PUDU

PuduBot 2

Universal Delivery Robot

— Relay of classic —

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

7-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

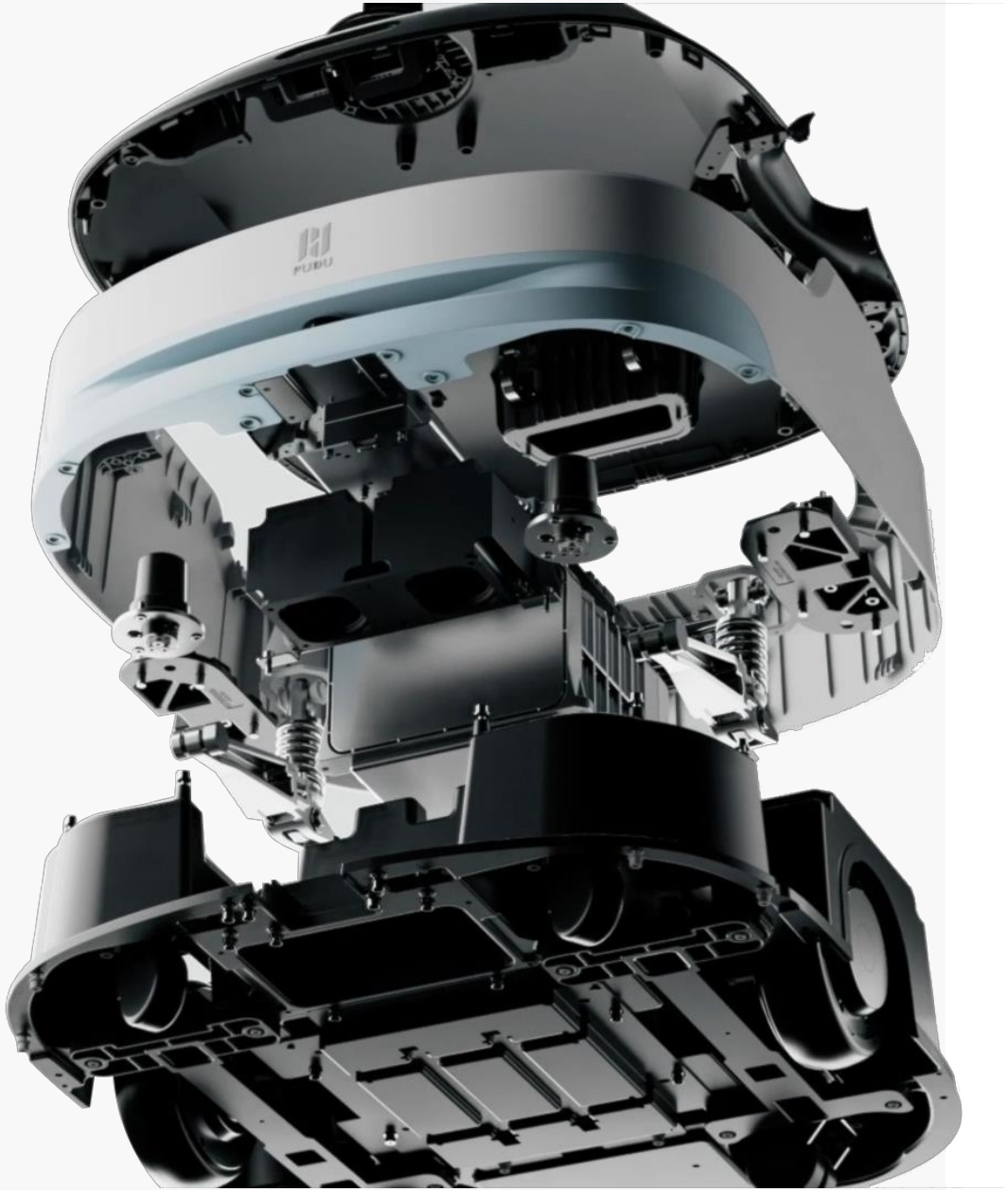
Product Overview

Dimension	580mm*535mm*1290mm
Machine Weight	37kg
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	VSLAM & Laser SLAM
Dispatching	Maximum 20
Charging	Wire or Automatic

