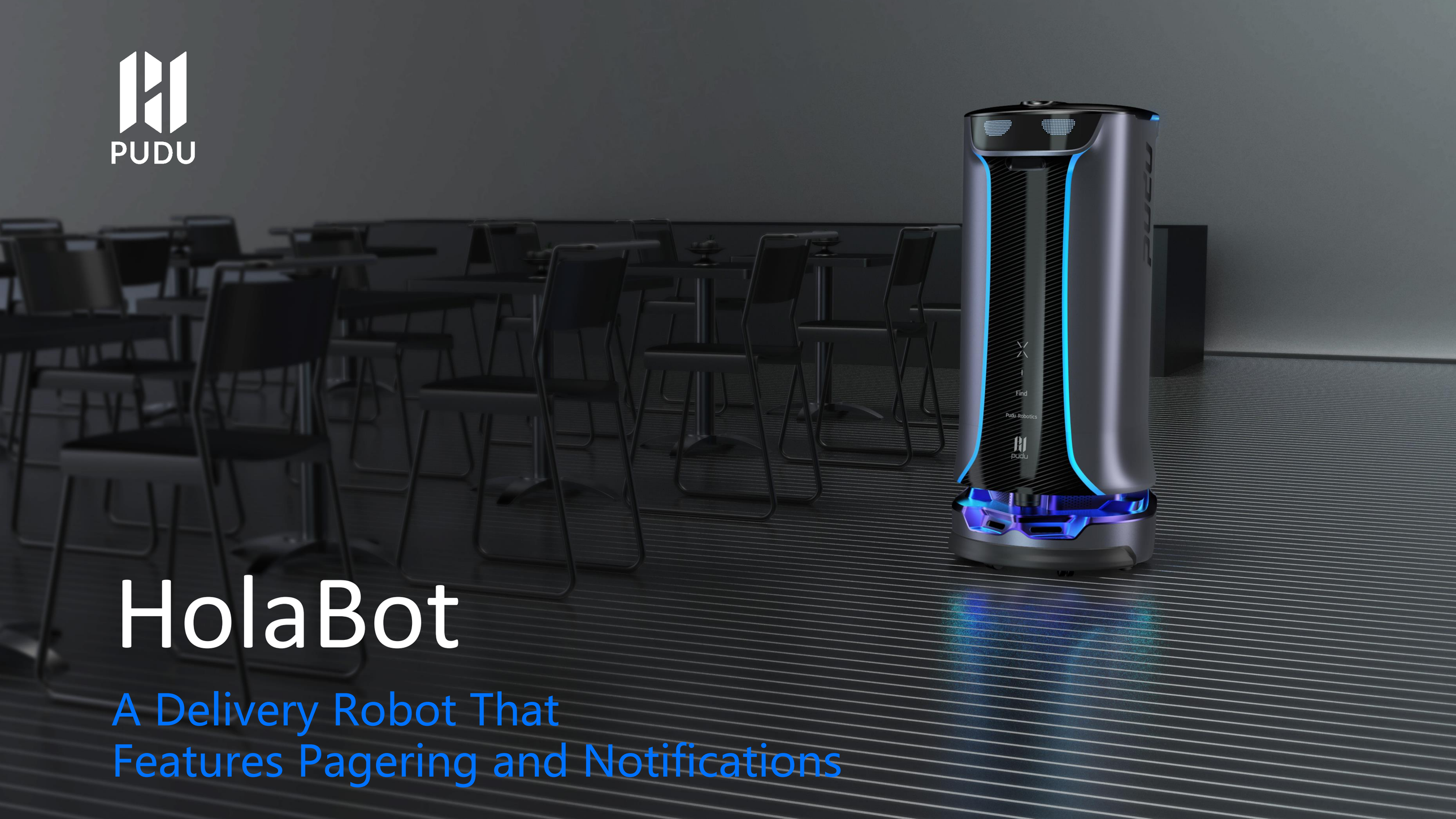
PUDU



HolaBot

A Delivery Robot That Features Pagering and Notifications

About HolaBot

CONTENT

Pudu Robotics
Company Overview

Shenzhen Pudu Technology Co.,Ltd.

