HOLABOT



HolaBot - der effiziente Sammelroboter

Maße der Maschine	541×531×1226 (mm)
Gewicht der Maschine	60 kg
Werkstoffe der Maschine	ABS technischer Kunststoff/Aluminiumlegierung in Luftfahrtqualität
Aufladezeit	4,5 h
Akkulaufzeit	12-24 h (Austauschbarer Akku)
Akkukapazität	25,6 Ah (körpersichere Stromstärke)
Rundfahrtge- schwindigkeit	0,5-1,2 m/s, einstellbar
Stauraum pro Ablage	15 kg/Ablage (4 Ablagen)





Contents

- Product Overview
- Product introduction
- b. Selling point refinement
- c. Product Scenario
- d. Business process presentation

- Product Configuration
- Exterior structure
- b. Performance parameters
- c. Product accessories

- System Features
- a. Positioning method
- b. Operation scheduling
- c. Security design
- d. Ultra-large capacity
- e. Waterproof inner cabin
- f. Quick release battery
- g. Voice control
- h. Gesture control

- Product Function
- a. Business mode
- b. Multi-tray customization
- c. Remote call
- d. Pudu microservice
- e. Automatic door sdaptation
- f. Customized features



Product Overview

Pager and Notifications Delivery Robot

HolaBot is a delivery robot that features calling and notifications tailored to a variety of delivery scenarios.

- Best performance: HolaBot has a carrying capacity as large as 60kg.
 With 4 trays and the IPX5 waterproof cabin. Great business capabilities give HolaBot unprecedented delivery efficiency
- Most intelligent: HolaBot supports pager function. With the modular base and the full-range depth sensor, HolaBot redefines the delivery robot





Selling points refinement

- Core functions: providing remote call notification and multi-point recovery function;
- High carrying capacity: the whole machine has a load capacity of 60kg (132.28 pounds), a large 120L cabin with four adjustable trays;
- Flexible and efficient: 70cm (27.56 inches) extreme passability, vehicle-grade suspension, smooth and flexible operation, small scenes with ease;
- Contact-free control: omnidirectional six-mac array, 360° sound source positioning, robot sound tracking, intelligent turning to achieve contact-free control; equipped with infrared gesture sensing to achieve spaced operation;
- Stable and durable: IPX5 inner cabin waterproof, no fear of dirt; aviation aluminum alloy and engineering plastic body, durable;
- Watch call: equipped with 4G watch call, real-time summoning robot and give task instructions to receive the arrival notice, to do on-call



Exterior structure

3D Obstacle Avoidance Sensor

The RGBD camera at the neck part makes 3D obstacle avoidance acute

All-aluminum Body

Aviation-grade aluminum alloy that is structurally stable, antioxidant and corrosion resistant

Brand New Laser Radar

Customized laser radar with better detection accuracy



Top infrared camera for real-time positioning, set up the complete visual positioning solution

120L Inner Cabin

120 small plates, 39 big plates and 33 bowls at the same time

Auto-level independent linkage suspension

Auto-level independent linkage suspension easily dealing with various of dump on the road



Product accessories | 4G Watch

Remote call · arrival notification · NFC support

Pudu 4G watch is a call notification watch that supports 4G network and Wi-Fi, which needs to be used together with Purdue Technology robot, and its call communication business system is based on the cloud central control dispatching platform. After the robot binds the 4G watch information, the robot synchronizes the information to the cloud central control and scheduling platform. When the 4G watch initiates a task request, the request will be sent to the cloud central control and scheduling platform, which allocates tasks and schedules the robot. After the robot receives the task, the execution result is returned to the 4G watch through the cloud central control scheduling platform.





Operational scheduling

BellaBot relies on the core technology of "Multi-machine Distributed Dispatching System for Highly Dynamic Environment" developed by Pudu, which forms a self-organizing network based on machine ESP modules and can realize multiple machines running efficiently in the same environment. The system supports up to 20 robots and provides traffic rules to handle various restaurant road conditions, reducing aisle blockage and congestion.



