Flexible and Interactive Delivery Robot

T8 LS

Key Features

- 55cm minimum passage width: make T8 go freely in various limited spaces.
- The device employs a die-cast chassis, offering enhanced strength, durability, and lightness, with a narrowed gap design to deter rodent infiltration.
- Smart charge: autonomous timed and quantitative charging with charging pile.
- Independently developed SLAM(synchronous localization and mapping) to ensure precise positioning and movements.
- Intelligent obstacle avoidance ability provides secure service with multiple sensor.
- Convenient use: ultra wide fetching space with up to 300° access angle to allow easy food placing and taking.
- Multi-Robot collaboration: multiple robots can cooperate smoothly in the same working environment.
- Multiple ways reminder: voice, expressions and tray indicator light to remind the customer to pick up food.
- With the new plate detector, there's no need for any additional confirmation on the touch screen. Simply pick up the meal, and the T8 will seamlessly move on to its next task.

Specifications

Performance

Maximum Coverage Area per Device	200*200㎡
Minimum Passage Width	55cm
Moving Speed	0.1~0.8m/s adjustable
Braking Distance	0.6m(Max. Moving speed & Full load)
Slope Angle	≤ 5°
Battery Life	Up to 14h
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	35W

Environment

Operating Temperature and Humidity	0 - 40℃, RH: 20% ~ 80%
Operating Environment	Indoor environment, flat ground, no dust
Storage Temperature and Humidity	-15℃ - 45℃, RH: 20% ~ 80%

Battery and Charging

Battery Type	Ternary lithium battery
Battery Capacity	DC25.9V, 20.8Ah
Battery Dismountable	No
Charging Mode	Automatic charging with charging pile and manual charging by recharger
Charging Input	100-240V~,50/60Hz
Charging Time	About 5h(With recharger or charging pile, and robot powered on, from 15% to 100%)
Charging Pile Dimension	305*220*146mm
Charging Pile Weight	2.2kg

Hardware

Machine Material	ABS & aluminum alloy
Positioning Method	Laser Positioning/Label Positioning(for the start point if charging pile is not used)
Positioning Accuracy	Centimeter Level
Sensing Techniques	LiDAR, Stereo Vision Sensor, Image Module, Collision sensor, IMU
Sensor Coverage	LiDAR detection range: 204°, ≤20m, Stereo Vision range: 120°, 0.1-1.5m
Image Module	120°, celling height required 2-8m
Network	Wi-Fi: 2412-2472MHz, max 17.73dBm; ESP01: 2412-2472MHz, max 17.65dBm
Memory and Internal Storage	2GB RAM + 16GB ROM
Touch Screen	10.1inch(1280*800)
Interactive Ability	Light/Touch/Voice Prompt

Measurements

Robot Dimension(WxDxH)	384 x 468 x 1111mm
Robot Weight	38kg
Tray Amount	3(fixed)
Tray Dismountable	no
Space of Each Layer	383*342*220mm(The upper two), 383*342*285mm(The bottom layer)
Tray Access	300° easy access
Load Capacity	20kg (5Kg per layer for the upper two layers, with 10Kg for bottom layer)

System and Function

System	Linux(Control) & Android(Interaction)
App Language	Chinese, English, Japanese, Korean, Germany, French, Italian, Spanish
App Functions	Food Delivery, Multiple Delivery, Dish Return, Greeting and Escort, Celebration
Expression	9 different scenarios
Voice Reminder	Different voice prompt in different working mode and general operation.

Official Standard and Optional Parts

Package Main Contents	Robot*1, Silicone Pad*2 , Battery Recharger*1, Charging Pile*1, Product Manual*1
Robot Color Optional	White

Package Content

Silicone Pad*2

Battery Recharger*1

*The actual recharger may be different.

Product Manual*1

Charging Pile*1

Main Unit and Dimension