Founded in 2016 and headquartered in Shenzhen, Pudu Robotics is a national high-tech enterprise dedicated to the design, R&D, production and sales of commercial service robots. The company has set up R&D centers in Shenzhen and Chengdu, and hundreds of after-sales service centers across the globe.

Powered by the core technologies of positioning and navigation, motion control, multiple-robot dispatching, obstacle detection and avoidance, NVH, intelligent interaction and automated simulation testing, Pudu Robotics has developed more than 600 patents and top-notch delivery robots, disinfection robots as well as delivery & reception robot with an Ad display. As a world-leading provider of commercial service robots, Pudu Robotics has sold tens of thousands of robots to more than 60 countries and regions around the world. The robots are widely used in restaurants, hospitals, schools, office buildings, government halls, subway stations, waiting rooms, etc.

Say Goodbye to Dirty and Repetition Work

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 pagering function. With the modular base and the full-range depth sensor, HolaBot redefines the delivery robot

Design for Delivery

Efficient: 60kg large capacity, fast movement, twice as efficient as the staff

Secure: Avoiding obstacles instantly for smooth movement, water-proof and spill-resistant

Affordable: Only $5 cost per day

Easy: Require no extra maintenance except charging

Durable: 73,000km durability test （The data is based on certain environment test）

Just the right choice of different indoor scenarios

Pudu Robotics has independently researched and developed. Its own robot positioning and navigating technologies based on multi-sensor solution, HolaBot could be widely used in commercial scenarios like restaurants, hospitals, hotels, office buildings, etc

Restaurant

Hospital

Hotel

Office

Government

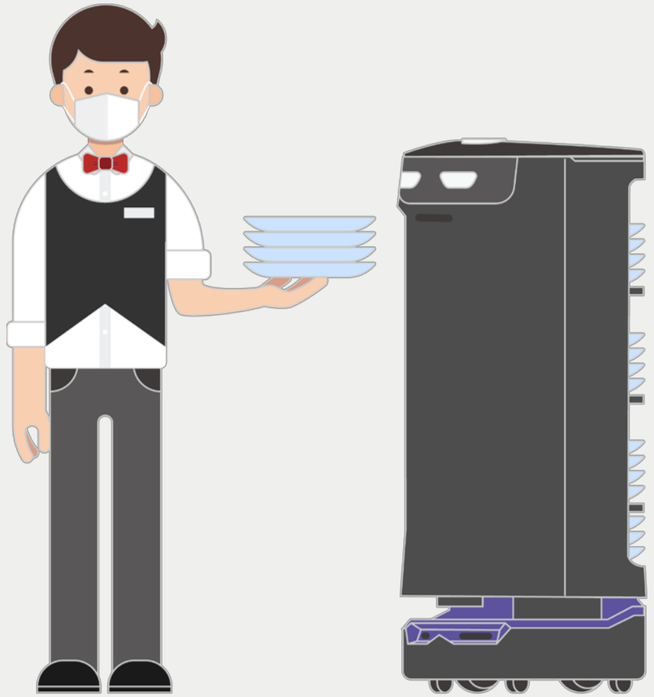
Karaoke

Internet Cafe

Shopping mall

Contactless delivery, safety means everything

The COVID-19 Pandemic profoundly changes our way of life and production. HolaBot supports pagering function, traces the target following the voice directions, and receives remote operation commands. It is a critical solution to the post-pandemic era. In the restaurants, HolaBot receives demands from the pagers and collects the dishes automatically, requiring no manual operation, reducing people-to-people contact and boosting efficiency



Product Feature

HolaBot Features

- 60kg carrying capacity
- Pageing function, giving orders in flexible position
- Voice recognition for a hands-free experience, and Omnidirectional six-mic array for the robot to locate sound source in real time
- IPX5 waterproof inner cabin

Product Feature

Pro Performance, Power to Delivery

High Carrying Capacity

Build-in a 120L ultra-large cabin, HolaBot includes 4 Tier loading zone with adjustable trays level. The carrying capacity is 60KG. HolaBot is famous for its large volume and high carrying capacity.