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



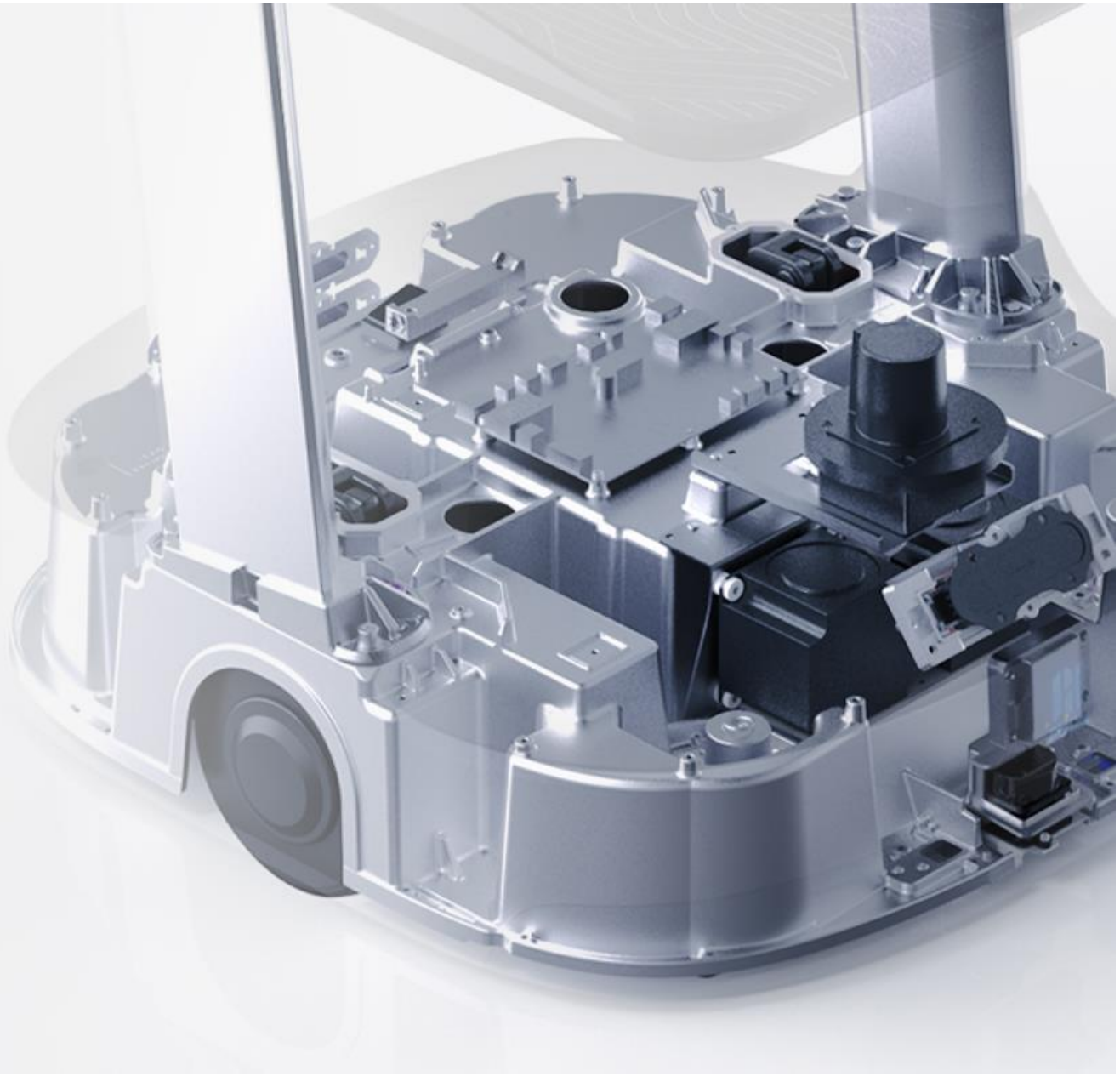
*Source: PUDU Lab

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

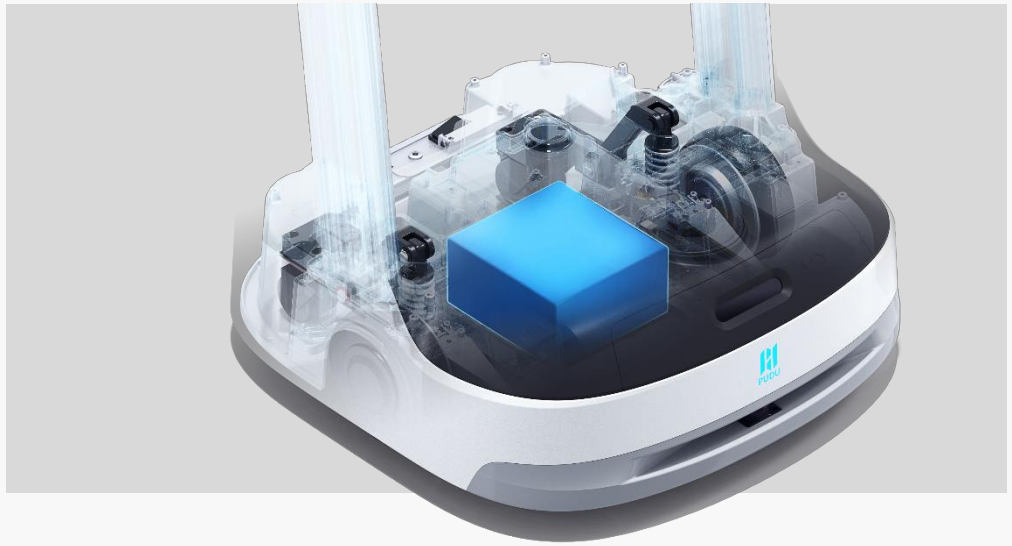
PUDU SLAM

Simplified Deployment , Greater Adaptability

- Fusing laser and visual positioning & navigation technology
- Support Lidar SLAM, Vision SLAM, or Fusion (Lidar + Vision)
- Marker-less deployment, reducing 75% deployment time without redecoration of ceiling
- Comfortable operation even in high ceiling environment (up to 20 meters)

Key Features

High Performance LFP Battery



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

Automatic Charging

- Compatible with Pudu Charging Pile
- 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

Multi-Table Delivery

- Serve several tables at one go

Food Delivery Mode

Delivery Mode

Cruise Mode

Direct Mode

Dish Return Mode

Birthday Mode

Meet the diversified delivery needs

Key Features

Calling and Notification

Autonomous and flexible, anytime and anywhere

Calling Robot

- Support Pudu Watch & APP Calling
- 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

