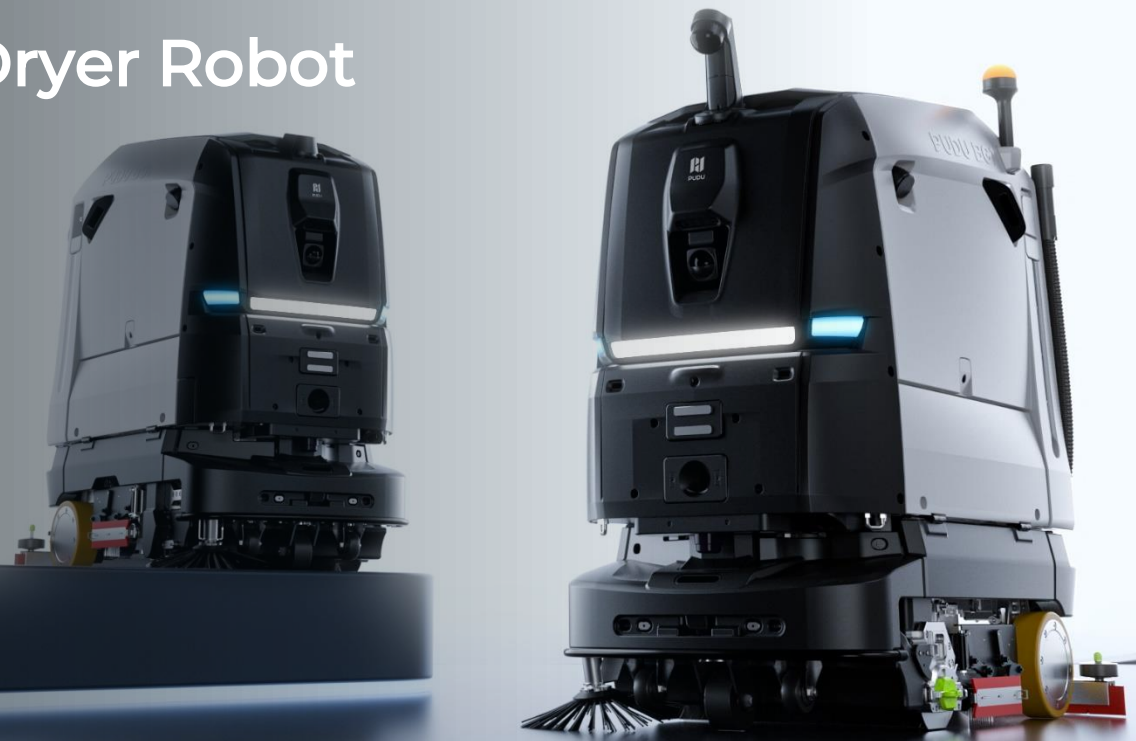
PUDU

PUDU BG1 Series

AI-Native Large Scrubber-Dryer Robot



CONTENT

About BG1 Series

Key Features

Application Scenarios

About PUDU

Product Appearance

Sensor
Audio-Visual Warning System
Cleaning Mechanism



3D LiDAR
Front Projection Light
Front Fill Light
AI Camera
DToF Array Modular
Docking station (Automatic Water/Electric Supply)
LiDAR
RGBD
LiDAR
Side Brush

Warning Light
Manual Water Inlet
RGBD
Outline Light
Clean Water Level Gauge
RGB Camera
Scrubbing Disc Brush
Dust Box
Sweeping Roller Brush

Product Appearance

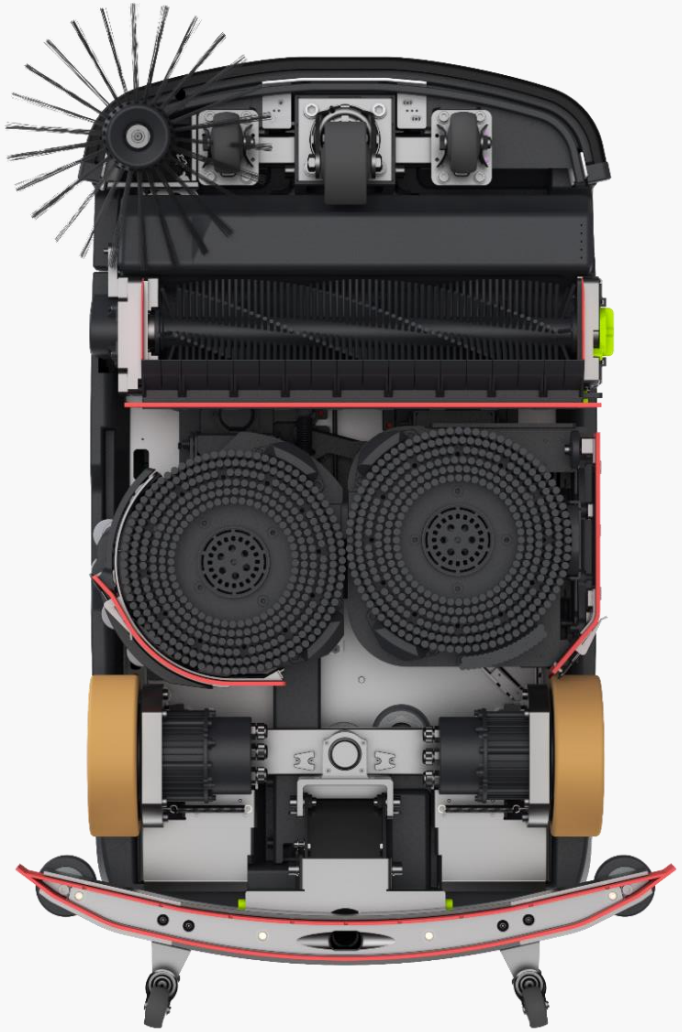
Sensor
Audio-Visual Warning System
Cleaning Mechanism
Others



