Flexible and Interactive Delivery Robot

T11

Key Features

- **Extraordinary Moving Ability**: With a minimum path width requirement of just only 49cm, T11 navigates narrow spaces, making it versatile for various environments .
- **Optional Headwear**: Optional cat ear and rabbit ear makes T11 more adorable .
- **Intelligent Self-Pickup Experience**: T11's plate detection sensors, tray indicators, new tray indication spotlight, voice prompts, and visual guidance streamline self-pickup while offering interactive feedback for a seamless customer experience .
- **Advertising Capabilities**: Equipped with a 18.5-inch 1080P advertising screen and two advertising modes, T11 transforms into a powerful marketing tool to engage customers .
- **New Guidance Mode**: T11 guides customers to their destinations and returns to the start point autonomously, making it ideal for restaurants, hotels, airports, and more .
- **Enhanced Safety**: T11 incorporates FIVE stereo vision sensors for enhanced safety and obstacle avoidance, setting new standards for food delivery robots .
- **Intuitive Operation Screen**: Featuring a 10.1-inch 1080P operation screen, T11 provides a user-friendly interface for easy interactions .
- **Sensor Fusion**: T11 features an advanced VSLAM sensor for precise navigation through sensor fusion with LiDAR, expanding its versatility .
- **Smooth Delivery**: Ensured by a shock-absorbing chassis

Specifications

Performance

Maximum Coverage Area per Device	200*200m²
Minimum Passage Width	49cm
Moving Speed	0.1~1.0 m/s adjustable
Braking Distance	70 cm(Moving Speed 1.0 m/s and Full Load on dry road)
Slope Angle	≤ 5°
Battery Life	Up to 9h(Battery from 100% to 5%, brightness of the advertising screen is set to 100%, actual performance may vary)
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	55W

Environment

Operating Temperature and Humidity	0 - 40°C, RH:5%~85%
Operating Environment	Indoor environment, flat ground, no dust
Storage Temperature and Humidity	Temperature: -15°C-45°C; Humidity: 20%-80%RH

Battery and Charging

Battery Type	Ternary lithium battery
Battery Capacity	DC25.9V, 20.8Ah
Charging Mode	Automatic charging with charging pile and manual charging by recharger
Charging Input	100-240V~,50/60Hz
Charging Time	5.5h(With recharger or charging pile, and robot powered on)
Charging Pile Dimension	305*220*146mm
Charging Pile Weight	2.2kg

Hardware

Machine Material	ABS & aluminum alloy
Positioning Method	Sensor Fusion(LiDAR and VSLAM Sensor)
Positioning Accuracy	Centimeter Level
Sensing Techniques	Lidar, Stereo vision, Image module, Collision sensor, IMU
Sensor Coverage	Lidar detection range: 210°, <=25 m; Stereo Vision range: 260°, <=1.5 m; VSLAM Sensor, celling height required 2-6 m
Network	Wi-Fi: 2.400-2.4835GHz, max 13.90dBm; ESP01: 2.400-2.4835GHz, max 13.90dBm
Memory and Internal Storage	2GB RAM + 16GB ROM
Touch Screen	10.1inch(1280*800)
Advertisement Screen	18.5 inch(1080*1920)
Interactive Ability	Light/Touch/Voice Prompt

Measurements

Robot Dimension(W*D*H)	384*463*1123mm
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	5 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