PUDU

PUDU CC1 Pro Disc

AI-Native Mid-Size Disc Scrubber-Dryer Robot



roboplanet

CONTENT

About PUDU CC1 Pro Disc

Key Features

Application Scenarios

About PUDU

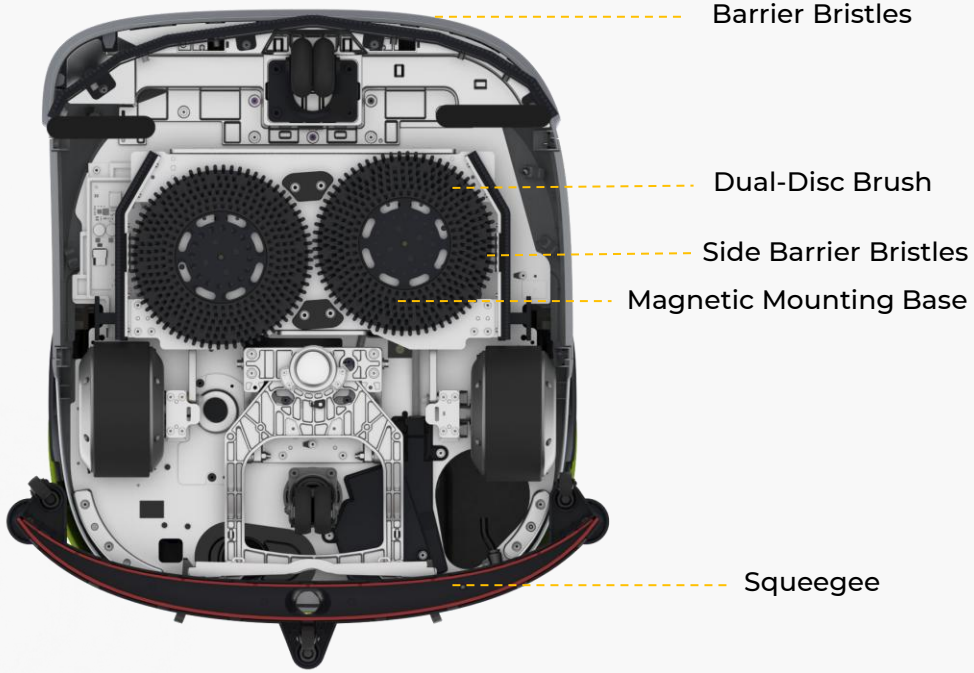
Introduction

- PUDU CC1 Pro Disc is purpose-built **for floor scrubbing while supporting light floor care**. Dual disc brushes with 25 kg of down pressure deliver powerful scrubbing, while floor pads support light polishing and routine floor care.
- Powered **by AI Magic Cleaning**, it offers **up to 10 AI-native skills**, including AI Adaptive Cleaning, AI Real-Time Cleaning Performance Detection, Guided Cleaning, and Call Cleaning. By adapting cleaning strategies to floor conditions and dirt levels, it enables precise, efficient, end-to-end intelligent cleaning.

