Orchard Autonomous Sprayer

S1000

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

APPLE **CITRUS** **OLIVE** **PEAR** **PEACH** **NUT**

PRODUCT ADVANTAGES

The LJ Tech S1000 autonomous sprayer delivers the same intelligent functionality and precision spraying as the S500 Pro. Notably, the S1000 can carry twice as much liquid and spray farther and higher. The S1000 is ideal for large orchards with wider rows, taller trees, and denser foliage.

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%

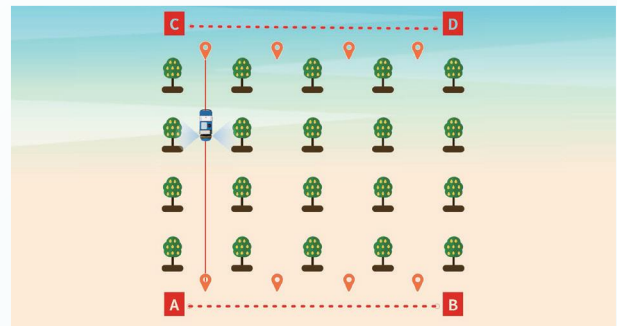▶ Modern electric control: **80% !**

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

Effortless Deployment
Seamless & Scalable

- ▶ Discrete point planning for all terrains (shade, tall trees, greenhouses)

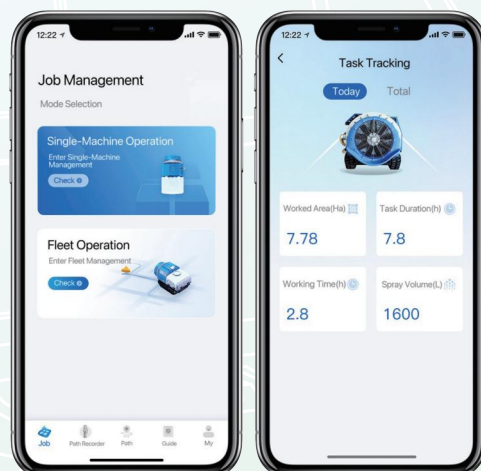- ▶ 5+ device fleet operation, Single-user control for large orchards

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	4490mm(L)*1720mm(W)*1920mm(H)
Unloaded weight	2500kg
Power type	Range-extended Electric Powertrain
Endurance time	≥7h
Power System	36kW / 48Hp diesel engine, 96V Super Capacitor
Generator power	30kW
Chassis type	Track chassis
Ground clearance	20cm
Travel speed	0-4.5km/h
Climbing angle	≤10° for constant slope
IP Rating	IP55
Spray System	
Water tank capacity	1000L main tank with agitator + 100L cleaning tank(auto clean) + 15L hand rinse tank
Rated pressure	0-1.5MPa
Flow range	0-100 L/min
Number of Nozzles	26
Spray radius	20m wide, 6-12m 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
Saftety	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