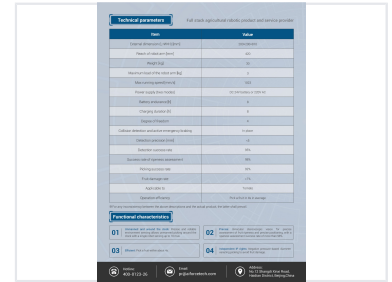


# Automated Tomato Harvesting Robot

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.



## 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