

# Orchard Autonomous Sprayer

## S500 Pro ▶



*Integrated  
Navigation*



*Ultra-Long  
Endurance*



*Precision  
Spraying*



*Visual  
Management*

# COMPANY PROFILE

Jiangsu Lanjiang Intelligent Technology Co., Ltd. (referred to as "LJ Tech" ) is China's first vertically integrated agri-robotics solution provider. We own three revolutionary product lines: Orchard Robotics, Field Patrol & Management Robots, SAAS Digital Agriculture Platform. By owning every layer of technology - embedded hardware, AI algorithms, and cloud systems -we make farms work smarter, ensuring seamless coordination between machines, data, and workflows.

LJ Tech has taken a significant step in exporting agricultural robots to a dozen countries. We contribute to the global shift towards a green, unmanned, and intelligent future in agriculture.



# APPLICATION SCENARIO



# PRODUCT ADVANTAGES

The LJ Tech S500 Pro autonomous sprayer achieves exceptional advancements in **intelligence** and **precision**. Additionally, the S500 Pro significantly improves operational speed, climbing ability, and battery life compared to the S500 model.

## World's Only Integrated Navigation System for Orchards

- ▶ Fuses RTK, vision, LiDAR, and IMU with advanced algorithms for seamless operation in signal-blocked areas

## All-Electric Control System Efficient & Stable

Powered by China's robust EV supply chain, using globally leading, cost-effective solutions.

### Energy Conversion Efficiency Comparison:

- ▶ Traditional hydraulics: 60%
- ▶ Modern electric control: **80% !**



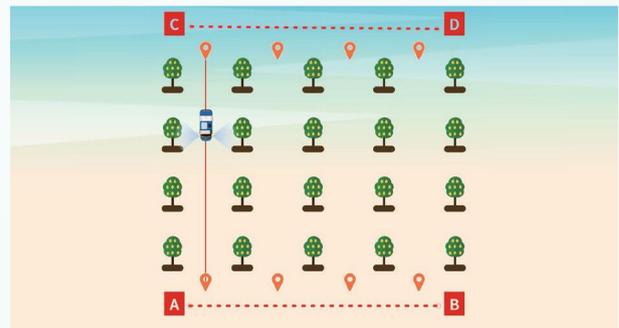


## Precision Spraying Green Revolution

- ▶ Dynamic Dosing Control: Auto-calibrates to maintain consistent application across hectares
- ▶ Smart start-stop & unilateral control slashes chemical use & environmental impact
- ▶ 6-15kW customizable fans adapt to tree types/ growth stages

## Effortless Deployment Seamless & Scalable

- ▶ Discrete point planning for all terrains (shade, tall trees, greenhouses)
- ▶ 5+ device fleet operation, Single-user control for large orchards



## Smart Visibility One-Tap Control.

- ▶ "Orchard Mate" APP: Real-time path/status monitoring. Auto-generates daily reports for digital orchard management
- ▶ Large-screen Remote Control: Live view + instant path tracking + real-time diagnostics + self-diagnosis alerts

## AI-driven Operation – High ROI

- ▶ **40%** higher efficiency  
LJ Tech enables single-user control of multiple machines
- ▶ **5%** increased yield  
Clear operation paths and data enhance spray consistency and management
- ▶ **10%** less pesticide use  
Precision spraying and navigation systems eliminate overlap and waste  
(Data based on real results from a 2,000-acre orchard)



# DATA PARAMETERS

Basic Configuration	
Overall dimensions	2650mm(L)*1260mm(W)*1360mm(H)
Unloaded weight	1230kg
Power type	Range-extended Electric Powertrain
Endurance time	≥6h
Power System	33kW / 45Hp diesel engine, 83.7V Super Capacitor
Generator power	15kW
Chassis type	Track chassis
Ground clearance	17.6cm
Travel speed	0-4.5km/h
Climbing angle	≤15° for constant slope
IP Rating	IP55
Spray System	
Water tank capacity	500L main tank with agitator + 30L cleaning tank, auto clean
Rated pressure	0.2-2.5MPa
Flow range	0-60L/min
Number of Nozzles	12
Spray radius	15m wide, 5-7m high
Atomization effect	80-200 μm
Autopilot System	
Fusion navigation	GNSS + RTK (Base Station/ CORS Net) + LiDAR + IMU + Visual Recognition(Pending)
Positioning accuracy	± 5 cm
Safety	Milimeter Wave Radar/ Low-liquid-level Stop/ Lateral-offset Stop
Intelligence	Path Sharing/Stop spraying during turning/ Single-sided Spray/ Precise Dosing Control / Smart Refilling Alert/ Fleet Management
Smart Remote	Path Tracking; Real-time Data Monitoring ; Video-transmission Display
Interactive System	PC, Big data management platform, APP of Smart phone



WhatsApp



Youtube



Instagram

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