120L = 120 small dishes
39 large dishes
33 Bowls

60KG/
Collection

Most Adaptive

In the catering bussing scenario, the staff have to deal with a lot of greasy dishes and leftovers. Hola’s inner cabin is the first in the catering industry to reach IPX5 waterproof, detachable and washable, convenient for staff to load and clean.

Intelligent Delivery Robot
Pagering Function

In order to respond quickly to tasks, waiters can call HolaBot through pagers. Tasks can be issued to the robot from the following device, ensuring the robot to be "on call" all the time.

Intelligent Delivery Robot

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.

Safe, to be safer

3D obstacle avoidance technology, is the safety performance guarantee

3*RGBD camera

- 3*REALSENSE™ RGBD camera
  Endows HolaBot with the best 3D perception ability
- Accurately detect obstacles and stop within 0.5 seconds in case of any obstacle
- Extra-wide front detection scope, the maximum is 192.64°
- Over 10 meters of front detection distance
- Able to detect the objects with a height as small as 2cm
- 5400 times of obstacle detection per minute at most

Safe, to be safer

The independent suspension system, ensures steady delivery

- Holabot’s self-adaptive and adjustable suspension system, which meets vehicle standards, adjust to the best condition by changing damping and resonance frequency based on the road and moving conditions

- Be capable of crossing 5mm obstacles
- Deliver dishes with no-spill out

A Comprehensive Collection of Certification

HolaBot can meet the requirement of certification such as EU CE certification, US FCC certification, Australian RCM certification, Canada IC certification, Singapore IMDA certification, Japan MIC certification and China CR certification, ensuring that the robot is safe and compliant

Product Feature

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

Visual Camera Positioning

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

HolaBot Specification

Machine dimension	541×531×1226 (mm)
Machine weight	60KG
Machine materials	ABS engineering plastics/Aviation grade aluminium alloy
Charging time	4.5H
Battery life	10-24H (replaceable battery)
Battery capacity	25.6Ah (safe levels of current in the human body)
Cruising speed	0.5-1.2m/s Adjustable
Capacity of single shelf	15KG
Carrying capacity	60KG

Friendly, Convenient and Professional

Thoughtful After Sales Service

1 year free warranty | Free Training | 7x12 Hours Service

IoT services: Solve over 90% technical issues online

Contact Us:

Email: global_sales@pudutech.com

Connect with Us:

Pudu Robotics

Pudu Robotics provides diverse training methods and tutorials

With a strong after-sales technical team, Pudu Robotics not only supports online installation training worldwide, but also provides diverse training materials

NO.2 sale: Robot installation and commissioning

2. Create Map

2.3 Draw a topological map

Check whether the location map path is consistent with the path that the actual robot needs to walk (the road accessible by the restaurant); Avoid missing certain roads; Draw a topological path along the location map path after confirming that the path is correct. Principle of drawing a topological path:

- Try best to along the static map path.
- Pay attention to the connection of the cross paths when drawing. A red circle will automatically appear when the mouse is placed on the path.
- Draw with multiple paths when there is a curved path.
- The length of a single path (between two nodes) needs to be ≥1.2m, and the distance between two adjacent paths is greater than 1.2m.
- The angle between the paths is >45°;
- The distance between the arrival point and path is <0.5m; The distance between the arrival point and node is greater than 0.2m.
- Pay attention to observe whether the robot's positioning has changed when push a robot to draw a topological map, and evaluate whether there is a positioning problem with the static map again.

