



# ***PuduBot 2***

## **Universal Delivery Robot**

— Relay of classic —



# Content.

## PuduBot 2

01

Product Overview

02

Key Features

03

Product Values

04

About Pudu



# Product Overview

## ***PuduBot***





# Product Overview

## ***PuduBot 2***

PuduBot 2, the newly upgraded delivery robot from Pudu Robotics, inherits excellent features and functions from PuduBot.

PuduBot 2 is committed to realizing intelligent deliveries in all scenarios, promoting the application of service robots and accelerating the overall robot development with higher performance, better functional extendability, environmental adaptability and reliability in use.



# Product Overview

10-inch Interactive Screen •

Aluminum Machine Body •

Adjustable Trays •

Upper Lidar •

Wide FOV RGBD •

Lower Lidar •

Visual Camera •

USB Interface •

Industry-leading  
Chassis System •

20Ah LFP Battery •

Automatic Charging •





# Product Overview

Dimension	580mm*535mm*1290mm
Machine Weight	39kg
Tray Size	500mm*432mm
Single Tray Load	Maximum 13kg
Maximum Loads	40kg
Battery Life	10~24h
Charging Time	3h
Path Clearance	80cm
Cruise Speed	0.5m/s~1.2m/s
Obstacle Negotiation Height	10mm
Climbing Angle	≤5°
Positioning Method	PUDU VSLAM+ & Laser SLAM
Dispatching	Maximum 20
Charging	Wire or Automatic



# Content.

## PuduBot 2

01

Product Overview

02

Key Features

03

Product Values

04

About Pudu



# Key Features

## **PUDU SLAM**

Fusing laser and visual positioning & navigation technology

- Support Laser SLAM, PUDU VSLAM+, or Fusion (Laser & VSLAM+)
- Position and navigate with ease in complex and dynamic environment
- Enhanced positioning, perception and route planning efficiency



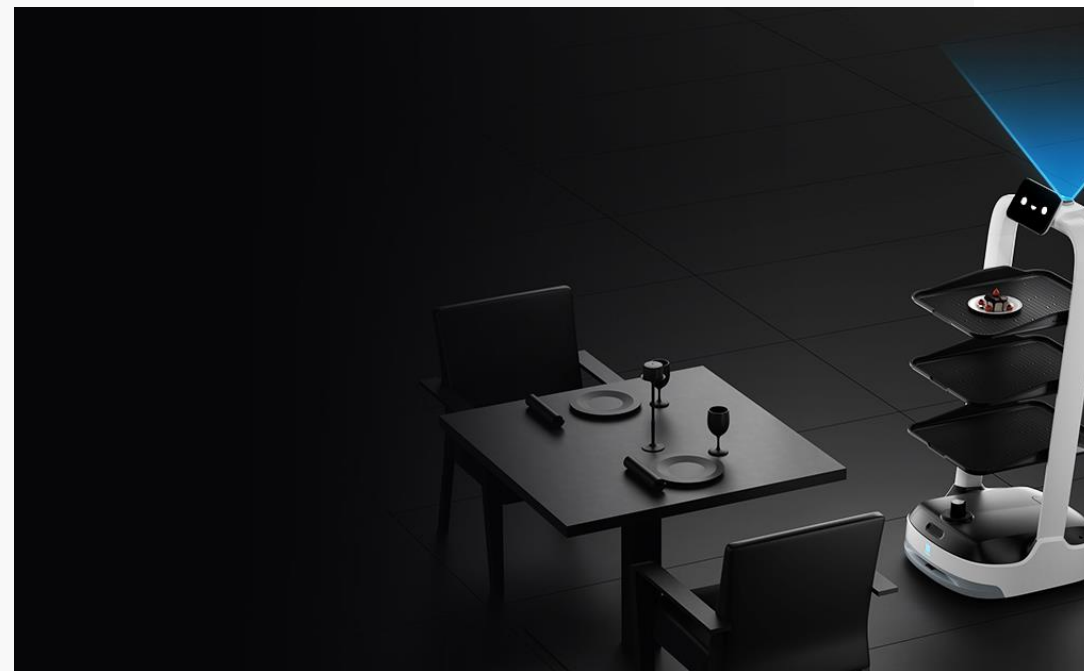


# Key Features

## PUDU VSLAM+

### New generation of PUDU VSLAM technology

- Marker-less deployment, reducing 75% deployment time
- Comfortable operation even in high ceiling environment up to 30 meters
- Extra large scene mapping for up to 40,000m<sup>2</sup>
- Improved stability with fewer changes of the positioning reference
- Greater adaptability of different scenarios under different light conditions

