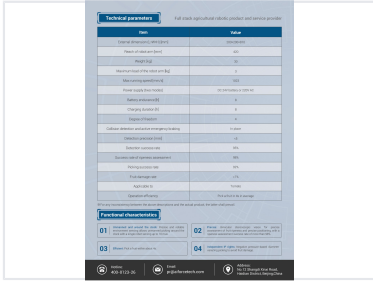


Automated Tomato Harvesting Robot

This robot uses stereoscopic vision and AI to detect and assess tomato ripeness. Its 4-degrees-of-freedom robot arm and negative pressure picking system enable efficient harvesting with minimal damage.



Item	Value
Product Name	Automated Tomato Harvesting Robot
Model	TH-2026
Manufacturer	Merhein Robotics Ltd.
Material	Aluminum Alloy, Stainless Steel
Weight	150kg
Dimensions (L x W x H)	1200 x 800 x 1500mm
Power Source	24V DC Battery
Operating Temperature	5°C to 35°C
Humidity	20% to 80%
Max. Harvesting Speed	4 s/fruit
Max. Harvesting Accuracy	98%
Max. Harvesting Success Rate	92%
Max. Harvesting Damage	< 5%
Max. Harvesting Efficiency	95%
Max. Harvesting Yield	10kg/hour
Max. Harvesting Area	1000m²
Max. Harvesting Time	100 hours
Max. Harvesting Distance	100m
Max. Harvesting Height	1.5m
Max. Harvesting Depth	0.5m
Max. Harvesting Width	0.5m
Max. Harvesting Length	0.5m
Max. Harvesting Volume	0.125m³
Max. Harvesting Weight	12.5kg
Max. Harvesting Volume (per hour)	12.5m³
Max. Harvesting Weight (per hour)	125kg
Max. Harvesting Volume (per day)	125m³
Max. Harvesting Weight (per day)	1250kg
Max. Harvesting Volume (per month)	1250m³
Max. Harvesting Weight (per month)	12500kg
Max. Harvesting Volume (per year)	12500m³
Max. Harvesting Weight (per year)	125000kg

ADDITIONAL IMAGES



Product Overview

Autonomous Agricultural Solution

This advanced robotic system is designed for automated fruit harvesting in unmanned environments such as agricultural parks and professional greenhouses. It integrates high-precision computer vision and deep learning algorithms to accurately assess ripeness and perform non-contact picking. By utilizing negative pressure suction technology, the robot ensures efficient, high-speed harvesting while minimizing potential damage to the crops.

Key Performance Metrics

Core Metrics

95 %

Detection Success

98 %

Ripeness Accuracy

92 %

Picking Success

4 s/fruit

Picking Speed

Technical Specifications

Dimensions & Weight

Property	Value
Dimensions (L*W*H)	200 x 200 x 810 mm
Weight	30 kg
Arm Reach	420 mm
Maximum Load	3 kg

Operational Parameters

- Max running speed: 1023 mm/s
- Degrees of freedom: 4
- Detection precision: < 5 mm
- Fruit damage rate: < 1%

Power & Safety

Safety Systems

Collision Detection • Active Emergency Braking

Power Requirements

DC 24V Battery, 220V AC