Emergency Stop Button
Control Joystick
Storage Box
RGBD
Suction Pipe
AI Camera
Front Fill Light
LiDAR
Dual Cleaning Agent Boxes
Suction Pipe
Squeegee

3D VSLAM Camera
Power On/Off Button
Outline Light
Semi-automatic Water Inlet (Supports Auto-stop When Full)
RGB Camera
Extended Disc Brush

Core Functions



One-Pass
Sweep & Scrub

Extendable
Edge Cleaning

Instant, User-friendly
Maintenance

AI Magic Cleaning

3D Perception
Enhancement

24/7
Continuous Operation

- Scrubbing, Polishing, Sweeping, Dust Mopping
- Dual Cleaning Agent Automatic Real-time Mixing
- Ultra-long Run-time, Ultra-high Cleaning Efficiency

.....

Product Specifications

	PUDU BG1	PUDU BG1 Pro
Total Machine Weight	approx. 344 kg (approx. 758 lbs)	
Overall Dimensions	1195x760 x 1303 mm (with squeegee) 1120x660 x 1303 mm (without squeegee) 47.0x29.9 x 51.3 in (with squeegee) 44.1x25.9 x 51.3 in (without squeegee)	
Battery Capacity	**90Ah** (48V platform, **equivalent to 24V platform 180Ah**)	
Run-time	Front sweep, rear scrub, **up to 7.5h**, Standard mode 5.5h+	
Charging Time	High voltage area (AC≥180V): about 3h Low voltage area (AC≤180V): about 4.5h * Adapter auto voltage recognition	
Cleaning Capability	Sweeper-scrubber integration, dust mopping (optional), polishing (optional) Supports **Extendable Edge Cleaning, Dual Cleaning Agent Real-time Mixing**	
Navigation Method	LiDAR + **3D VSLAM** Fusion Positioning	**3D LiDAR** + **3D VSLAM** Fusion Positioning

Product Specifications

	PUDU BG1	PUDU BG1 Pro
Min. Path Clearance	85 cm(33.5 in)	
Cleaning Width	**550 mm** / 708 mm (with side brushes) **21.65 in** / 27.87 in (with side brushes)	
Cleaning Efficiency (Scrubbing)	Covered Cleaning Mode: **Max. 2000 m²/h** Spot Cleaning Mode: Max. 6000m²/h Covered Cleaning: **Max. 21,528 ft²/h** Spot Cleaning Mode: Max. 64,583.4 ft²/h	
Dust Box Capacity	5L 1.32 Gal (US)	
Water Tank Capacity	Clean Water Tank: **75 L** Waste Water Tank: 60 L Clean Water Tank: **19.81 Gal (US)** Waste Water Tank: 15.85 Gal (US)	
Cleaning Agent Box	**Dual Cleaning Agent Box**, total capacity approx. 7L	
Unattended Operation	Supported (requires optional charging/docking station)	



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About BG1 Series

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About PUDU

AI-Native Cleaning Robot?

Hardware Design → ~~AI-Power~~ → AI-Native

AI-Native Cleaning Robot

=

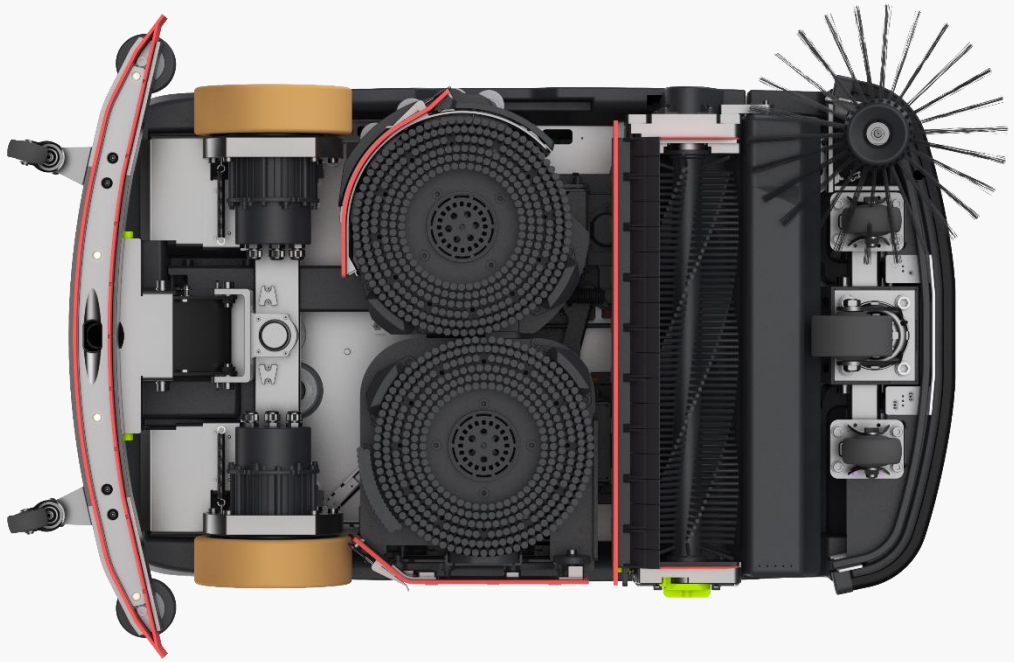
Precisely executed "Hardware Degrees of Freedom"