Fully Enclosed Machine Design

Machine Slit
≤1mm

Effectively resist
dust and water

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

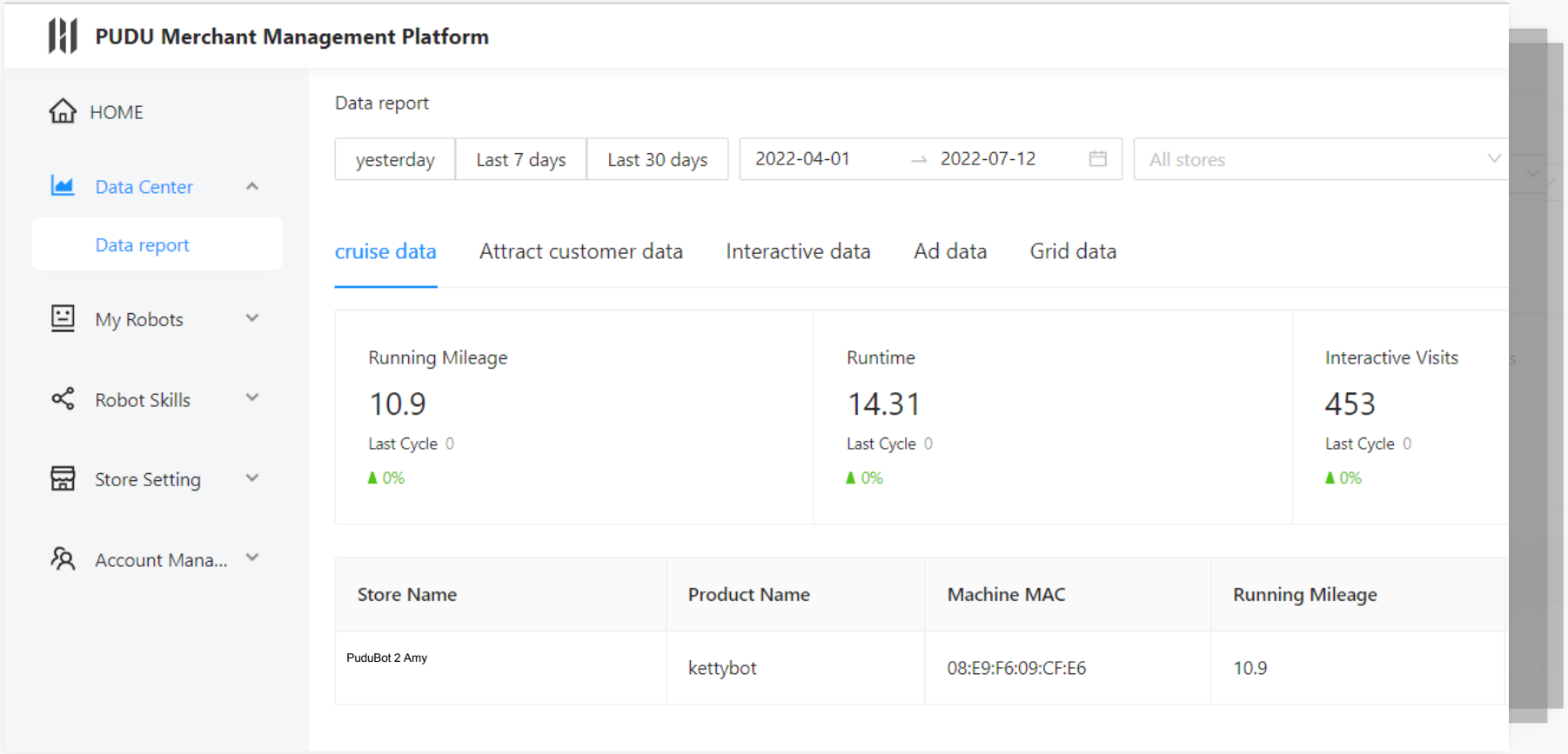
Key Features

Various Forms, Versatile Accessories