- Optimal path selection
- Autonomous robot avoidance
- Settable robot operating area



Security design

Battery fire protection design



Mainboard power protection



Double overvoltage and overcurrent protection for battery and charger



Battery BMS power protection

Quadruple power protection to ensure the safety of electricity

- 1. BMS power protection can avoid battery over-discharge, over-charge and other problems to extend the service life of the battery;
- 2. Battery/charger dual overvoltage and overcurrent protection can avoid battery damage caused by overcharging or over discharging;
- 3. The motherboard power protection can avoid short circuit, overload and other problems of the motherboard circuit to protect the normal work of the equipment;
- 4. Battery fire protection design can avoid battery overheating caused by fire and other safety issues.

Four power protection can ensure that the battery will not be used in the process of power problems and accidents, so as to protect the safety of users



Ultra-large Capacity

Load 60KG

The pallet height in loading area can be adjusted, and the load of the whole machine can reach 60KG

Pallet size: 390 mm x 360 mm(15.35*14.17 inches), 120 L super large cabin

Number of pallets: 4 layers (adjustable)

Height between trays(top to bottom):

216 mm/184 mm/184 mm (8.5 inches/7.24 inches/7.24 inches/7.24 inches)

Pallet load: flat road 15 kg(33.07 pounds) / layer; 5mm obstacle height 10 kg(22.05 pounds) / layer





Waterproof Inner Cabin

IPX5 waterproof inner cabin

It can effectively resist all kinds of liquid splashing in the working environment, without fear of oil, and keep the body clean

In delivery scenarios such as catering and medical care, where a large number of greasy dishes and medical items need to be faced, the inner cabin of the HolaBot is the first to support IPX5 waterproof, removable and washable, convenient for waiters to load on demand, and clean the robot.





Quick Release Battery

Quick Release Battery

Supports quick battery replacement

The whole charger can also charge the battery directly

BellaBot can work continuously for 7×24h





Voice control

Sound tracking: Auto and intelligent

Front-end noise reduction technology and full-range sound source positioning.

HolaBot is able to identify the location of the staff following the sound "Hola, Hola" and turn the tank around towards the table, thus facilitating dish collection and table cleaning.





Gesture control

Air Motion

Infrared gesture sensing, no need to touch the button in space operation

Wave and take it all away

High efficiency contactless





Collection mode

In collection mode, the robot can reach multiple tables for recycling in a single mission. Upon arrival at the destination, the customer will be reminded to put the unwanted items into the empty tray. After completing all tasks, the robot will automatically return to the recycling point, remind the staff to unload the recovered items, and perform the return task to the docking point after completion.

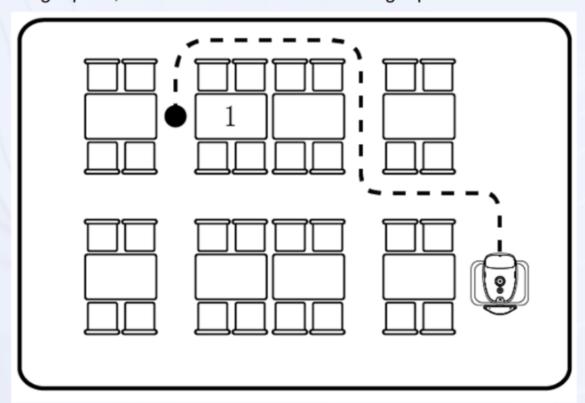






Direct mode

In the direct mode, the robot can perform a single transport operation, you can set the table number, dishwashing room and other places as the target, automatically exit the task after delivery, will not automatically return, at this time can enter a new target point, so that the robot to the next target point.







Multi-tray customization display





7 layer tray + tray rear extension 70mm Machine example



Value-Added Services | Body sticker customization

Pudu provides robot skin templates for users to design, and after printing, they can be pasted on the robot body to play the role of

decoration to attract customers or brand promotion.



- -HolaBot has definite skin templates for customers to design their own
- -Designed skin stickers can be printed and directly pasted on the robot





Thanks!

business@pudutech.com www.pudurobotics.com