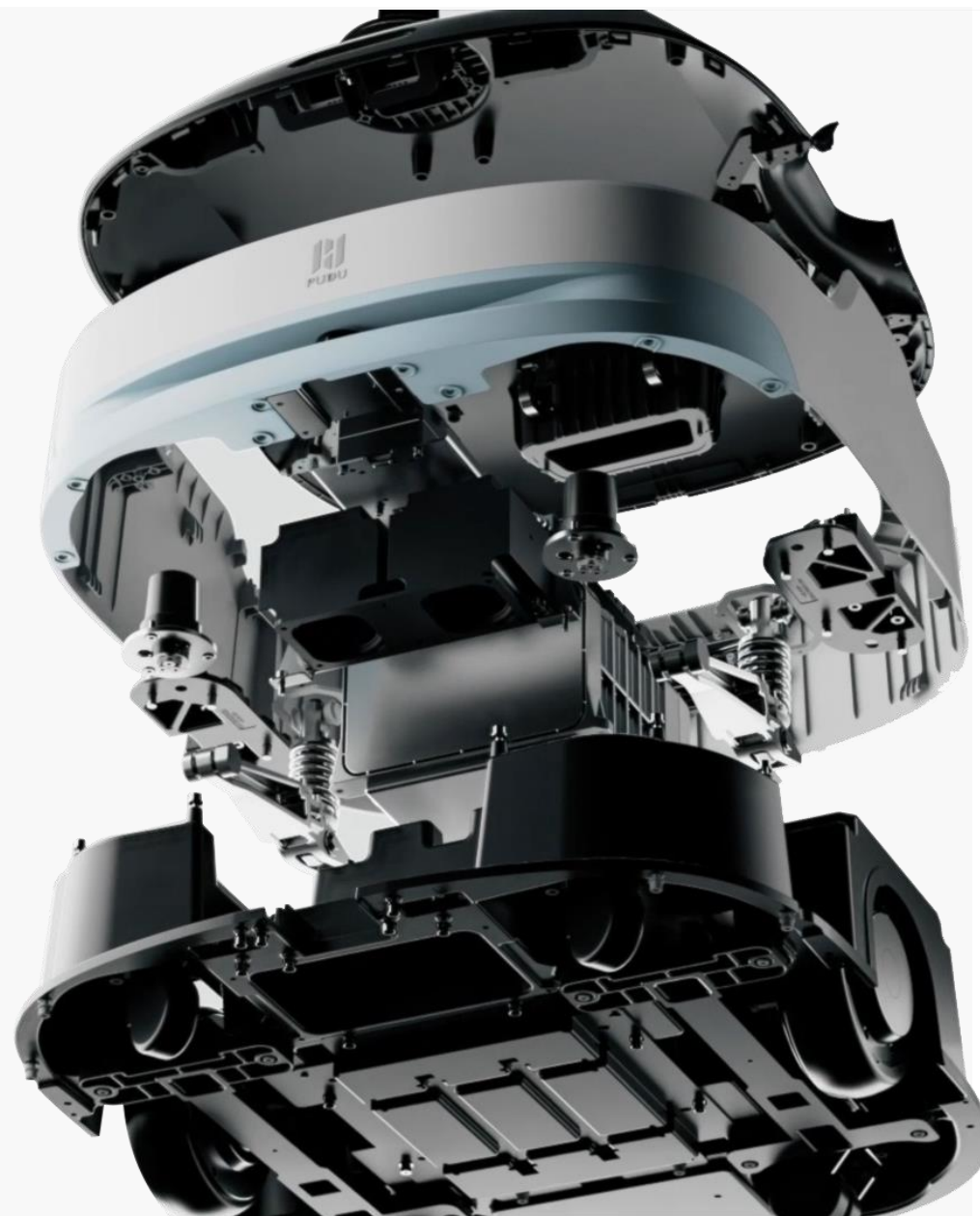


# Key Features

## Industry-leading Chassis System Better Stability, Better Performance

- Highly integrated chassis with newly upgraded vertical linkage suspension system
- Significantly improved obstacle-crossing capability
- Adapt to different road surfaces, 30% improvement in moving stability
- Smooth mobility even with bumpy roads