Designed to meet the needs of business

Key Features

24 X 7 Management and Analysis

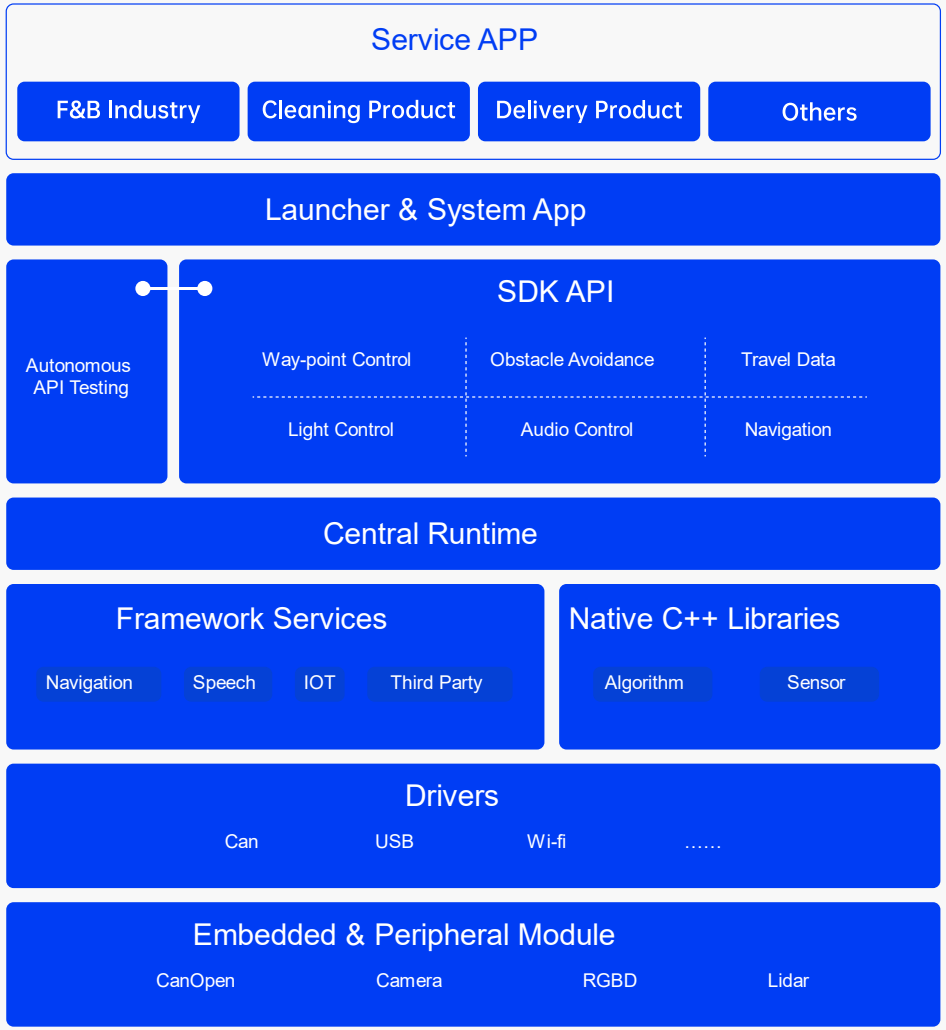


Key Features

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 3rd 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.

Product Values

