T9

Key Features

➢ Features a new 11.6-inch high-definition display with a high refresh rate, enhancing user experience and facilitating easy operation.

➢ Accommodates a variety of item sizes with its flexible trays and a maximum payload capacity of 40kg.

➢ A shock-absorbing chassis ensures smooth delivery, expanding the range of deliverable food types and broadening the scope of use scenarios.

➢ Supports collaboration among up to 20 robots, expanding payload capacity and enabling a wider range of services.

➢ Autonomously navigates to charging stations, eliminating the need for human intervention and ensuring uninterrupted operation.

➢ Achieves accurate positioning and precise movements with its independently developed SLAM technology.

➢ Employs multiple sensors, including LiDAR and stereo vision sensors, for intelligent obstacle avoidance during navigation.

Specifications

Performance

Maximum Coverage Area per Device	200*200㎡
Minimum Passage Width	70cm
Moving Speed	0.1~0.8m/s adjustable
Braking Distance	80cm (Max. moving speed & full load on dry road)
Slope Angle	≤ 5°
Battery Life	13-18
Service Life Circle	20000h
Multi-robot Collaboration	Maximum 20 robots
Multi-point Delivery	Up to 20 points(single delivery)
Intelligent Obstacle Avoidance Maximum Detect Range	≤1.5M
Rated Power	50W

Environment

Operating Temperature and Humidity	0 - 40℃, RH：5％~85％
Operating Environment	Indoor environment, flat ground, no dust
Storage Temperature	-30℃-60℃

KEENON

Battery and Charging

Battery Type	Ternary lithium battery
Battery Capacity	DC48V，12Ah
Battery Dismountable	No
Charging Mode	Automatic charging with charging pile and manual charging by recharger
Charging Input	100-240V~,50/60Hz
Charging Time	4h (With charger or charging pile, and robot powered on)
Charging Pile Dimension	215*290*230mm
Charging Pile Weight	2.2kg

Hardware

Machine Material	PC & ABS
Positioning Method	Laser Positioning/Label Positioning(for the start point if charging pile is not used)
Positioning Accuracy	Centimeter Level
Sensors	LiDAR, Stereo Vision Sensor, Image Module, Collision Sensor, IMU(Inertial Measurement Unit)
Sensor Coverage	Lidar detection range: 216°，<=20M; 3D Stereo vision range: 140°，0.1-1.5m
Image Module	120°, celling height required 2-8m
Network	Wi-Fi(2412-2472MHz)
Touch Screen	11.6 inch(1080p)
Interactive Ability	Light/Touch

Measurements

Robot Dimension(WxDxH)	500*527*1266mm
Box Dimension(WxDxH)	550*610*1305mm
Robot Weight	63kg (Charging pile is not included)
Tray Amount	4
Tray Dismountable	Yes
Space of Each Layer	490*404*195mm(The 1st upper layer)， 490*404*169mm(The lower three layers)； 490*404*253mm(The 1st upper layer, adjusted to 3 trays), 490*404*228mm(The lower two layers, adjusted to 3 trays)
Tray Access	Open access from the front and the rear
Load Capacity	40Kg (10kg per layer)

System and Function

System	Linux(Control) & Android(Interaction)
App Language	Chinese, English, Japanese, Korean
App Functions	Food delivery, Snacks, Direct delivery, Multi-point delivery, Welcome Mode
Expression	3 types
Voice Reminder	Different voice prompt in different working mode and general operation.

Official Standard and Optional Parts

Package Main Contents	Robot*1, Silicone Pad*4 , Battery Recharger*1, Product Manual*1, Charging Pile*1
Robot Color Optional	White

Package Content

Silicone Pad*4

Battery Recharger*1
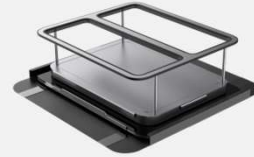*The actual recharger may be different.

Charging Pile*1

Product Manual*1

Optional Parts

Floating Tray

Dishpan
*The actual Dishpan may be different.

Main Unit and Dimension

500 mm
1266 mm
- Operation Screen
- Stereo Vision Sensors
- LiDAR
- Emergency Sensing Strip

527 mm
1266 mm
Tray

527 mm
500 mm
- Emergency Stop Button
- Image Module