Ever-evolving "AI Degrees of Freedom "

Front Sweep, Rear Scrub, Restructuring Cleaning Efficiency

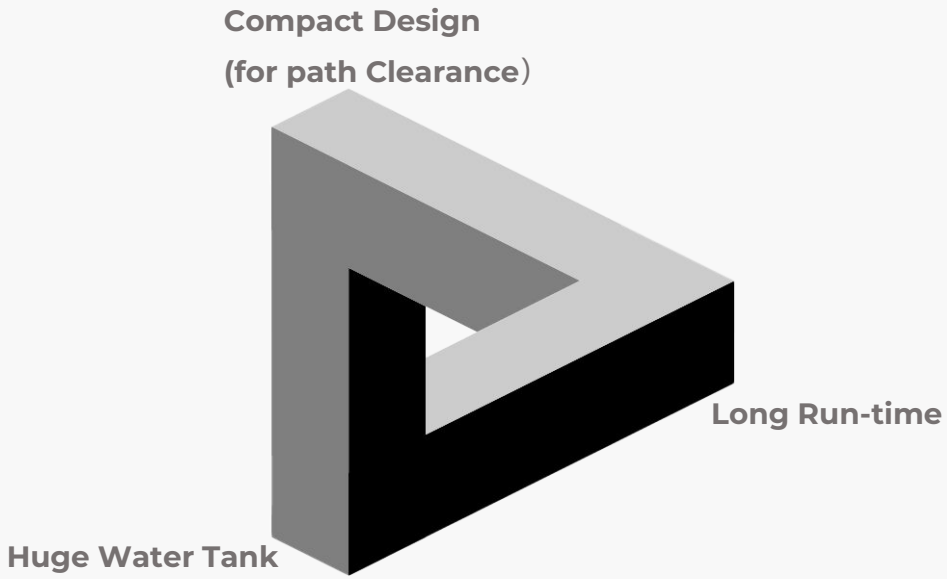
One-Pass Sweep & Scrub



550mm scrubbing width, **708mm** sweeping width

75L/60L water capacity, **7L** cleaning agent capacity, **5L** dust box capacity

Advanced Architecture, Ultimate Efficiency



48V electrical architecture, 90Ah equivalent to 24V platform **180Ah**

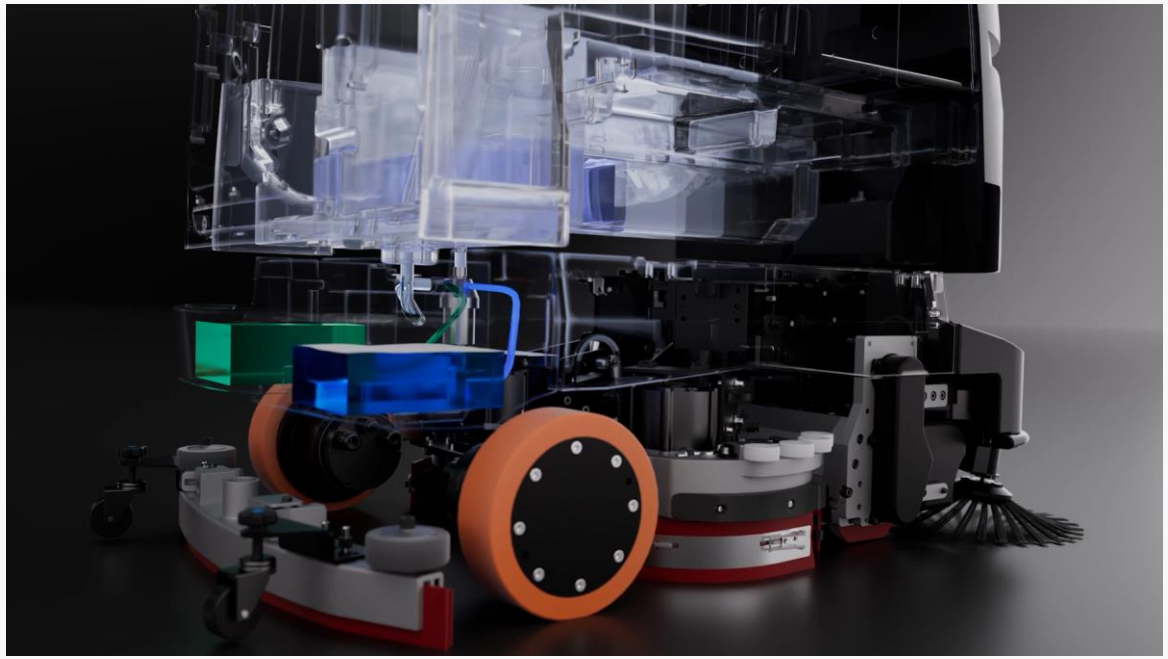
7.5h+ cleaning time (standard mode **5.5h+**), **2000m²/h** cleaning efficiency

Extendable Edge Cleaning



The scrubbing brush can physically extend to reach walls and shelving edges, thoroughly removing dust and dirt along edges, improving coverage, and minimizing manual touch-ups.