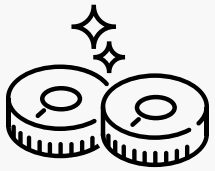


Product Appearance

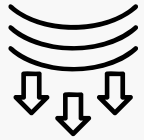




Key Features



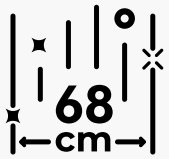
Dual-Disc Brush Scrubbing



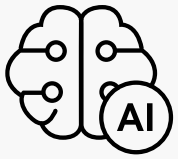
25 kg Scrubbing Pressure



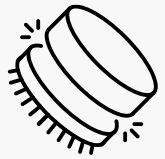
Multiple Disc Brushes & Pads



68 cm Path Clearance



AI Magic Cleaning



Quick-Release Disc Brush

Product Specifications

	PUDU CC1 Pro Disc
Disc Brush Down Pressure	**25 kg**
Cleaning Width	**380 mm (14.96 in)** (with dual-disc brush)
Battery capacity	**69 Ah**
Run-time	**Scrubbing: Up to 5.3 h (3.8 h+ in Standard Mode)**
Cleaning Efficiency (Scrubbing)	**700-1000 ㎡/h (837.19-1,195.99 yd²/h)** (All-Covered Scrubbing) **1500-3000 ㎡/h (1,793.99-3,587.97 yd²/h)** (Spot Scrubbing)
Min. Path Clearance	**68 cm (26.77 in)** **U-turn: 88 cm (34.65 in)**
Water Tank Capacity	Clean Water Tank: 15 L (3.96 gal) Waste Water Tank: 15 L (3.96 gal) (With AI Adaptive Water Control, Equivalent to 30L/30L)
AI Agent Skills	**UP to 10 AI Skills:** **AI-Adaptive, Thermal Cleaning, Summon Cleaning...etc.**
Optional Accessories	**Self-Cleaning Docking Station** **Mobile Water Station** **SmartView Display Kit**



CONTENT

About PUDU CC1 Pro Disc

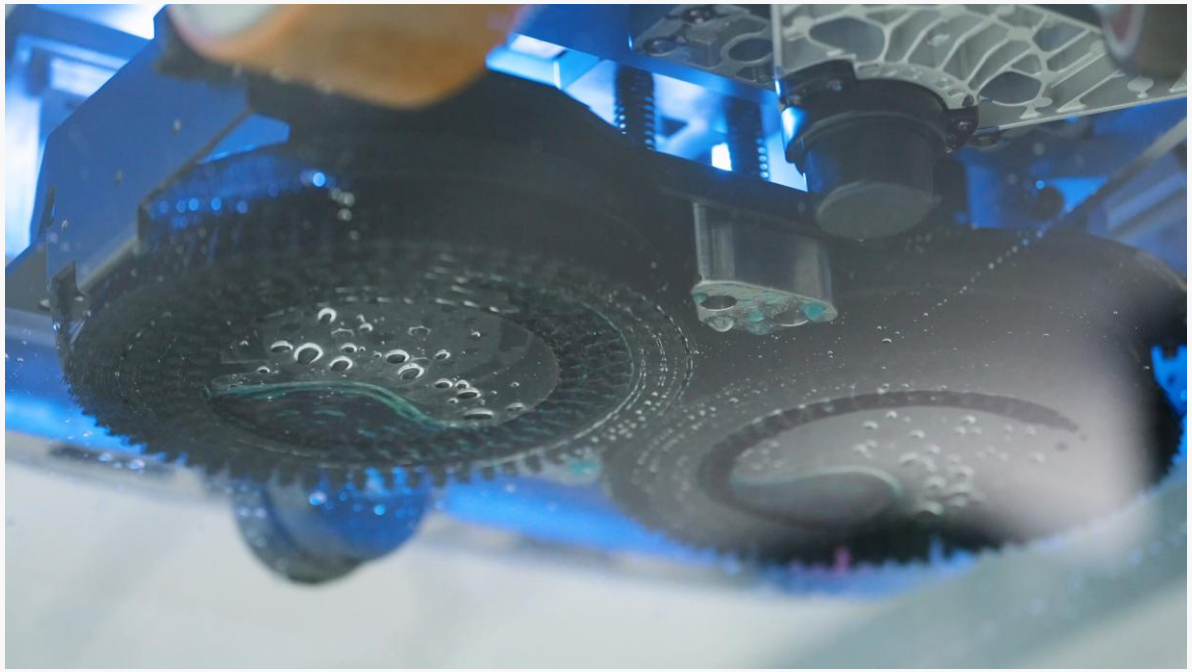
Key Features

Application Scenarios

About PUDU

Dual-Disc Brush with 25 kg Down Pressure

High-speed **dual-disc brush** combines with a consistent **25 kg of down pressure** to deliver powerful deep cleaning, effectively **removing stubborn stains and debris.** Built for high-frequency use, the system delivers consistent cleaning performance for everyday retail operations.



Compatible with Floor Pads

One Machine for Diverse Floor Care Needs

- CC1 Pro Disc is compatible with multiple floor pads and diamond pads, allowing flexible configuration for **different floor materials and application needs**. It supports a wide range of tasks, including **light polishing, and floor care**.