\*Source: PUDU Lab

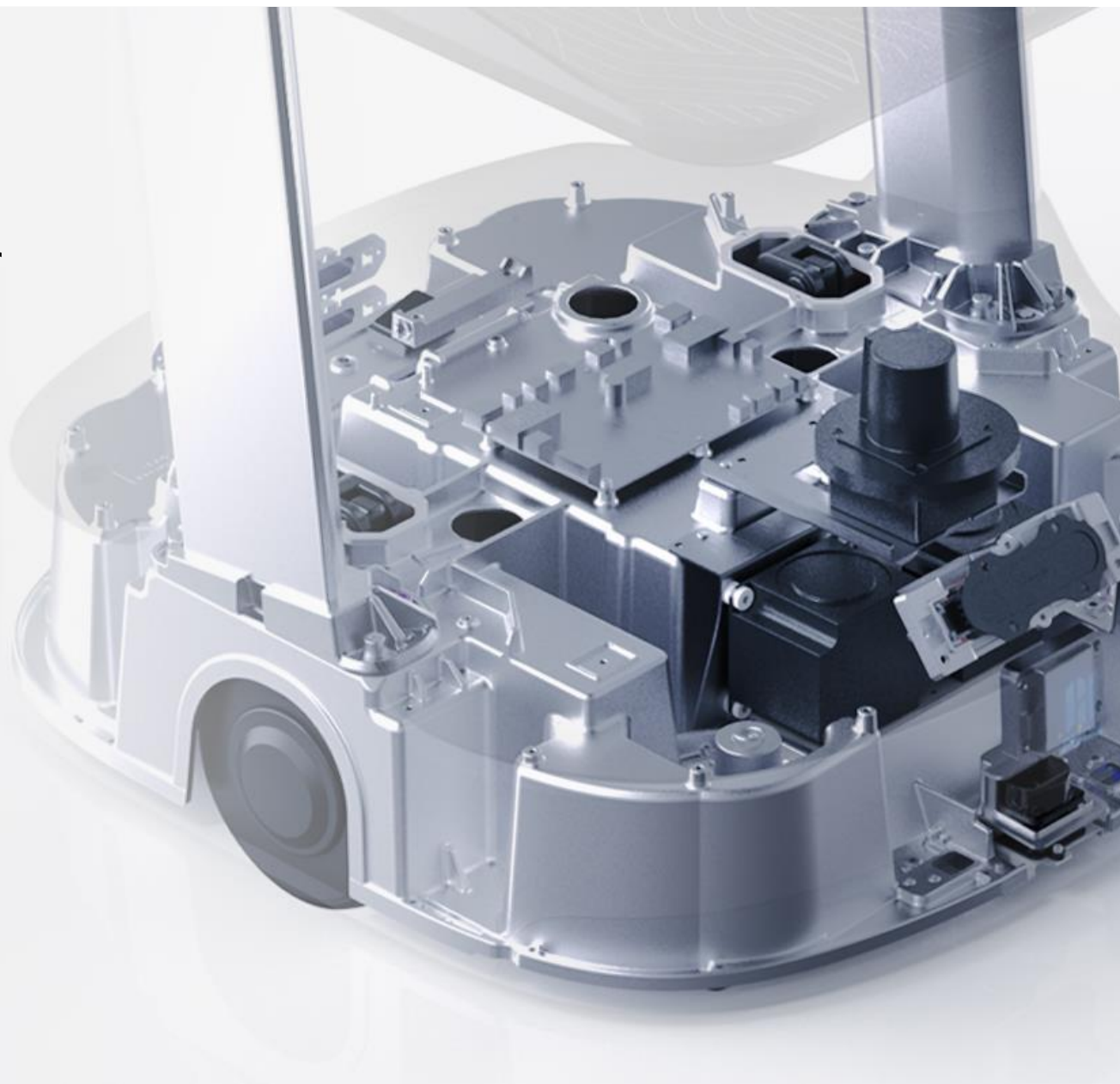


# Key Features

## PUDU-developed Servo In-wheel Motor Cost Reducing, Efficiency Boosting

- 33% increasement in load capacity
- 16% improvement in energy utilization
- Excel in both performance and energy saving

\*Source: PUDU Lab





# Key Features

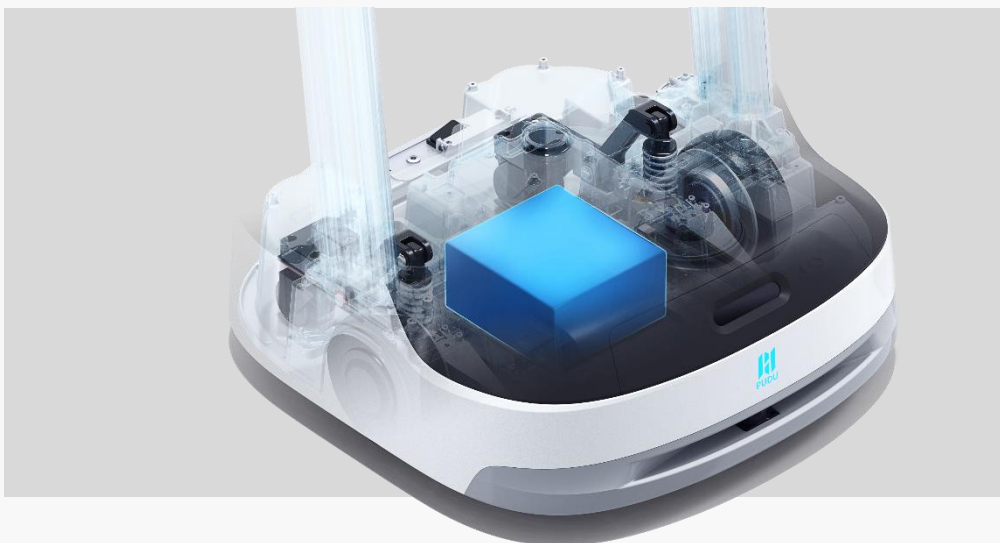
## Dual Lidar, Precise Perception More Reliable, More Secure

- Dual-Lidar system provides PuduBot 2 the ability of 360 degree sensing, with environmental features in full view
- The upper lidar is responsible for distance detection, with an effective obstacle avoidance capability within **0.8m** (at a load of 40kg and 1.2m/s travel speed)
- The lower lidar is responsible for ground detection with the shortest detectable height of **8cm**



# Key Features

## High Performance LFP Battery



- Extended battery duration
- Operates up to 24h on a 3 hour charge
- 6X longer battery lifetime
- Enhanced safety and reliability

## Automatic Charging



- Co-charging pile with other Pudu products
- Automatic recharge at set time or when battery level is lower than set threshold

# Key Features

## Multi-Modal Delivery

- One robot serves for multiple purposes



Food Delivery Mode



Delivery Mode



Cruise Mode



Direct Mode



Dish Return Mode



Birthday Mode

## Multi-Table Delivery

- Serve several tables at one go

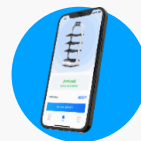
Meet the diversified delivery needs



# Key Features

## Calling and Notification

Autonomous and flexible, anytime and anywhere



### Calling Robot

- Support PUDU Pager, PUDU Watch & PUDU Link
- Assign and manage tasks simply with one click