Dual Cleaning Agent Real-time Mixing



Dual agent tanks**(7L total)** with **milliliter-level accuracy**.

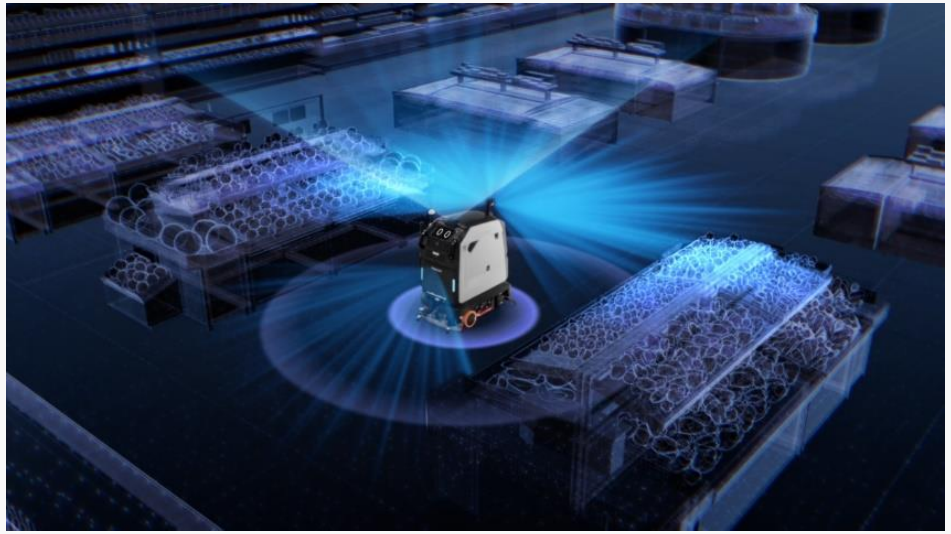
Automatic dosing eliminates inaccuracies from manual mixing.

Potential Agent Combinations:

1. Acidic Cleaner + Alkaline Cleaner
2. Cleaner + Disinfectant
3. Cleaner + Defoamer
4. Cleaner + Deodorizer
5. Cleaner + Polishing Conditioner

.....

Visual 3D Fusion



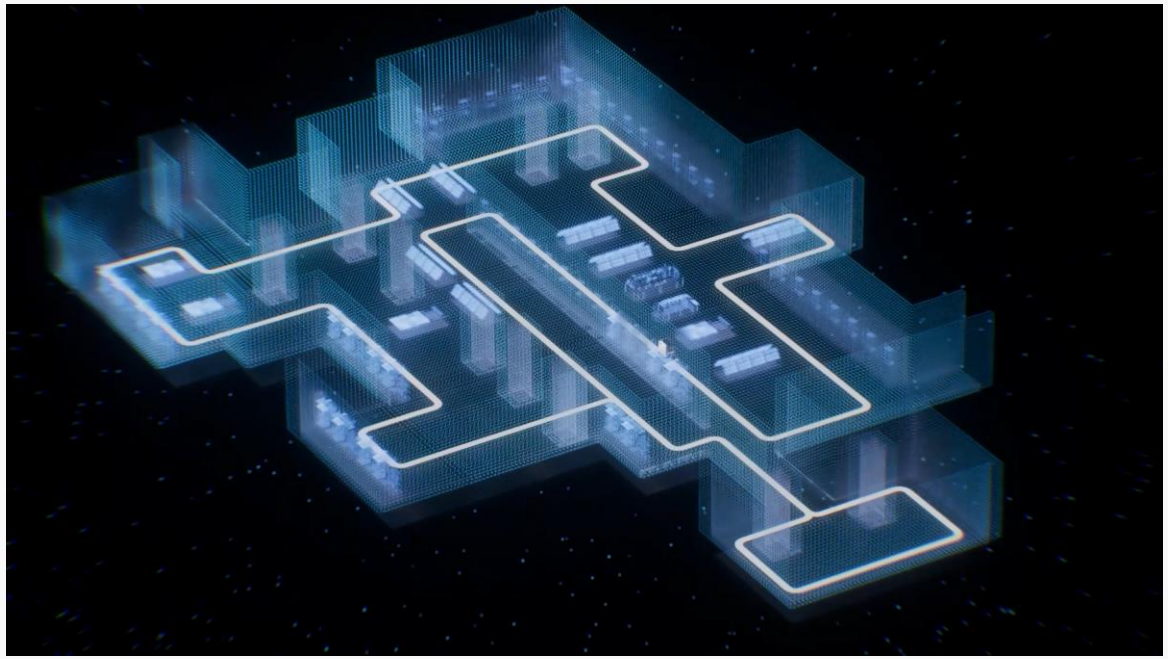
3D VSLAM + LiDAR + Multi-sensor Fusion



AI High Computing Power Platform

(Dual Chips + AI Enhanced Computing Unit)

