Brief Introduction

X50 UAV helicopter will accelerate the machinery revolution of plant protection industry in China.

In addition to its user-friendly controlling interface, ease in transportation and maintenance, X50 is an intelligent agriculture solution providing thorough services to clients by way of analysis carried out through big data platform.

Woozoom Agriculture makes plant protection more efficient and traceable with high quality solutions.

To help clients gain more profit from intelligent unmanned aerial vehicles is what Woozoom Agriculture built for, and we see it in the near future to come of eco-agriculture.

Parameters

	Items	Parameters
Drone	Dimensions	1985 mm×615 mm×670 mm
		1305 mm×615 mm×680 mm (folded)
Spraying System	Maximum Payloads	25L agrochemical tank×1
	Sprinkler Heads	Pressure nozzle×4
	Agrochemical Pumps	Brushless diaphragm pump×2
	Sensor Used for Monitoring The Agrochemical Quantity	Continuous liquid-level meter×1
	Maximum Flow	5 L/min
	Maximum Boom Width	8 m
Flying Parameters	Maximum Takeoff Weight	50 kg
	Positioning System	NovAtel RTK system (standard-equipped)
	Positioning Accuracy	Horizontal: ±10cm, Vertical: ±10cm
	Terrain Awareness System	Millimeter-wave radar
	Terrain Awareness Altitude	1.5 m to 15 m
	Maximum Speed When Operation	8 m/s
	Maximum Speed	10 m/s
	Fully Automated Operation	√
	Night Work	√
	Obstacle Avoidance Planning	√
	Breakpoint Spraying	√
	AI Fault Diagnosis	√
	AI Security Protection	√
Operation Capability	Operation Efficiency	14 ha/hr
Power Supply	Battery	2,8000 mAh
	Number of Charge Cycles	⩾300 times

Remarkable Outcome

Ideal for High-stalked Crops

A. Strong airflow: more droplets of pesticide go through straws and fell on more crops, bringing better pest control effect;

B. Better sedimentation: great precipitation of pesticide with better coverage on crops during operation;

C. High precision: centimeter-level precision spraying is achieved by the standard-equipped RTK differential positioning system;

D. Large flow: max flow rate: 5L/min.

High Efficiency

Big Boom Width at 8m

The boom width is 8m and operation efficiency is 0.33 ha/min when spraying at the medium speed of 8m/s.
U-shaped ridge change improves the operation efficiency by 20%.
If fly to operate over an expanse, it can spray 14.67 hectares per hour. (*Agrochemical changing and battery recharging should be done during actual operation).

Maximum payload is 25L

Effective operation area is 14 ha/hr

Maximum boom width is 8m

Benefits Are Maximized

650-Hectare Farmland Can Be Sprayed in Only One Week

A. Better droplet penetrability and coverage brings better pest control effect; users can reduce costs and increase their income.

B. A drone can finish operation on a farmland of more than 650 hectares in 7 days that the cost is lower and comprehensive benefit is higher.

Smart and Easy-to-Use

Simple Clicks to Operate Easily

Easy to Operate

A.Fully automatic operation

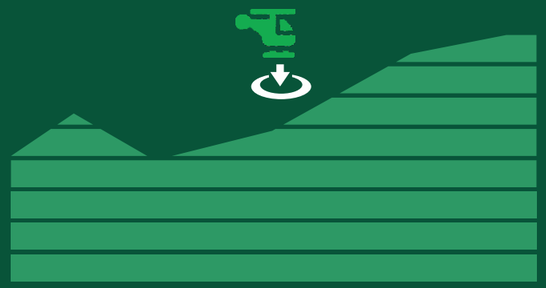
A phone can be used to accomplish operations including path planning, one-key operation, breakpoint spraying, automatic RTH, etc. without RC.

B.Easy to study

One can get started quickly after study for only 2 hours and operate individually in 3 days.

C.Able to operate in various fields

As equipped with a terrain awareness radar system, it is applicable to precision spraying for various crops regardless of the terrain.



Easy to Transport

The drone's tail boom is designed to fold rapidly, and the drone length can be shortened by 30% after it's folded which makes it convenient to be transported and carried; Wheels are convenient for drone transport on farmlands.

Easy to Maintain

An exclusive patent technology is adopted to reduce number of yaw control system parts by 90% and the fault rate by 99% which makes the drone system more secure, convenient and reliable.

Single-stage transmission is adopted and it's more visible when maintenance.

The modular design enables a 60% reduction in the number of components.

Stress construction designing is adopted for several parts that the fuselage construction is high strength and impact resistance. The maintenance cost is lower and service life is longer.

Easy to Manage

The big data management system used for monitoring drones is operated independently on our own, and operation data collected from drones can be used by users to analyze operation areas, duration, costs, etc. statistically. Member management, flying management and other functions are provided. It can be used on both PC and portable equipment to help with crop protection and management services efficiently.