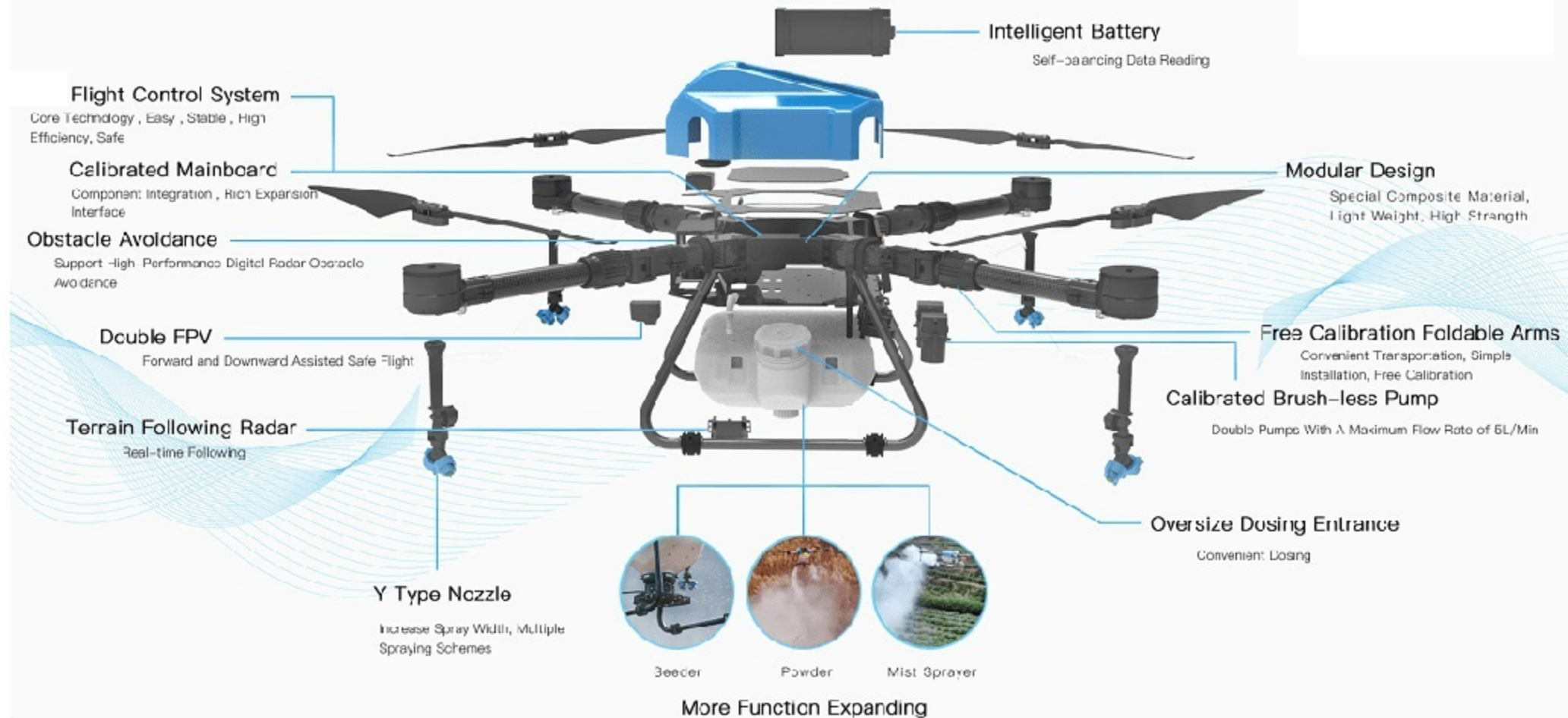
Swift 20

- 20kg



- Drone Dimension: 1140mm X 1140mm X 480mm
- Package Dimension: 905mm X 775mm X 585mm
- Aircraft Weight: 11.3 KG
- Full Loading Weight: 25.7 KG
- Hourly Work Area: 2.66-6.66 Hectare
- Operation Area per Tank: 0.66 Hectare (15L/Hectare)
- Droplet Size: 80-240 μm
- Flow Rate: 1L/min - 5L/min
- Spray Width: 3-6m

- Remote Control Distance: 2000m
- Maximum Attitude: 30m
- Battery Weight: 4.4 KG
- Battery Size: 90mm X 160mm X 220mm
- Charging Time: 15-40Mins
- Charger Size: 310mm X 202mm X 113mm
- Charging Power: 2100W
- Single Motor Power: 900W
- Total Power: 3600W



Swift 20 Plant Protection UAV

Swift 20 agriculture drone adopt convenient surrounded type airframe design, modular maintenance design, dual-pump accurate spraying system, supporting the one-key setting of the dosage of mu; it is also equipped with FPV, obstacle avoidance and other auxiliary operating systems, making the operation of the sprayer simple and safe.

The intelligent data platform based on 4G high-speed network can efficiently transmit plant protection operation data, and the background system can conduct synchronous analysis and process to make the management visible and controllable in real time.