Magic Cleaning – AI Spot Cleaning



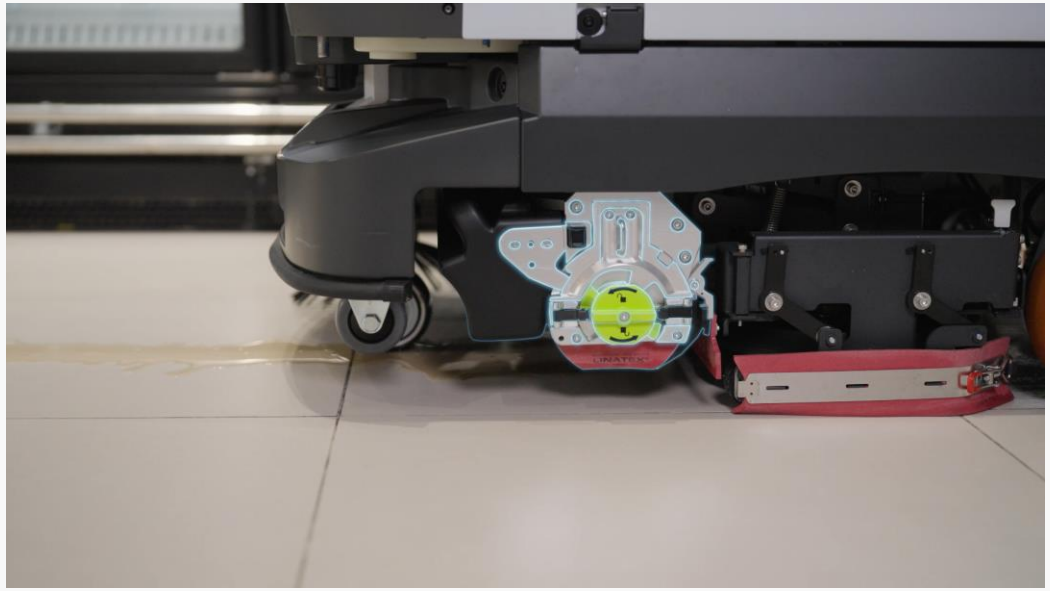
Spot Cleaning Mode Cleaning Efficiency

6000m²/h

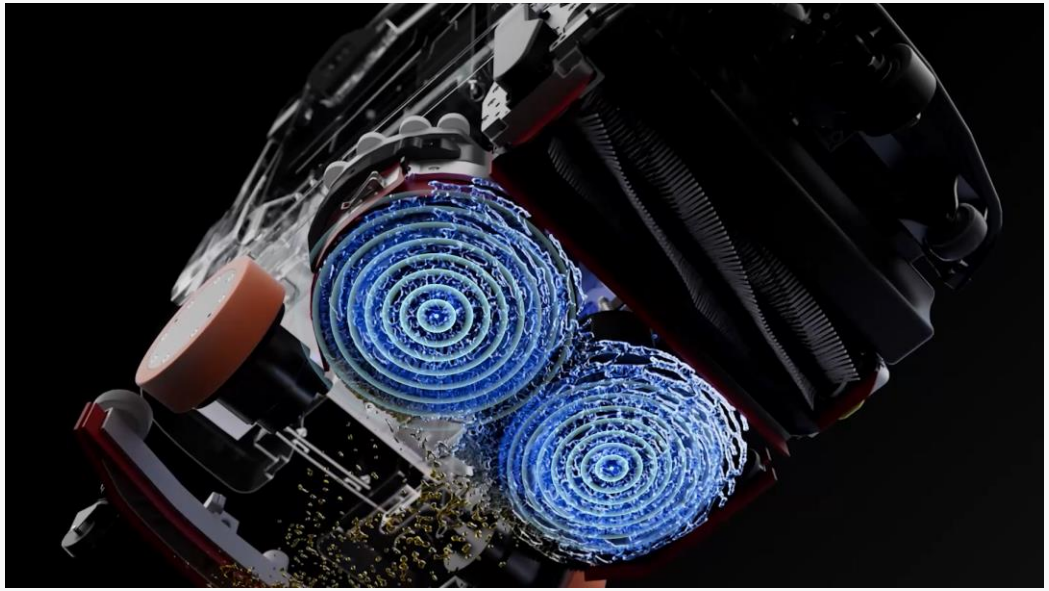
Powered by an ultra-wide FOV and AI vision, the PUDU BG1 series detects and targets messes in real-time. This "See-and-Clean" approach transforms operations from passive to proactive, ensuring pristine floors in high-traffic zones with split-second response times.