Quick-Release Disc Brush

Magnetic attachment enables **quick positioning, installation, and removal**. Disc brushes can be easily cleaned, inspected, or replaced, **reducing routine maintenance time** and minimizing downtime between cleaning tasks.



How to understand AI-Native cleaning robots?

AI Magic Cleaning

- PUDU CC1 Pro Disc integrates a range of AI capabilities, including **AI Adaptive Cleaning, AI real-time cleaning performance detection, guided cleaning, and summon cleaning.**
- It dynamically adjusts cleaning strategies based on environmental conditions and cleaning results for more precise, efficient, and reliable operation.



AI Adaptive Cleaning Mechanism

Stubborn Stains Detection

Detects stubborn stains and boosts cleaning power as needed, ensuring deeper, more thorough cleaning.

Floor Cleanliness Monitoring

Detects cleanliness levels and automatically switches modes—eco mode for clean areas, deep cleaning for dirty spots to optimize energy and water use.



AI Spot Scrubbing

Targeted Cleaning for Precision

Powered by **vision-based AI recognition**, the system detects common wet stains such as coffee spills, sauces, and puddles during its patrol, instantly **creating optimal cleaning routes** and enhancing the overall intelligence and responsiveness of the operation.



AI Obstacle Recognition & Avoidance

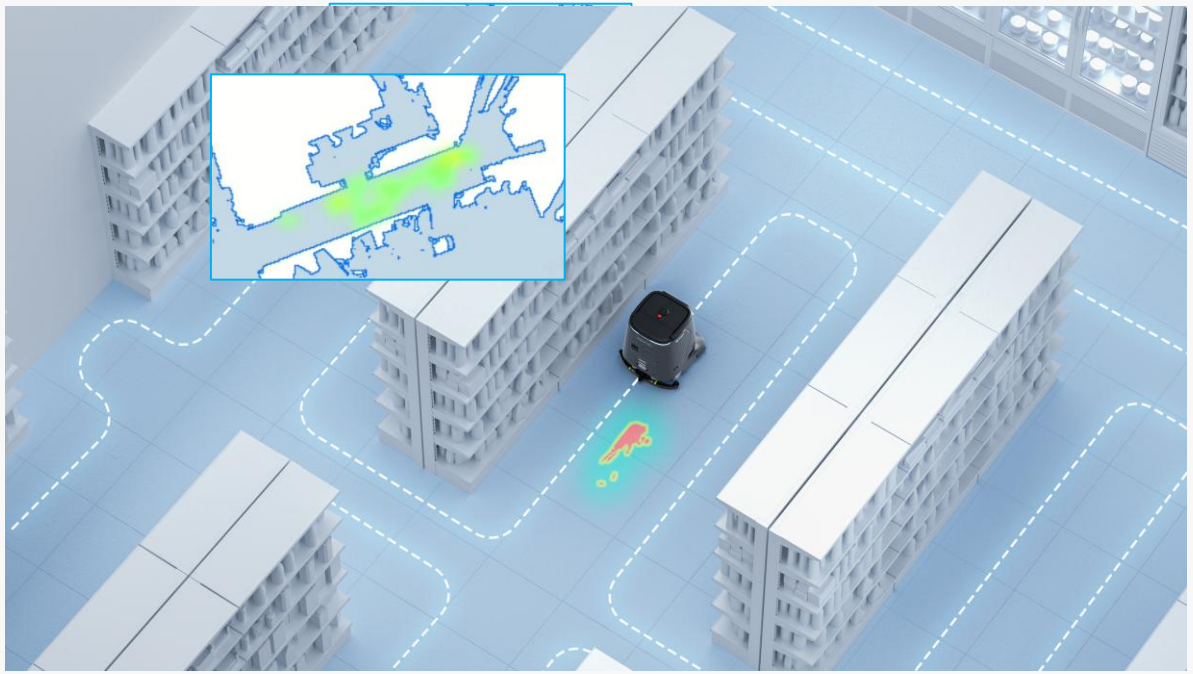
- Powered by **AI sensor-fusion perception**, the robot detects and navigates around common obstacles in real time, including **guardrails, warning signs, shopping carts, and retractable belt barriers.**
- It also **identifies and avoids carpeted areas** during scrubbing, ensuring safe, uninterrupted operation in retail environments.





