Flexible and Interactive Delivery Robot

T8 LS

Key Features

- Minimum passage width of 55 cm allows the robot to move freely in tight spaces.
- Die-cast chassis ensures strength, durability, and a lightweight design, with narrow gaps to help prevent rodent entry.
- Smart charging: autonomous, scheduled, and quantity-based via charging dock.
- Equipped with independently developed SLAM (Simultaneous Localization and Mapping) for precise positioning and navigation.
- Intelligent obstacle avoidance with multiple sensors ensures safe operation.
- User-friendly design: ultra-wide access (up to 300°) for easy serving and interaction.
- Multi-robot support: multiple units work smoothly in the same space.
- Multiple alerts: voice, expressions, and tray lights notify customers.
- Plate detection: no screen confirmation needed, pick up and the T8 continues.

Specifications

Performance

Maximum Coverage Area per Device	200 × 200 m²
Minimum Passage Width	55 cm
Moving Speed	0.1~0.8 m/s (adjustable)
Braking Distance	0.6 m (max. moving speed & full load)
Slope Angle	≤ 5°
Battery Life	11–14 h
Service Life Circle	20000 h
Multi-robot Collaboration	Maximum 20 robots
Multi-point Delivery	Up to 20 points (single delivery)
Intelligent Obstacle Avoidance Maximum Detect Range	≤1.5 M
Rated Power	35 W

Environment

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

Battery and Charging

Battery Type	Ternary lithium battery
Battery Capacity	DC 25.9 V, 20.8 Ah
Battery Dismountable	No
Charging Mode	Automatic charging with charging pile and manual charging by recharger
Charging Input	100-240 V~, 50/60 Hz
Charing Time	5 h (with recharger or charging pile, and robot powered on)
Charging Pile Dimension	305 × 220 × 146mm
Charging Pile Weight	2.2 kg

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, Image Module, Collision Sensor, IMU
Sensor Coverage	Lidar detection range: 204 °, ≤ 20 m; 3D; Stereo vision range: 120°, 0.1–1.5 m
Image Module	120°, celling height required: 2–8m
Network	Wi-Fi (2412–2472 MHz)
Memory and Internal Storage	2 GB RAM + 16 GB ROM
Touch Screen	10.1 inch (1280 × 800)
Interactive Ability	Light/Touch/Voice Prompt

Measurements

Robot Dimensions (W × D × H)	384 × 468 × 1111 mm
Box Dimensions (W × D × H)	480 × 590 × 1166 mm
Robot Weight	34 kg
Tray Amount	3 (fixed)
Tray Dismountable	No
Space of Each Layer	383 × 342 × 220 mm (upper two layers), 383 × 342 × 285 mm (the bottom layer)
Tray Access	300° easy access
Load Capacity	20 kg (5 kg per layer for the upper two layers, with 10 kg for bottom layer)

System and Function

System	Linux (Control) & Android (Interaction)
App Language	Chinese, English, Japanese, Korean, Thai language, Cantonese, Germany, French, Italian, Arabic, Vietnamese, Russian, Spanish, Portuguese, and other language customizable
App Functions	Food delivery, Snack, Direct delivery, Multi-point delivery, Blessing Mode, Welcome Mode
Expression	10 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 ×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