Magic Cleaning – AI Adaptation

Adaptive Cleaning Mechanism

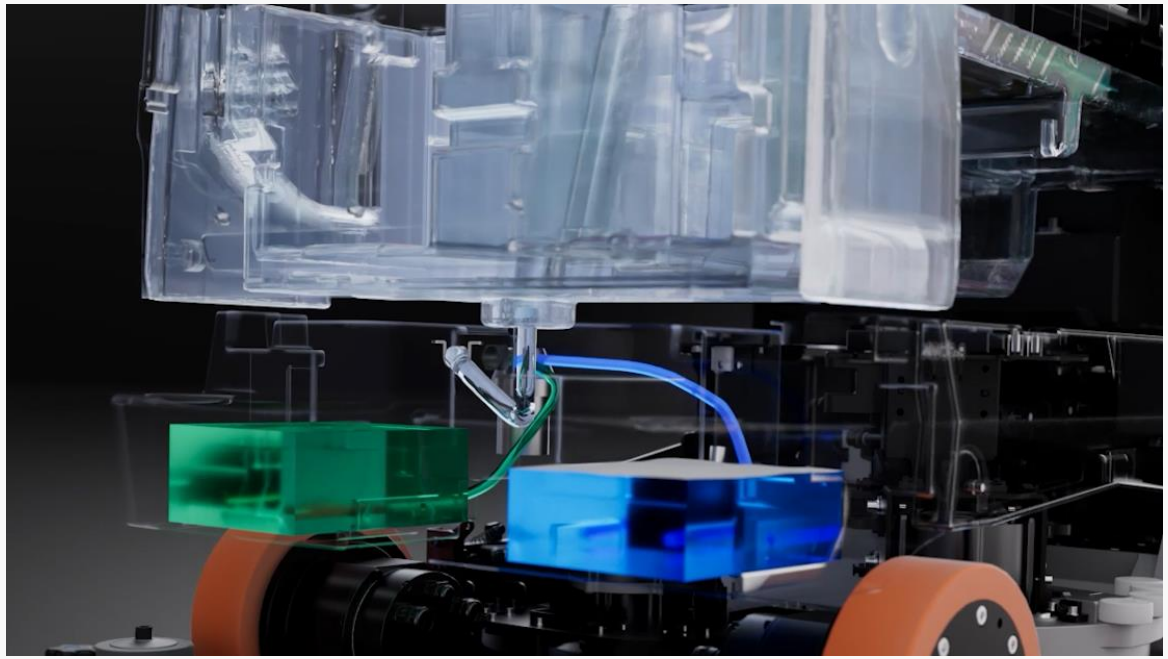


Upon detecting wet spills, it instantly retracts the sweeping modules(side brush, roller brush) to prevent secondary spreading.



For stubborn stains, it automatically boosts brush pressure & speed for a spotless, single-pass clean.

Magic Cleaning – AI Adaptation



Adaptive Cleaning Agents Mixing:

It automatically scales chemical intensity to match floor conditions, optimizing cleaning performance while reducing consumption.

Magic Cleaning – Summon Cleaning



Teamwork makes the clean work

- Smart Detection: Real-time stain recording.
- Seamless Handover: Automatic task dispatching between robots.
- Total Coverage: From sweeping large debris to scrubbing stains.

Magic Cleaning – Others

Stain Heat Map



Generate the heat map based on the accumulation of garbage detected in each cleaning task.

Ultra Spot Cleaning



Quickly clean areas with a higher probability of staining based on the historical data of the stain heat map.

Magic Cleaning – Others

Cleaning Effect Map



Record stubborn stains such as adhesive marks and chewing gum that cannot be completely cleaned in each cleaning task.

Guided Cleaning





AI Smart Re-cleaning

How to understand AI-Native Cleaning Robot?

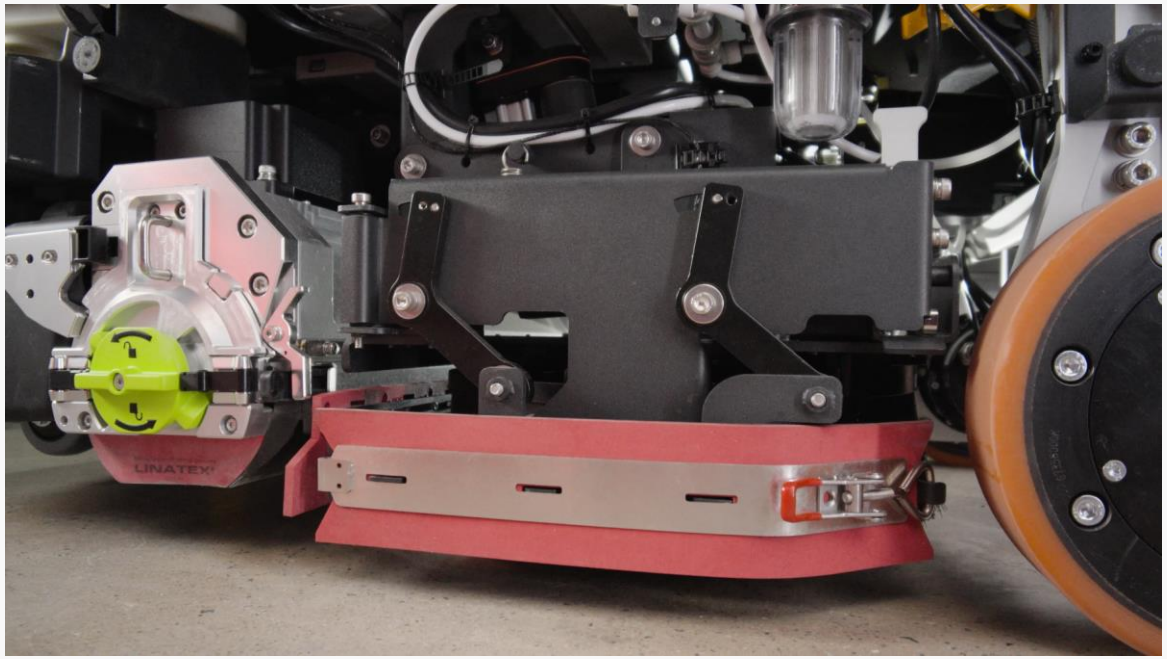
AI-Native Cleaning Skills = Precise Execution **"Hardware Freedom" x** Ever-evolving **"AI Versatility "**