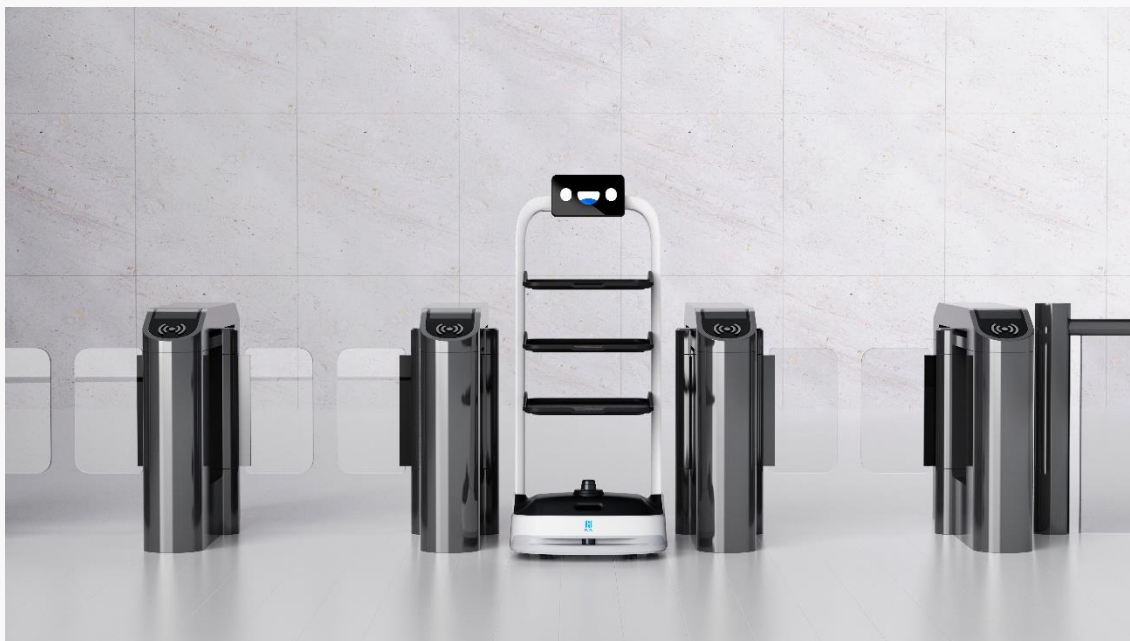
### VIP Room Notification

- Notify the guests on robot arrival
- Enable more efficient delivery service for private rooms

# Key Features

## Automated Pass-through

Safely and automatically pass through E-gates or Electric glass doors







# Key Features

## Fully Enclosed Machine Design



Machine Slit  
 $\leq 1\text{mm}$



Effectively resist  
dust and water



IP42 rated



# Key Features

## Multi-Robot Collaboration

- Powerful self-organized network
- Dispatch up to **20** robots in one environment
- Realtime environmental perception
- Automatically detour for traffic congestion
- Adapt to complex and dynamic scenarios
- Allow painless collaboration among robots





# Key Features

Various Forms, Versatile Accessories





# Key Features

## 24 X 7 Management and Analysis

**PUDU Merchant Management Platform**

HOME

Data Center ^

Data report

My Robots v

Robot Skills v

Store Setting v

Account Mana... v

Data report

yesterdayLast 7 daysLast 30 days2022-04-01 → 2022-07-12All stores

cruise data

Attract customer data

Interactive data

Ad data

Grid data

Running Mileage

10.9

Last Cycle 0

▲ 0%

Runtime

14.31

Last Cycle 0

▲ 0%

Interactive Visits

453

Last Cycle 0

▲ 0%

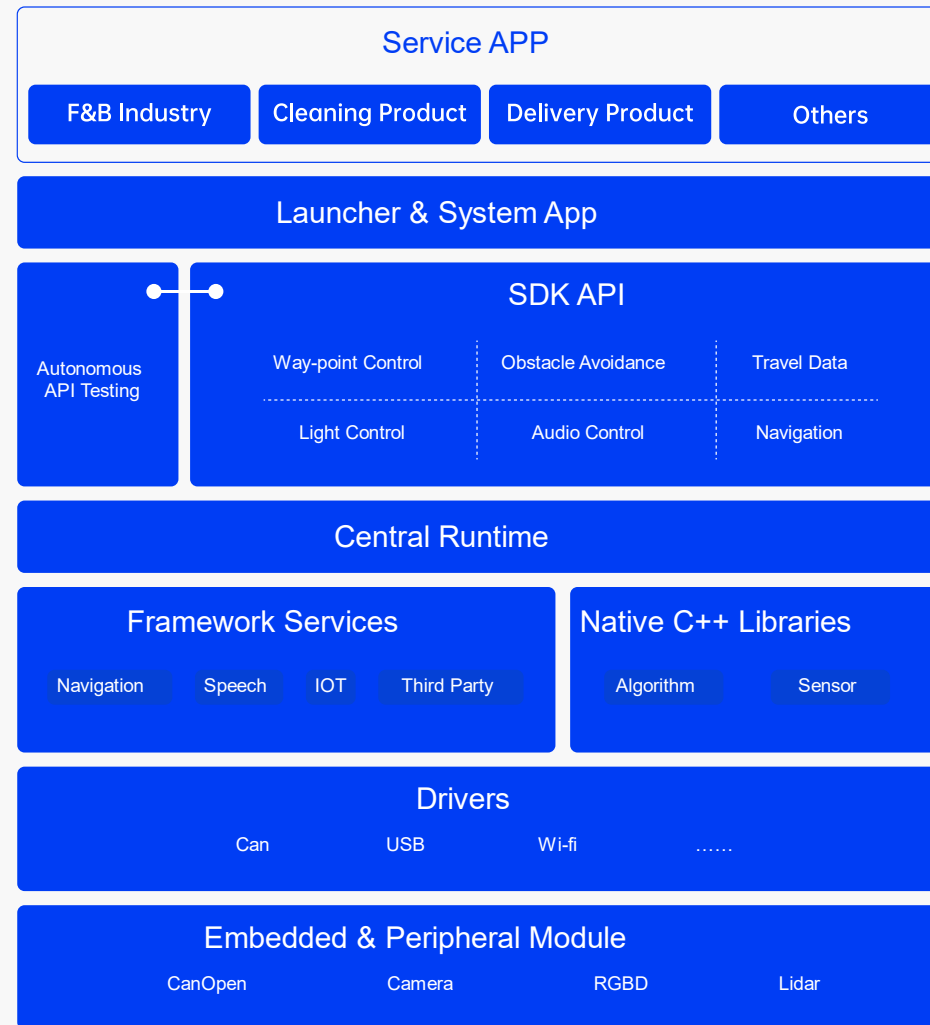
Store Name	Product Name	Machine MAC	Running Mileage
PuduBot 2 Amy	kettybot	08:E9:F6:09:CF:E6	10.9

# Key Features

## PUDU OS

### All-inclusive Platform, Endless Capabilities

- PUDU self-developed integrated robot operating system platform based on various PUDU product with a powerful cloud platform
- PUDU self-developed security system with high credibility
- Open SDK API, support 3<sup>rd</sup> party integration and development