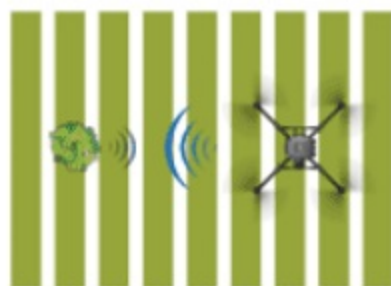


Professional Swift Plant Protection Flight Controller

Developed based on Swift flight controller architecture of the second generation. In addition, it conducts comprehensive optimization to the plant protection industry, thus dramatically improving the work efficiency and realizing the intelligent UAV plant protection operation.



Support the expansion of rich accessories to tap the unlimited potential of plant protection



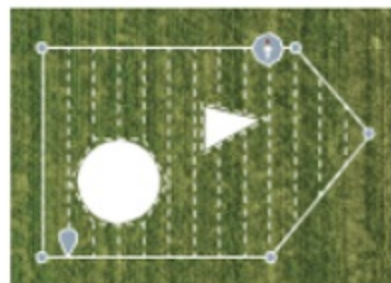
Perceive the Obstacle

In flying, the plant protection machine can perceive the direction and distance of the obstacle through the real-time scanning of the obstacle-avoidance radar in the front and at the back. When the obstacle enters the warning area, the aircraft will automatically stop and record the interruption coordinate point.



Intelligent Scanning, Precise Terrain Following

The high-precision terrain following radar of the second generation can have real-time perception of the distance between the plant protection machine and the plant to be applied. Through continuous adjustment of the control system, it ensures that the distance between the plant protection machine and the plant remains unchanged, to as to ensure the spraying uniformity.



Multiple Operation Modes

The user can set flight and operation parameters according to actual operation requirements. UAV automatically completes route planning and provides users with four operation modes: AB point operation, regional planning operation, semi-automatic operation or manual operation to meet the operation requirements in different environments.



Intelligent Management, Convenient & Efficient

Automatic planning of the flight route, one-key take off, one-key return and landing, voice broadcasting, intelligent assistant to promote the operation and control experience. Intelligent spraying setting, precise calculation of the operation area, automatic generation of the operation report, precise spraying and efficient fertilizing.



Cm-level Positioning, Precise Direction

The plant protection UAV is equipped with the RTK system to realize high-precision flight and provide cm-level positioning. At the same time, it is equipped with dual antenna configuration for accurate direction of the flight control. Then there is no need to worry about the interference of the magnetic compass.

Simpler and Safer Plant Protection

Swift 20 agricultural and forestry plant protection solution adopts the brand-new T-series plant protection UAV, carries the flight controller especially for plant protection and the agricultural intelligent data processing platform, dual-pump accurate measuring and spraying system combines the FPV, obstacle avoidance and other auxiliary operation systems to realize the accurate plant protection operation, making the plant protection operation become simpler and safer.



Swift 20 General Parameter

Wheelbase	2596mm(8 axes)
Overall dimension	Expansion: 2550x911x685mm Folding: 1362x911x685mm
Spray width	8.5~11.0m
Cabinet capacity	21.5L(maximum load)
Operational efficiency	200 mu /h~230 mu /h
Machine weight	20kg(without battery)
Maximum effective take-off weight	50.5 kg
Power cell	TG-28000S
Sprinkler type	High-pressure sector sprinkler
Atomized particle	130~250 um (XR11001VS)
Hover time	>16min (no load) >7min (full load)
Operating height	1.5 m to 3.5 m
Maximum flight Angle	25°(Attitude mode)
Maximum flight speed	10m/s (GPS mode)
Horizontal positioning accuracy	Horizontal +1.0m Vertical +0.5m Horizontal +10cm Vertical 10cm (using RTK) Vertical soil 0.1m(radar enabled)
The range accuracy of imitation radar	0.02m
Height range	1~10m
Obstacle avoidance sensing range	2~20m



Swift 30

- 30kg

Swift 50

- 50kg



- Controllable spray rate
- Low Battery/Liquid Alarm
- Interchangeable nozzle
- Quick Assemble/Disassemble
- Intelligent flight
- Breakpoint intelligent record
- Terrain/Obstacle Radar
- Atomized spraying

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SPECIFICATION	
Product name	
Wheelbase	1950mm
Working speed	5-10m/s
Payload	30L
Duration of flight	10-15min
Nozzle number	8
Battery	Smart battery 14S 28000mah
Terrain radar	Included
Remote control	FPV screen
Camera	Included
Aluminium Case	Included
Seeding Device	Included



★ Technology products have rapid iteration, the parameters are subject to actual data.

SPECIFICATION	
Product name	
Wheelbase	2560mm
Working speed	5-10m/s
Payload	50L
Duration of flight	10-15min
Nozzle number	12
Battery	Smart battery 14S 28000mah
Terrain radar	Included
Remote control	FPV screen
Camera	Included
Seeding Device	Included



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