

XAG

XAG R150 Unmanned Ground Vehicle **Spray Version**

**Autonomous Operations with Smart Control,
One System for Multiple Farming Tasks**

Born for the future of unmanned farming system, R150 is the first mass-produced agricultural robotic platform of its kind. Embarked with XAG JetSprayer™ System, it can conduct fully autonomous, precise spraying operation at max efficiency of 5 hectares per hour. Powerful scalability and multiple operation modes enable a wide range of applications from crop protection to disinfection.

Package Component

R150 Mobility Platform X1 • ACS2 Control Stick X1 • Drive Control Module X1
• RTK Module X1 • B13860S Smart Battery X2 • CM12500 Intelligent Supercharger X1
• Jetsprayer X1 • Smart Liquid Tank X1



XA.COM



Precise Spraying in Every Direction

100 L
Smart liquid tank

12 m
Max. spray width

4.8 L/min
Rated flow

5 ha/h*
Max. efficiency

Jet Spray Atomisation, Adjustable Droplets

Just right onto the target areas. High pressure jet engine projects focused, high-speed airflow that can atomise the liquid into 60-200 µm particles.

Outlet velocity reaches up to 160 m/s, with max. wind force being at grade.

Smart Pan Tilt, Omni-directional Spray

Brushless direct-drive pan tilt and embedded gyroscope facilitate spot spraying and 360° coverage.

Vertical swing: 200° max. angle ; 360°/s max. angle velocity

Horizontal swing: 290° max. angle ; 180°/s max. angle velocity

*Max. efficiency is measured when R150 continuously operates on plain fields with the speed of 1.2 m/s and spray width of 12 m.

Multi-scenario Applications

Orchard crop protection/ public space disinfecting/ golf turf maintenance/ highway weeding/ urban landscaping



Safe with Precision Mobility

SUPERX3 Pro RTK Drive Control System

RTK cm-level accuracy navigation for auto drive

Optical positioning aided to ensure precise operation

AI mobility control to predict road condition

Real-time transmission in high-speed 4G+wireless networking

Strong Momentum, Traverse with Ease

Enabled by high-performance brushless motors and four-wheel drive on multiple terrains. Electric braking system prevents skidding.

1000 N·m max. torque

150 kg load capacity

1.2 m/s standard operational speed

0.7 m min. turning diameter

Simple Structure, Yet Durable

High-strength integration steel frames for overall protection

Adjustable ground clearance increases stability on slopes

Lightweight design allows free movement between dense orchards

Modular Design, Easy-to-maintain

Easy switch between different wheel sets to adapt various terrains

IP67 waterproof and dust-resistance, convenient maintenance

Smart Control, Easy-to-use

2 Interaction Patterns: start immediately with XAG ACS2 handheld control stick or use smartphone to enable autonomous driving.

4 Operation Modes: support waypoint, shuttle, follow-me, and remote control that adapt to different application scenarios.



Waypoint mode



Shuttle mode



Follow-me mode



Remote control mode

15-min Charge, 4-hour Endurance

Less waiting, endless power on the go

4-hour unloaded endurance, power supply by dual batteries

IP67 protection for water-cooling, longer battery life

XBMS intelligent battery management with self-balancing



CM12500 Intelligent SuperCharger

AC charging, cost-effective

• 2500W rated power, 15 min supercharge*

* Laboratory research data under general operating conditions. Specific performance may vary depending on the working environment, user habits, daily maintenance, etc.

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