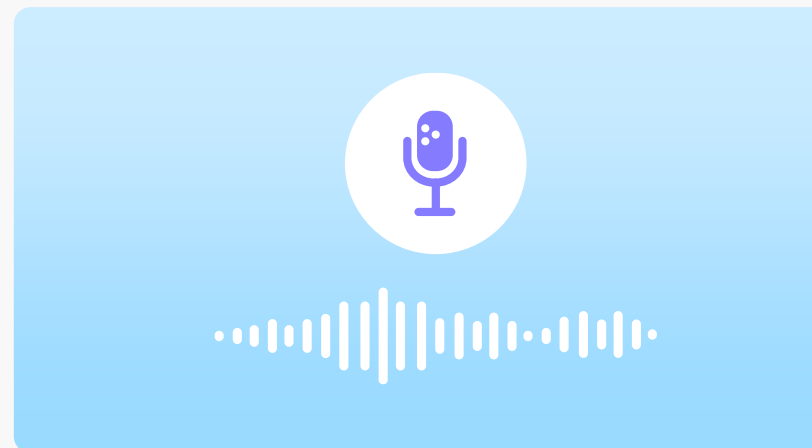
# Key Features

## Customization Services



### Customized Sticker

- Create your exclusive Pudubot 2 for greater brand exposure
- Make your robot unique and eye-catching



### Customized Voice Pack

- Online upgrade and real-time sync.

# Content.

## PuduBot 2

01

Product Overview

02

Key Features

03

Product Values

04

About Pudu

# Product Values

## Multi-Industry, Multi-Scenario Coverage



Restaurant & Café



Hospital & Clinic



Hotel & Resort



Office



Senior Living



Manufacture



Entertainment & Leisure



Retail

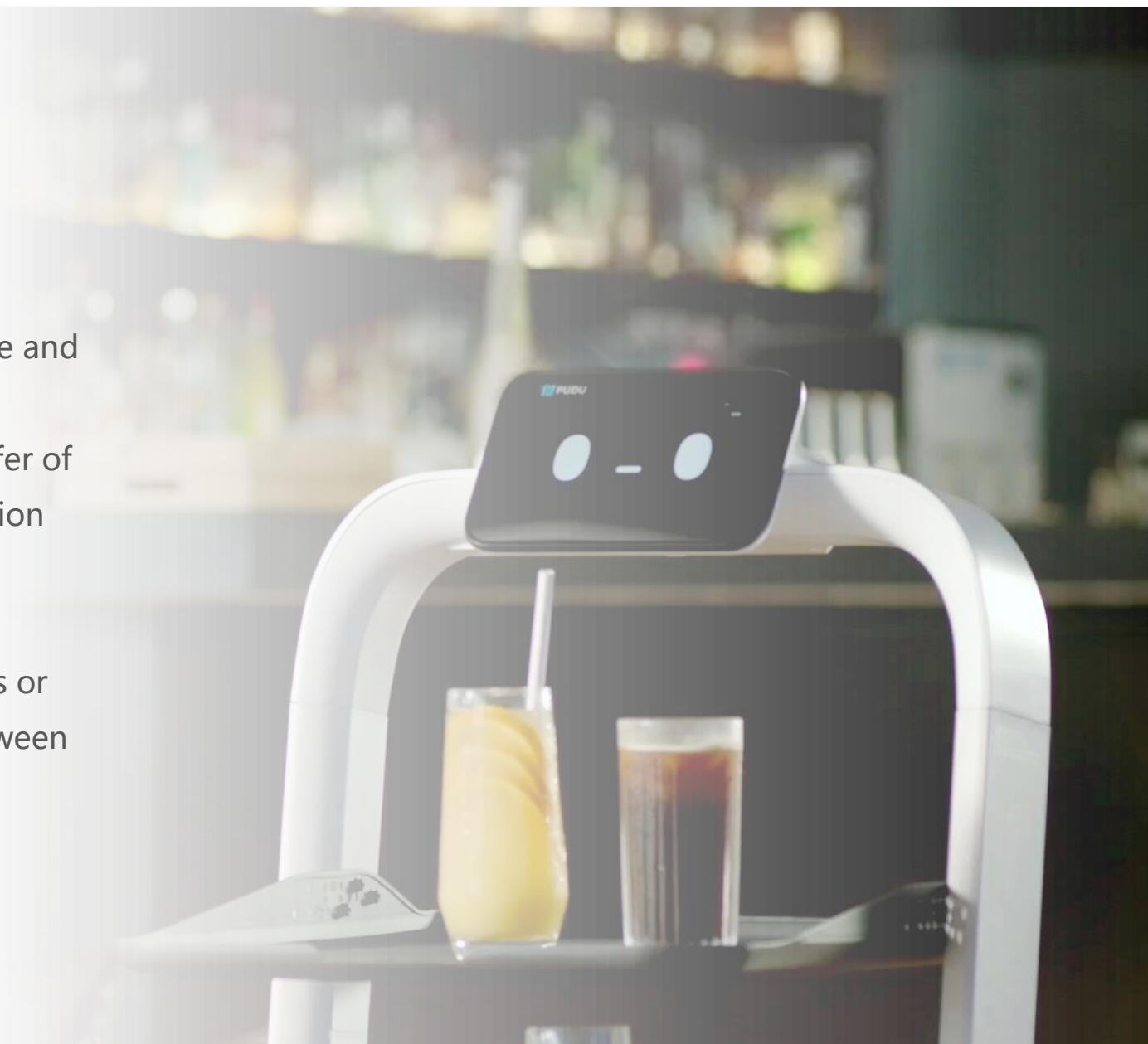




# Product Values

## Contact-free Delivery

The COVID-19 profoundly changes our way of life and production and lots of restaurants have offered contact-free delivery to guarantee the safe transfer of food nowadays. PuduBot 2 supports pager function and receives remote operation commands. In different use scenarios PuduBot 2 can receive demands from the pagers and collects the dishes or items automatically, reducing contagion risk between people while boosting delivery efficiency.