AI Real-Time Cleaning Performance Detection

CC1 Pro Disc features **the world's first rear AI camera**, which monitors and evaluates cleaning performance in real-time. It detects leftover stains, triggers **spot re-cleaning**, and **generates heatmaps** after each task for clear insight into cleaning results.



Stain Distribution Heatmap

- **AI-powered stain detection** generates a **heatmap** highlighting contamination levels and frequently soiled areas.
- The data informs zone allocation, cleaning frequency, and route planning, directing CC1 Pro Disc to areas where cleaning is needed most.



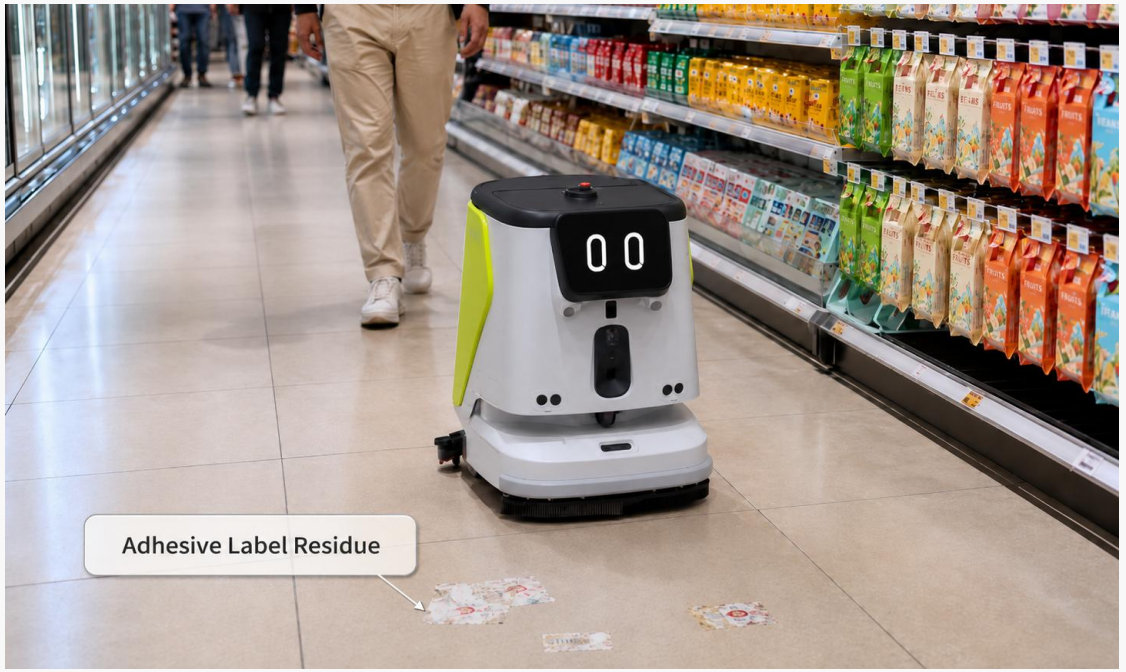
Ultra Spot Cleaning

- Designed for **peak supermarket hours**, Ultra Spot Cleaning can be activated with a single tap.
- Based on the **stain distribution heatmap**, PUDU CC1 Pro Disc automatically **identifies concentrated stains** and soiled areas, autonomously **plans its route**, and quickly navigates to the target locations for prioritized cleaning.