- AI Cleaning Mechanism Adaptive
- AI Adaptive Cleaning Agent Mixing
- AI Spot Cleaning
- Stain Heatmap
- Cleaning Effect Map
- Summon Cleaning
- Guided Cleaning
- Ultra Spot Cleaning
- ……

- Front (Strong) Sweep, Rear Scrub
- Disc Brush Independent Lifting & Control
- Roller Brush Independent Lifting & Control
- Disc Brush Extendable Edge Cleaning
- Dual Cleaning Agent Real-time Automatic Mixing
- Front and Rear AI Cameras & VSLAM Cameras

- Trash/Stain Recognition Capability
- Cleaning Effect Detection Capability
- 3D VSLAM
- Automatic Edge-Cleaning
- Vehicle Recognition and Perception
- ……

Quick and Convenient Maintenance



World's First

Cleaning robot with automatic disc brush installation, making it the world's first truly user-friendly cleaning robot for cleaning staff.

24H Fully Automatic Cleaning



The all-in-one station automates refilling, drainage, and charging, ensuring 24/7 mission-readiness. By closing the loop between task execution and maintenance, the system prevents residue buildup and odors, achieving a seamless, zero-intervention workflow.

Human-Machine Interaction

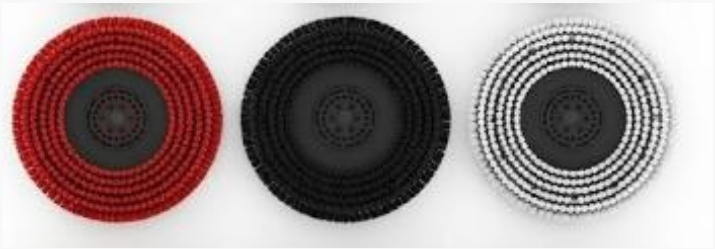


Audio-Visual Alarm System

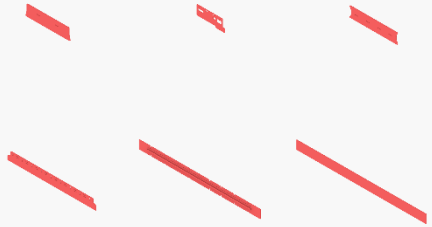


Ride-on Mode

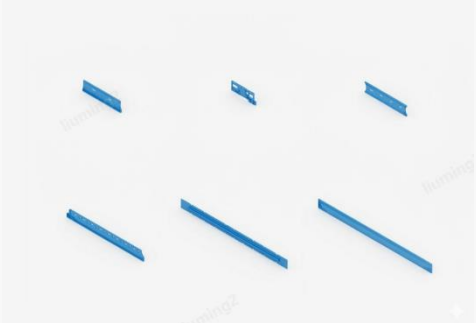
Core Consumables & Optional Accessories



Scrubbing Disc Brush



Rubber Blade



Rubber Blade
(Oil-resistant)



Scouring Pad

- Ride-on Kit
- Dust Mop Assembly

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IoT



Elevator Control



Automatic door/gate



Pudulink App

World's first AI-Native Large Scrubber-Dryer Robot



One-Pass
Sweep & Scrub



Extendable
Edge Cleaning



Instant, User-friendly
Maintenance



AI Magic Cleaning



3D Perception
Enhancement



24/7
Continuous Operation

CONTENT

About BG1 Series

Key Features

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About PUDU

Retail Examples

- **L1: Retail**
  - ○ Department stores and supermarkets
  - ● Warehouse supermarkets
  - ○ DIY/home improvement supermarkets
  - ○ Commercial complexes
- **Scenario segmentation**
  - Fresh food area
  - Shelf area
  - Aisle

BG1 Task High-frequency scrubbing + edge cleaning

★ BG1 Fits Core Value:

- **Anti-slip and instantly dry,** wet and dry waste cleaned in one pass
- **Edge cleaning,** perfectly covers shelf edges

One-Pass Sweep & Scrub
Wet and dry waste cleaned in one go

55cm
Ultra-wide scrubbing width

External Edge Cleaning
Active external expansion

AI Adaptive Cleaning/ Spot Cleaning
Cleaner, more efficient





Industrial Manufacturing Examples

- **L1: Industry**
  - ○ Food manufacturing
  - ● Chemical manufacturing
  - ○ Beverage manufacturing
  - ○ Chemical products manufacturing
- **Scenario segmentation**
  - Workshop area
  - Workshop aisle
  - Office area

BG1 Task **Deep cleaning + edge and corner cleaning**

★ BG1 Fits Core Value:

- **Oil stain cleaning:** dual disc brush powerful scrubbing, free detergent ratio, flexible switching
- **Floor protection:** One-Pass sweep & scrub, debris cleaning