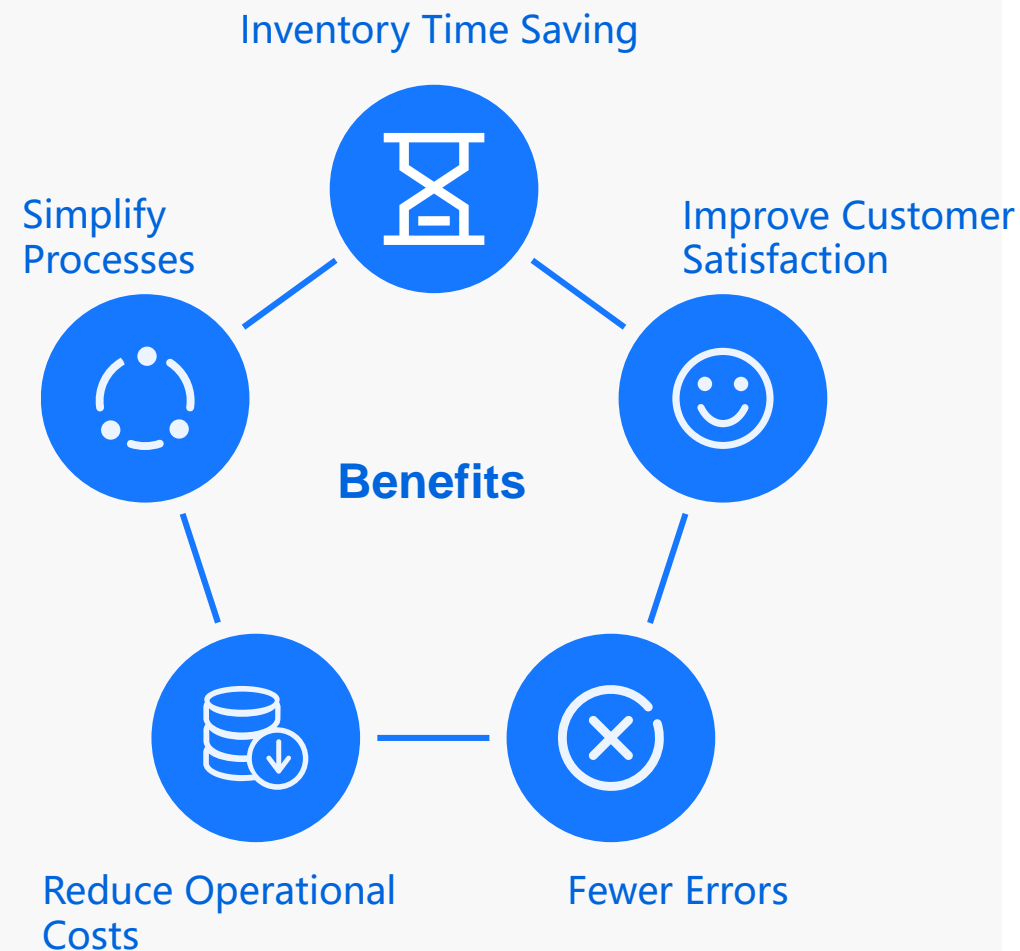


# Product Values

## Keep up with Trend of Restaurant Automation

Restaurant Automation is the use of automated or robotic technology to complete tasks throughout the restaurant and facility in order to simplify ordering, meals preparing, food delivery and bill payment.

Embedded in strong foundations and in-depth understanding of catering industry, PuduBot 2 possesses the significant features to streamline the food delivery services. And the powerful multi-robot dispatch system distinctly cuts down on the human labor required to stay up and table running.



# Product Values

## Mitigate Labor Shortage

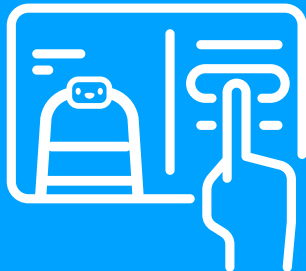
The pandemic has been hugely devastating to the labor market and fundamentally altered the industries and locations where would-be employees want to work. Employers are struggling in looking for and retaining qualified staffs.

Deploying robots to replace the 4-D jobs (Dull, Duplicate, Dirty and Dangerous) is trendy and will become ubiquitous in future. With the help of robots, employees may focus more on the high-value work and have a better work environment, which results in better work experience and satisfaction.

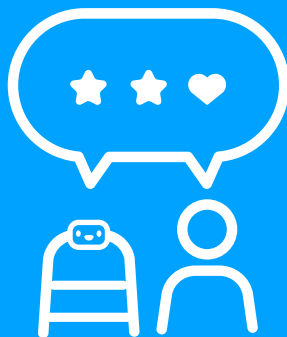
# Product Values

## Revolutionize Customer Experience

Commercial robots are being successfully integrated into different hospitality organizations or retail stores to improve customer experience.