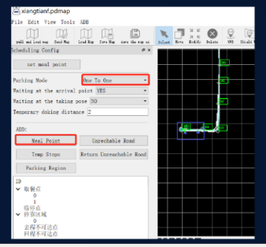
NO.2 sale: Robot installation and commissioning

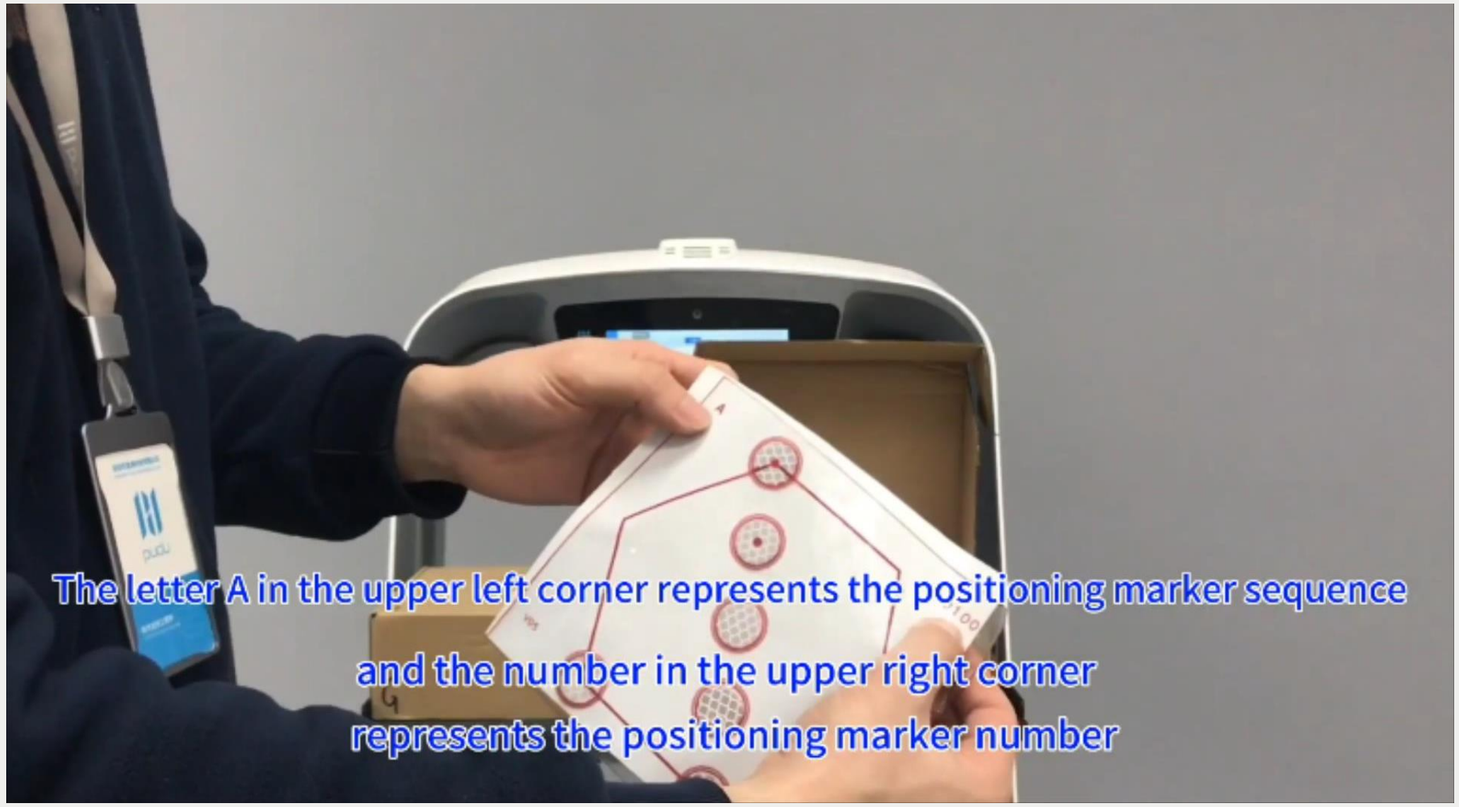
3. Docking point settings

3.1 Single robot fixed docking

When only one robot is deployed in a restaurant; it is only necessary to set a fixed docking point, and it is also necessary to set up a docking area. The specific operations are as follows:

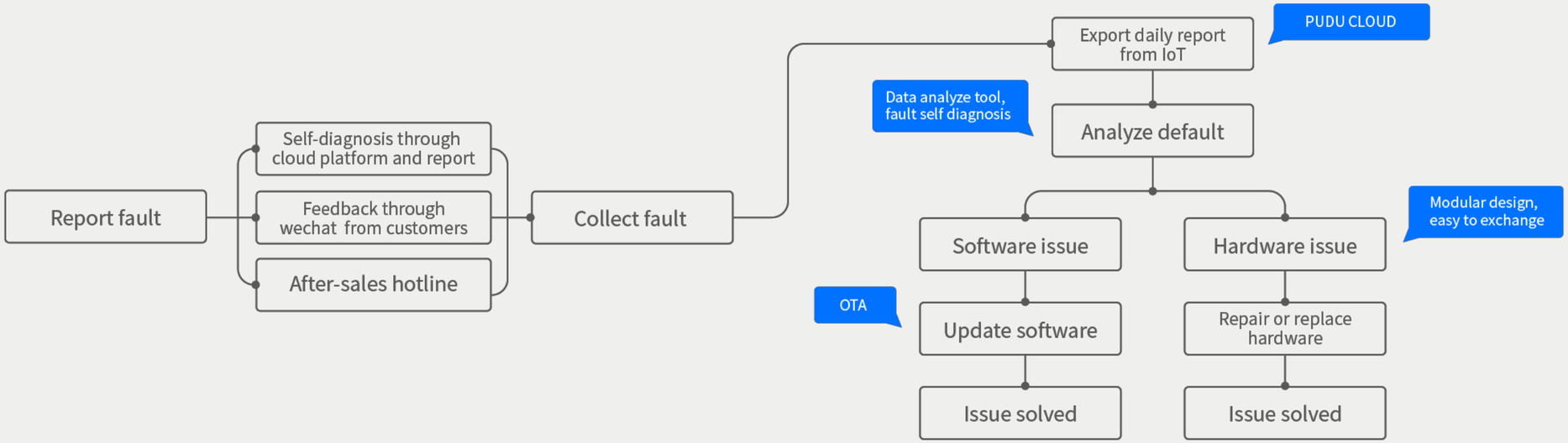
1. Make sure the installation tool is connected to the machine, click "watcher" in the toolbar, and push the robot to the designated stop.
2. Click "Meal point" button on the installation tool, and enter the "meal point" number in the pop-up dialog box (default starts from 0). At this time, The "meal point" will be showed in the right picture.
3. the docking mode select "One to One Mode ".
4. Send map.





PUDU IoT cloud service could solve over 90% of technical faults

- Real-time fault detection and reporting via the cloud platform: Not rely on clients' feedback, timely respond to and handle the faults
- Analyze and handle faults online: Locate the fault module precisely and handle over 90% of the faults online by IoT
- Automatic fault diagnostic tools: Improve the fault handling efficiency and lower the after-sales cost
- Modular design: Make after-sales service easier and professional by streamlining the maintenance steps



PUDU Open Platform

The platform allows the developers to issue commands via the interfaces, rather than the robots

RESTfullSDK

RESTfullSDK requires the online cloud service from the client, making the communication between PUDU Cloud and the clients' cloud possible via RESTfullSDK, thus calling commands and receiving the status codes of the robots

SDK remote control solution

Remote control the robot
Input the task
Monitor the location and status of the robot
Obtain the task progress of the robot
Other information

AndroidSDK

Pudu provide the end-to-cloud AndroidSDK access solution
AndroidSDK does not rely on the clients' business solutions. The users can develop the minitype applications via AndroidSDK, realizing direct call and control of the robot