Guided Cleaning

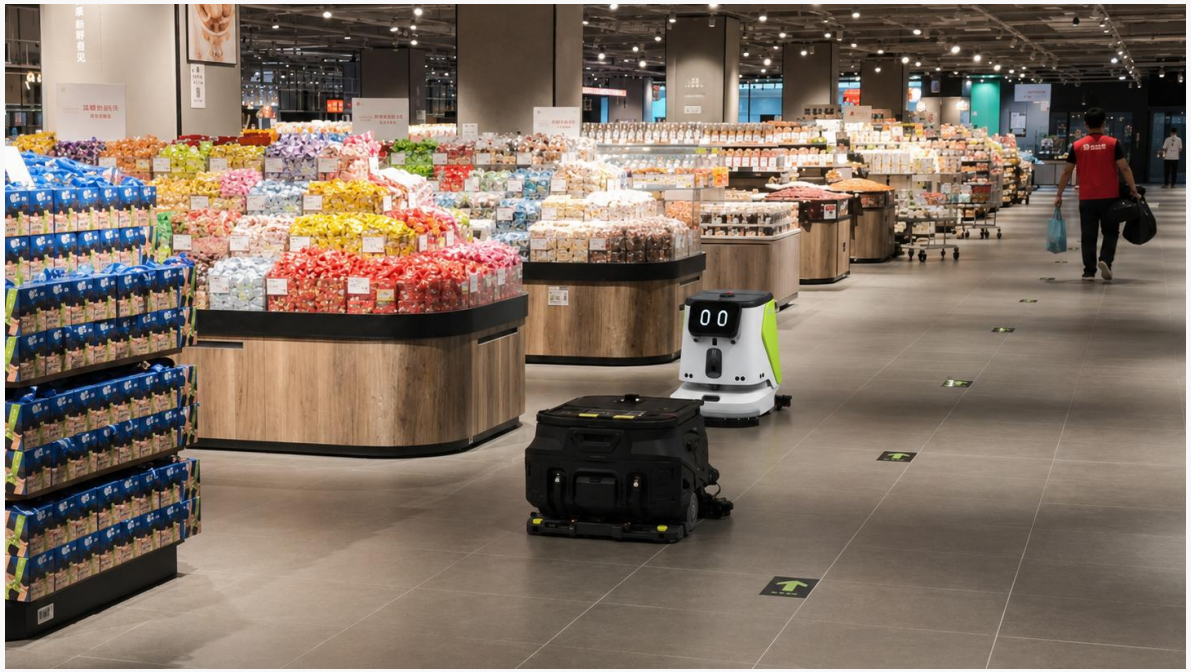
- Guided Cleaning uses a real-time cleaning performance heatmap to locate stubborn residues, such as **paint marks and adhesive labels**, and **directs staff to untreated spots** for targeted cleaning.
- Confirmed **floor damage**, including chipped tiles and cracks, is **excluded from future stain detection** to prevent repeated false alerts.



Multi-Robot Collaboration—Sweep First, Scrub Next

MT1 Series Sweep First, CC1 Series Scrub Next

PUDU MT1 and CC1 Pro Disc work together in a coordinated workflow: PUDU MT1 **pre-sweeps dust and debris**, while CC1 Pro Disc follows with **thorough floor scrubbing**, delivering more efficient and complete cleaning across large areas.

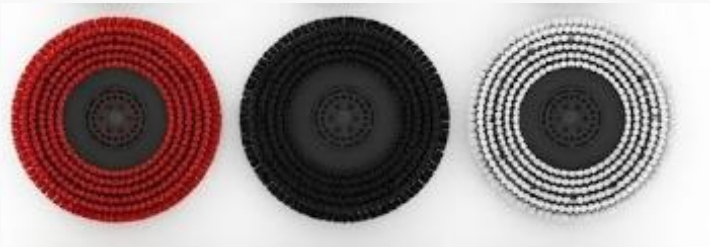


Multi-Robot Collaboration—Summon Cleaning

- CC1 Pro Disc and PUDU MT1 intelligently **summon each other based on the cleaning need detected**. When PUDU MT1 detects **a wet stain or spill**, it avoids and records the area, then moves near CC1 Pro Disc's docking point **to summon it for targeted cleaning**.
- Likewise, when CC1 Pro Disc detects dry debris, it summons PUDU MT1 for removal.



Optional Accessories



Scrubbing Disc Brush



Scrubbing Pad



Diamond Scrubbing Pad



Rubber Blade



Rubber Blade
(Oil-resistant)

- Self-Cleaning Docking Station
- Mobile Water Station
- SmartView Display Kit

.....