Streamlining underlying processes



Reducing friction to create the sense of seamlessness and delight



Boosting customer experience by re-allocating more humans into front-facing roles

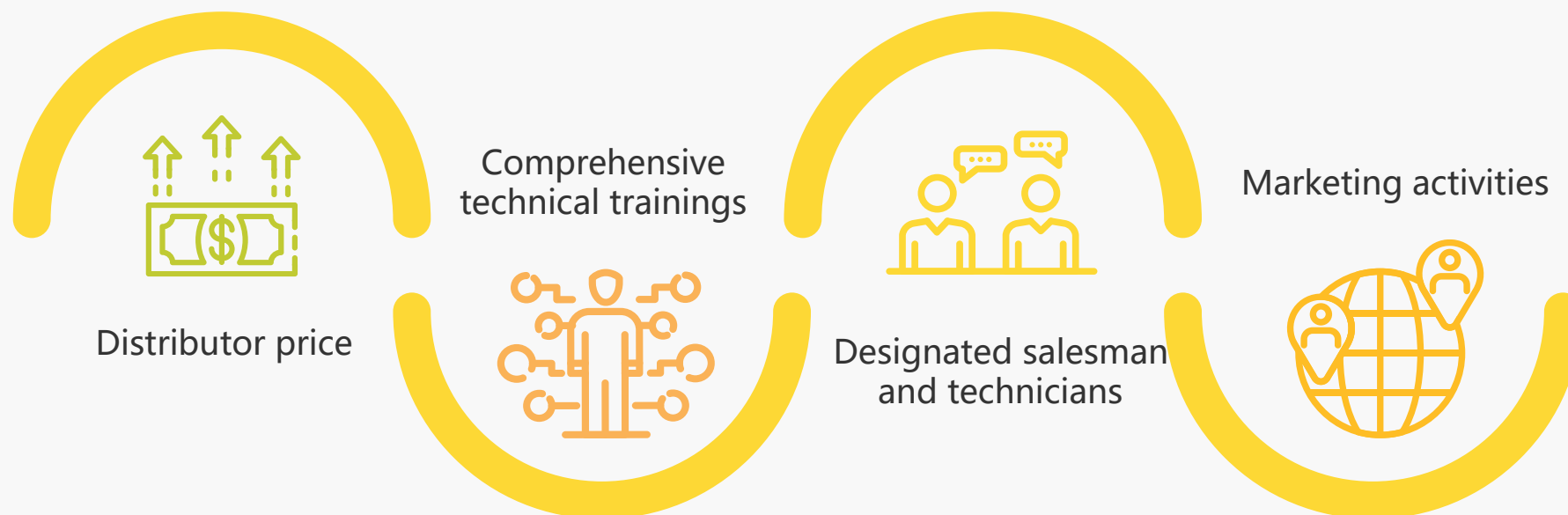


Enhancing customer journey by providing innovative experience

## Your Reliable Business Partner

### Build the future together

Solid partnerships starts with a shared commitment to providing superior value to you, we will support you as followed:



# Content.

## PuduBot 2

01

Product Overview

02

Key Features

03

Product Values

04

About Pudu

# Milestone

2016



**Jan.:** Shenzhen-based

Founded in 2016

2017



**Mar.:** Released First Delivery Product – PuduBot

**Jul.:** Won Red Dot Award – The Best of the Best

2018



**Jun.:** Series A Financing: Raised \$8 Million

**Nov.:** Approved as a National High-tech Corporate

## 2019



**Jun.:** Global Strategic Cooperation – Haidilao Hotpot

**Sep.:** Strategic Cooperation – Xiabu Xiabu

**Dec.:** Released Multi-featured Products – BellaBot & HolaBot

## 2020



**Jan.:** Awarded CES Technology Innovation Award

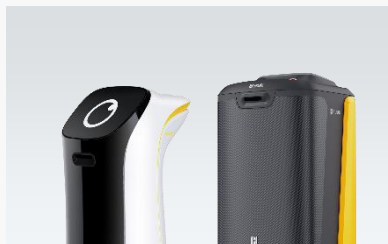
**Feb.:** Contributed to Hundreds of Hospitals during COVID-19 Outbreak

**Jul.:** Series B Financing: Raised over \$15 Million by Meituan

**Aug.:** Series B+ Financing: Raised \$15 Million by Sequoia China Investment Management LLP

**Dec.:** Launched Disinfection Robot – Puductor 2

## 2021



**Mar.:** Sub-branch R&D Center Set-up

**Mar.:** Launched New Products - KettyBot & FlashBot

**May:** Series C1 Financing: Raised \$78 Million by Tencent, Meituan and Sequoia China Investment Management LLP

**Sep.:** Strategic Cooperation - Panasonic

**Sep.:** Series C2 Financing: Raised \$77 Million by Meituan, Greater Bay Area Homeland Investments Limited, Shenzhen Investment Holdings Co., Ltd., Sequoia China Investment Management LLP