Multi-Industry, Multi-Scenario Coverage

Restaurant & Café

Hospital & Clinic

Hotel & Resort

Office

Senior Living

Manufacture

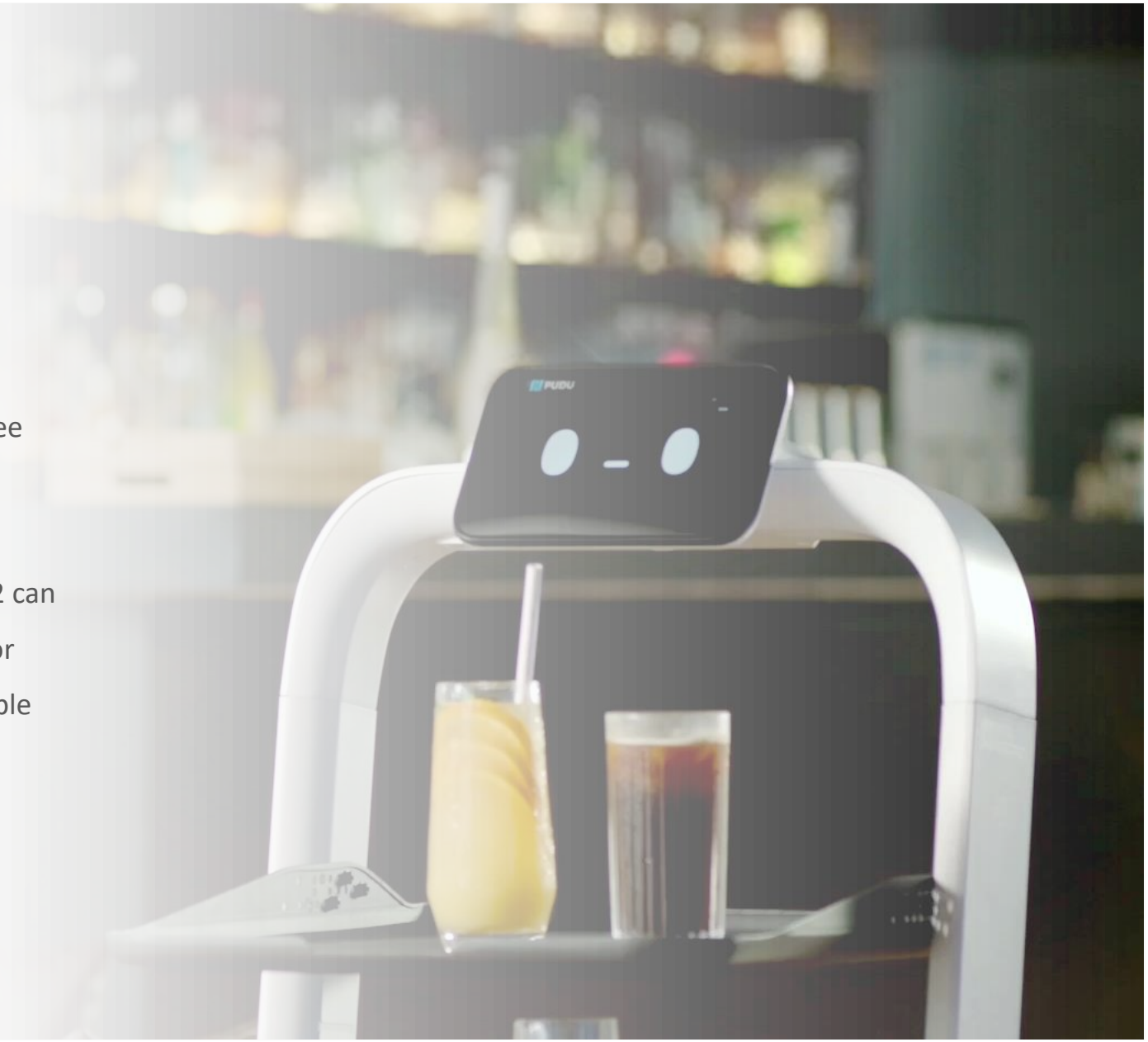
Entertainment & Leisure

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.