Optional 18-inch Marketing Display

Supporting **portrait and landscape** orientations, the optional display presents **advertisements, promotions, and in-store information** while the robot cleans, creating a mobile marketing touchpoint that increases content exposure.



Self-Cleaning Docking Station

■ **Automatic Water Refill and Drainage:**

The station automatically refills clean water, drains wastewater, and cleans the robot's squeegee. After each task, the robot returns to recharge.

■ **Deep Squeegee Cleaning:**

A 100 W ultrasonic module and 65°C hot water remove stubborn dirt and debris from the squeegee, helping prevent water marks and secondary contamination.



Mobile Water Tank

No Plumbing Modification

- Fixed docking stations, combined with this mobile water tank, eliminate the need for water pipeline modifications—just plug in and use.
- The mobile water tank has a sufficient internal capacity, featuring a 30L clean water tank and a 30L wastewater tank, providing enough water for two complete cycles of the CC1 Pro.
- When the clean water runs out or the wastewater tank is full, intelligent prompts on the mobile app and the robot's homepage will alert users to manually refill the mobile water tank.



Pudulink App

Transforming Data into Actionable Insights

■ **Waste Hotspot map:**

Highlights areas with the heaviest waste accumulation, enabling precise scheduling of cleaning operations.

■ **Cleaning Performance Heatmap:**

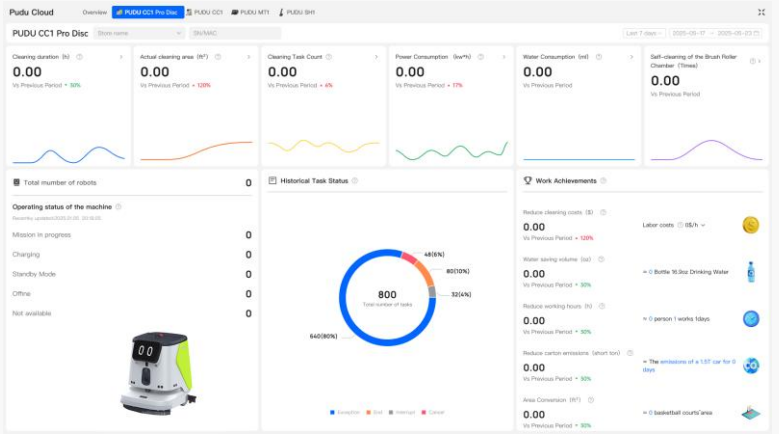
Marks stubborn stains that remain after multiple cleaning cycles, helping with manual inspection and further cleaning.

■ **Operation Dashboard:**

Visualizes key metrics—task execution and completion rates, maintenance frequency—and issues real-time alerts for any equipment anomalies.



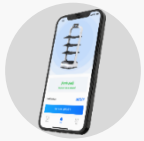




IoT capability

- PUDU CC1 Pro Disc can integrate with automatic doors, access gates, turnstiles, and other entry systems through IoT connectivity. Upon reaching an access point, the robot automatically requests entry, passes through, and continues its cleaning task without manual assistance.





PUDU Link (App)



Elevator Control Module



E-gate Control Module

CONTENT

About PUDU CC1 Pro Disc

Key Features

Product Value

About PUDU

Product Value

Deep Cleaning for High-Traffic Environments

Designed for **busy retail spaces**, CC1 Pro Disc effectively tackles common challenges such as **gum marks and tire scuffs**, reducing the need for manual re-cleaning. It delivers consistent cleaning performance to enhance the customer experience.





Cleaning & Floor Care, One Solution

Compatible with **various floor pads and diamond pads**, CC1 Pro Disc supports **daily cleaning, floor maintenance, and light polishing** for different floor surfaces. It not only keeps floors clean but also helps preserve their appearance and finish, enabling comprehensive floor care with one machine.

Product Value



Modular Design, Easy Maintenance

The modular cleaning system enables **quick replacement and simplified maintenance.** With magnetic disc brush attachment, it allows **fast alignment and secure installation** for effortless changeover.