**Oct.:** Won G-mark – Good Design Award

## 2022



**May:** Released New Delivery Product - SwiftBot

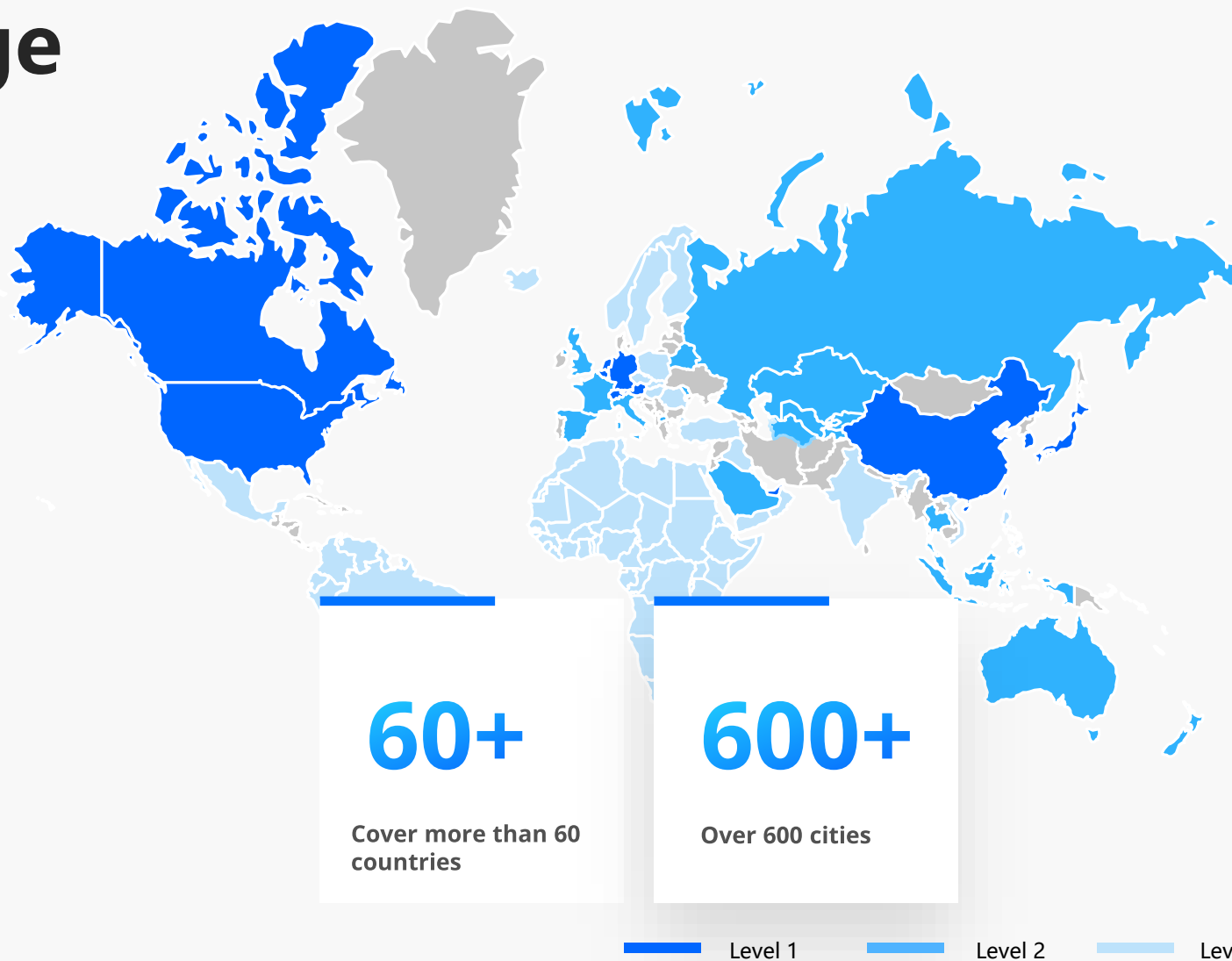
**Jun.:** Released New Cleaning Product - PUDU CC1



# Scale Advantage

## Globalization

Pudu Robotics has established a business presence in North America, Europe, East Asia, Asia-Pacific, the Middle East and Latin America. The products have been exported to more than 60 countries around the world, covering more than 600 cities worldwide. Pudu Robotics has established a trustworthy international brand image and become one of the representative enterprises of China's "intelligent" manufacturing abroad.



# Certificate & Patent

All of existing products have passed the multi-certification that match the targeting markets.



Pudu Robotics has applied for about 1200 core patents, of which invention patents are over 60%, involving positioning, navigation, motion control, human-computer interaction, robotics arm, servo motor, computer vision, cloud platform and other technical fields.



# Honor

Pudu Robotics has been recognized by organizations and institutions in various industries.



# Cooperation

Pudu Robotics has reached strategic cooperation with many famous brands.



The market share of  
Top 100 restaurant clients

24,000+

Delployed Store



Panasonic



DUNKIN'

ZARA



TimHoWan 添好運



MediaMarkt



Coca-Cola

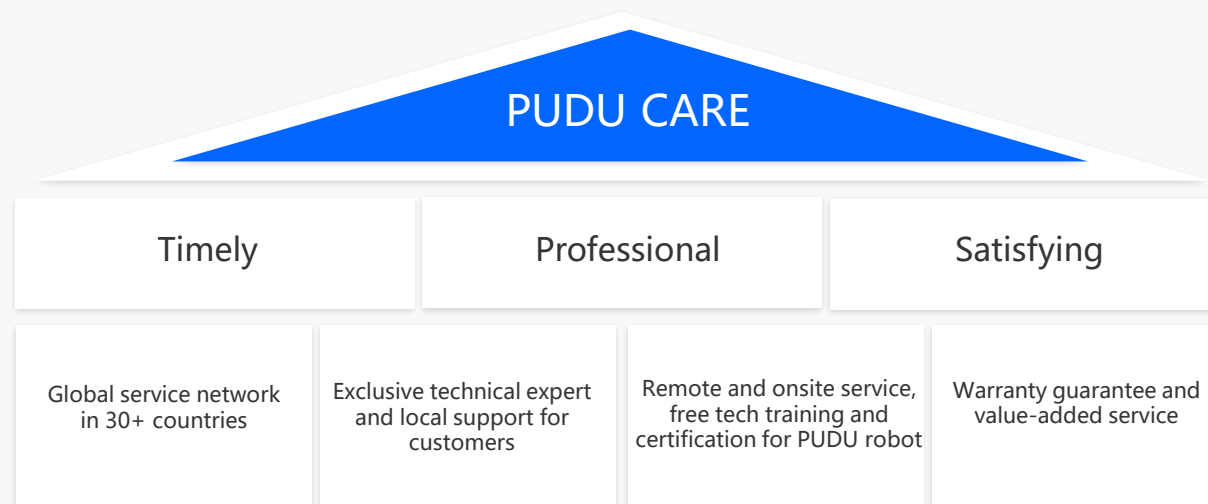


# Operation Advantage

## Offline Service:


- 1 Year Free Warranty
- 7 × 24 Hours Service
- Local Service & Support

Pudu Robotics has a thorough after-sales support system and humanized after-sales policy as well, whenever it is needed, we are going all out to offer service and reach your satisfaction.






# Thank you!

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