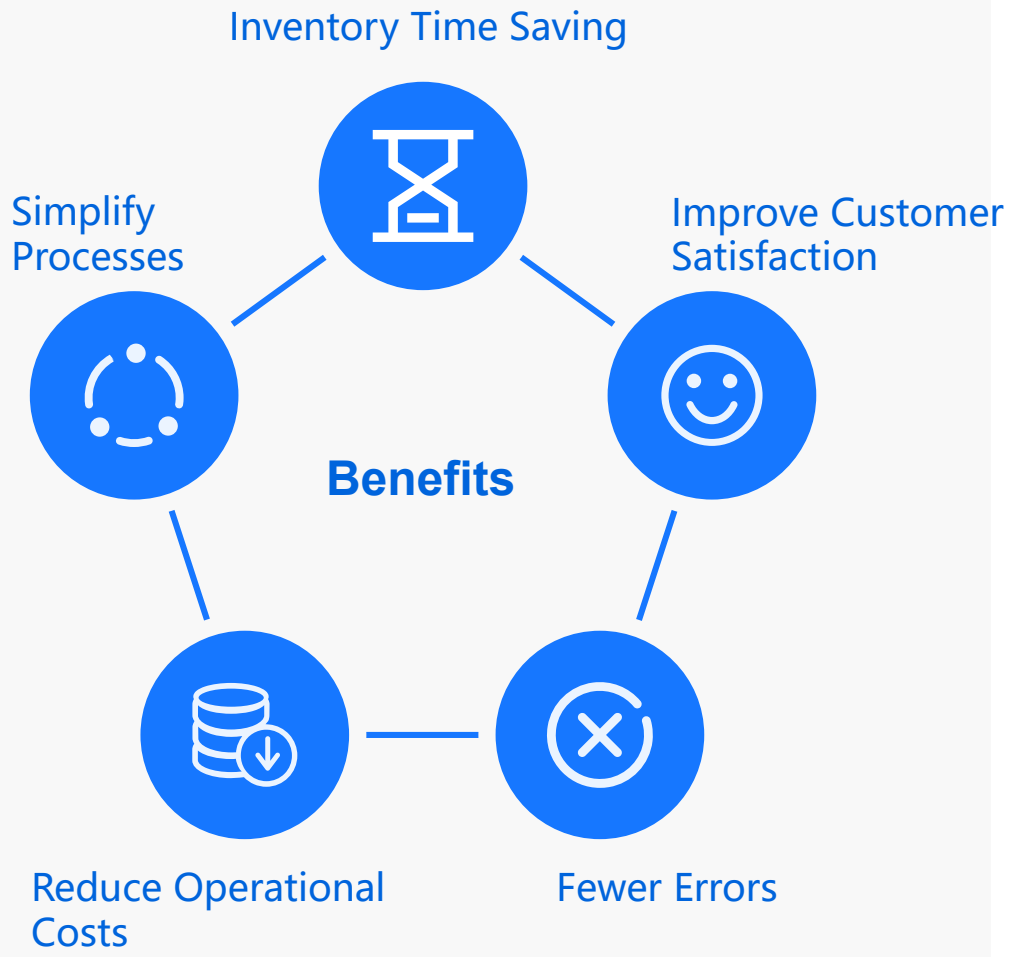


Product Values

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

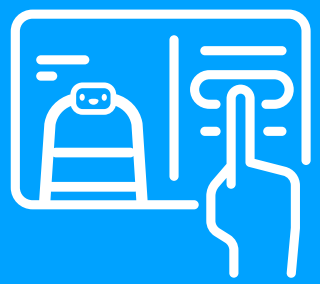
The pandemic has been hugely devastative to the labor market and fundamentally altered the industries and locations where would-be employees want to work. Employers are struggling in looking for and retaining qualified staffs.

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