AI Perception, Smart Adaptation

Powered by **AI-based perception and recognition**, CC1 Pro Disc detects environmental changes and dynamic obstacles in real time. It intelligently **adapts cleaning strategies** based on floor conditions and cleaning results, delivering precise performance



CONTENT

About PUDU CC1 Pro Disc

Key Features

Application Scenarios

About PUDU

About US

Pudu Robotics, a global leader in the commercial service robotics sector, is dedicated to empowering easier work and better lives through AI and robotics, with a vision of building a global intelligent robotics infrastructure that serves 10 billion people worldwide.

Pudu Robotics has achieved full-stack proprietary R&D in core technologies, including navigation algorithms, multi-robot scheduling, swarm control, motion controllers, and integrated joint modules.

Built on three core technologies—Embodied Navigation, Embodied Manipulation, and Embodied Interaction—Pudu Robotics has pioneered a "One Brain, Multiple Embodiments" architecture, establishing a comprehensive product portfolio that includes specialized, semi-humanoid, and humanoid robots.

Currently, Pudu offers four major product lines: service delivery, commercial cleaning, industrial delivery and general embodied AI. Its solutions are widely deployed across industries such as retail, hospitality, manufacturing, real estate and property services, healthcare, entertainment and sport, education, and public services.

To date, Pudu Robotics has shipped over 130,000 units globally, with a presence in more than 85 countries and regions.



* Relevant statistics as of July 2026

The Global No.1 in Commercial Service Robotics

Global Market Share by Revenue

No.1 in the global commercial service robotics market by revenue,

25% market share

TOP1

Global Market Share by Shipments

No.1 in the global commercial service robotics market by shipments,

23% market share

TOP1

Global Commercial Cleaning Robotics Market Share by Revenue

No.1 in the global commercial cleaning robotics market by revenue,

29% market share

TOP1

International Market Share by Shipments

No.1 Chinese commercial service robotics company in international markets by shipments,

44% market share

TOP1

85+
Countries and Regions

1,000+
Cities

50,000+
End Customers

130,000+
Shipped Globally

Serving Customers Across 85+ Countries and Regions



Honor and Awards

Pudu Robotics has gained recognition from organizations and institutions across various industries.

Red Dot Award: "Best of the Best"	Red Dot Award: Product Design 2023 & 2025	International Design Excellence Awards	iF DESIGN AWARD 2023 & 2025	Good Design Award	Fast Company Innovation by Design Awards
Named among the top 25 for the WIPO Global Awards	CES Innovation Awards	IFEX Innovation Awards	Horeca New Business Models Awards	Winner of Commercial Kitchen Innovation Challenge	IFSA Awards

Application Industries

Powering Every Industry with Pudu’s Robots

Making Work Easier. Making Life Better.

Food & Beverage



Hospitality



Retail



Industrial Facility



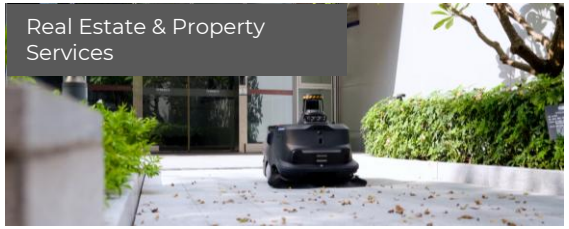
Warehousing & Logistics



Health Care



Real Estate & Property Services



Transportation and Related Service



Education



Entertainment & Sport



Agriculture



Public Service



Power & Utilities



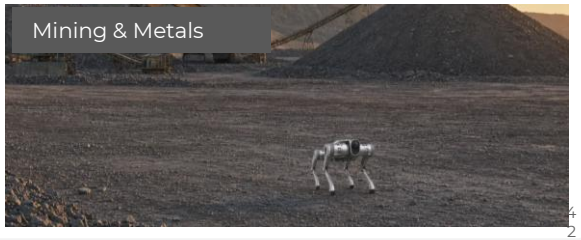
Oil & Gas



Data Centers & AI Infrastructure



Mining & Metals



PUDU

roboplanet

Thank you!



+86 755-86952935

Global_sales@pudutech.com

11/F, Building 2A, Shenzhen International Inno Valley Phase 1, Dashi 1st Road, Nanshan District, Shenzhen, China 518300