Create Your Exclusive HolaBot

Customized Appearance

Enhanced Promotion

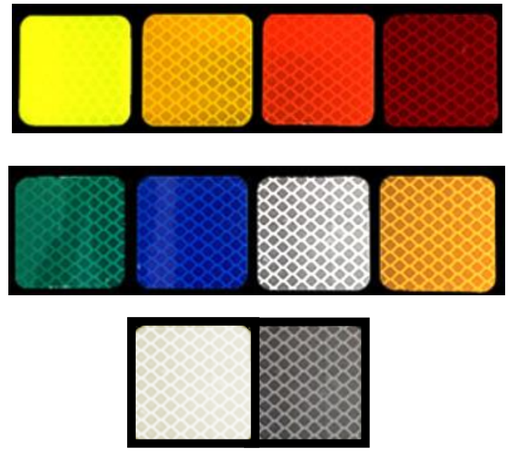
- Go harmony with the vibe of the restaurant
- Greater brand and service exposure

3-day production

- Modular production (needs confirmation-design-launch) takes 3 days at the fastest

Customized Voice Pack

Multicolor Marker



Notes: The colors are subject to the actual marker

Real data, more convincing

A restaurant in Shenzhen:

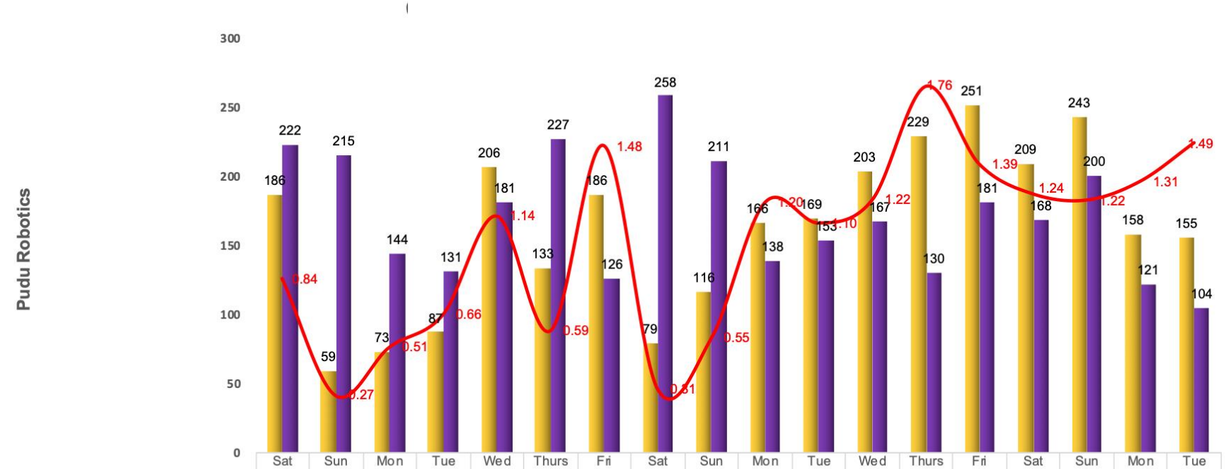
Total area 1600m^2; dinning area: 1000m^2

Tables: 80 tables

Installed in 1 day (1 person)

Daily plate collection capacity: 210 times

Comparison of daily plate collection quantities



	Sat 11/30	Sun 1/12	Mon 2/12	Tue 12/3	Wed 12/4	Thurs 12/5	Fri 12/6	Sat 12/7	Sun 12/8	Mon 12/9	Tue 12/10	Wed 12/11	Thurs 12/12	Fri 12/13	Sat 12/14	Sun 12/15	Mon 12/16	Tue 12/17
Plate Collection Quantity by HolaBot	186	59	73	87	206	133	186	79	116	166	169	203	229	251	209	243	158	155
Plate Collection Quantity by stuff	222	215	144	131	181	227	126	258	211	138	153	167	130	181	168	200	121	104
N (Efficiency Ratio)	0.84	0.27	0.51	0.66	1.14	0.59	1.48	0.31	0.55	1.20	1.10	1.22	1.76	1.39	1.24	1.22	1.31	1.49