

Orchard Autonomous Sprayer



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.





PRODUCT STRUCTURE



APPLICATION SCENARIO













Automated Driving System

- Multiple Mapping Ways
 - ·Machine memory ·path recorder
 - ·discrete point marking ·drone mapping
- CM-Level Accuracy

RTK technology supports ±5cm accuracy. Inertial navigation ensures continuous operation during brief signal loss

Human Safety

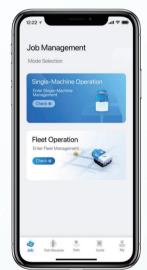
Distance prevents pesticides poisoning Night work becomes easy as day work Machine work lowers labor intensity

Machine Safety

Ultra-sonic radar, weak-signal stop, low-liquid-level stop, lateral-offset stop









Digital & Intelligent Features

- Spray Cutoff During Turns
 Saves chemicals by automatically stopping spray during turns
- Smart Monitoring(Optional)
 Real-time device status & operation data tracking via mobile APP
- Smart-Refill (Optional)
 AI-powered algorithm calculates optimal refill points for maximum efficiency
- Fleet Management(Optional)
 One-person can manage multiple machines via
 "Orchard Mate" APP

High ROI

- 3 times efficiency VS traditional machines
- Algorithm-drivenBoosts consistency and output



DATA PARAMETERS

Basic Configuration	
Overall dimensions	2100mm(L)*1200mm(W)*1200mm(H)
Unloaded weight	600kg
Power type	Range-extended Electric Powertrain
Endurance time	≥5h
Power System	13kW / 17Hp diesel engine, 48 V 44 AH lead-acid battery
Generator power	5kW
Chassis type	Track chassis
Ground clearance	16cm
Travel speed	0-3.6km/h
Climbing angle	≤15° for constant slope
IP Rating	IP55
Spray System	
Water tank capacity	450L
Rated pressure	0-3.5MPa
Flow range	0-42 L/min
Number of Nozzles	12
Spray radius	30m wide, 7-10m high
Atomization effect	80-200 μm
Work Efficiency	1.33Ha/h (4m row spacing, 3.6km/h walking speed)
Autopilot System	
Ways of navigation	GNSS + RTK (Base Station/ CORS Net)+IMU(Inertial Navigation)
Positioning accuracy	± 5 cm
Saftety	Ultra-sonic Radar/ Low-liquid-level Stop/ Weak-signal Stop/ Lateral-offset Stop
Intelligence	Path Sharing/ Stop spraying during turning/ Smart Refilling Alert(Optional)/ Fleet Management(Optional)
Smart Remote (Optional)	Path Tracking; Real-time Data Monitoring ; Video-transmission Display
Interactive System	PC, Big data management platform, APP of Smart phone







JIANGSU LANJIANG INTELLIGENT TECHNOLOGY CO., LTD