One-Pass Sweep & Scrub
One pass, double clean

Dual Disc Brush
Ultimate stripping

Dual Cleaning Agent Tanks
High-precision real-time mixing

AI Adaptive Cleaning/ Spot Cleaning
Cleaner, more efficient





Warehouse Logistics Examples

- **L1: Logistics**
  - ○ Raw material warehousing
  - ● FMCG warehousing
  - ○ 3PL warehousing
  - ○ Cold chain warehousing
- **Scenario segmentation**
  - Sorting area
  - Warehouse shelf area
  - Office area

BG1 Task **Large-area cleaning operations**

★ BG1 Fits Core Value:

- **24H cleaning:** non-stop cleaning
- **Efficient cleaning:** timed cleaning with ease
- **Floor protection:** One-Pass sweep & scrub, debris cleaning

90Ah
Equivalent 24V platform 180Ah

75L/60L
Large clean/dirty water tanks

7.5h
Maximum run-time

One-Pass Sweep & Scrub
One pass, double clean





Parking Garage Examples

- **L1: Real Estate & Property Services**
  - ○ Property & Facilities Management
  - ● Residential & office real estate
  - ○ Cleaning Service
- **Scenario segmentation**
  - Lobby area
  - **Basement area**
  - Office area

BG1 Pro Task **Lane and parking space cleaning**

★BG1 Pro Fits Core Value:

Clean and protection: dual disc brush, high pressure, powerful scrubbing

Safe, no collision: vehicle recognition

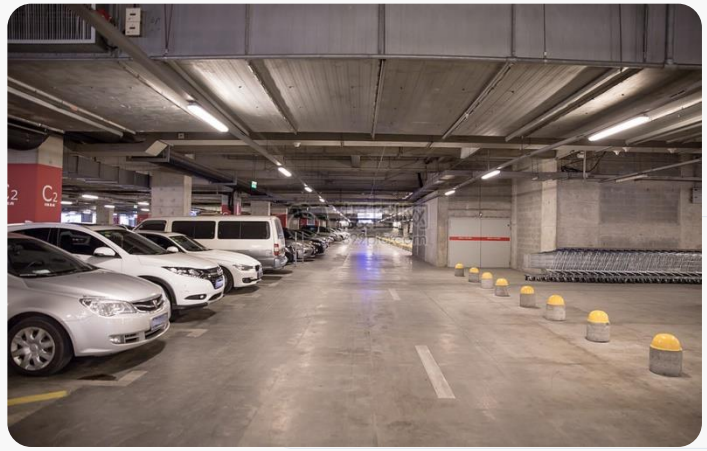
Large-area cleaning: large size, large capacity, and deep scrubbing

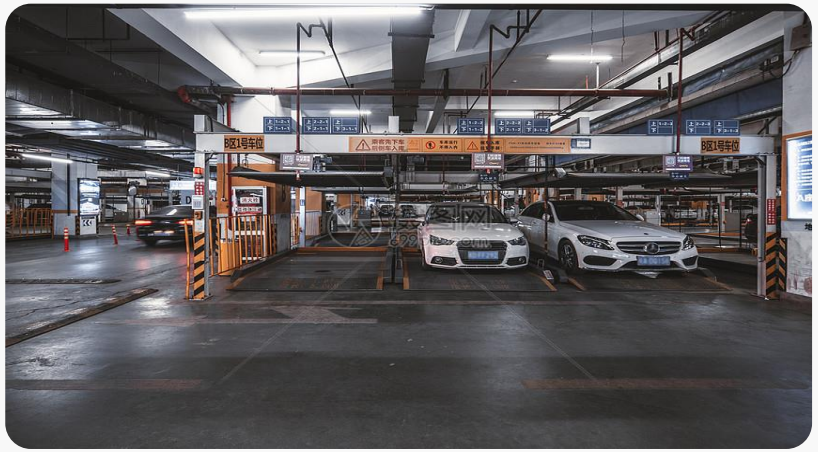
31Kg
Ultimate dirt stripping capability

One-Pass Sweep & Scrub
One pass, double clean

> 10000m²+
Maximum single operation area

Vehicle Avoidance
3D Lidar





BG1 Series Target Market

Retail **Core consumption scenarios, high traffic, high standard cleanliness**



Warehouse Supermarkets



DIY/Home Improvement Supermarkets



Floral & Gardening Markets



Department Stores & Supermarkets



Comprehensive Food Supermarkets



Shopping Centers



Underground Parking Garage



Electronics & Appliances Supermarkets



Stationery & Sports Goods Retail



Auto Repair Shop

Logistics **High-speed turnover scenarios, large area, fully automated operation**



Raw Material Warehousing



FMCG Warehousing



Cold Chain Warehousing



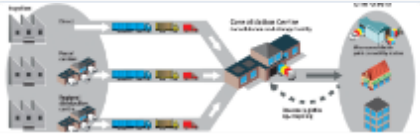
Electronics & Appliances Warehousing



3PL Warehousing



Constant Temperature & Humidity Warehousing



Consolidation Center



Distribution Center



Transit Center

BG1 Series Target Market:

Industry — **Harsh working conditions and professional cleaning services**



Food & Beverage Manufacturing



Computer & Electronics Manufacturing



Chemical Manufacturing



Plastic Product Manufacturing



Basic Pharmaceutical Manufacturing

Real Estate & Property Services — **professional cleaning services**



FM Companies



Cleaning Service Companies



Municipal Building

Transportation, Residential, Hospital, Hotel, and Public Services, etc. — **Extensive scenario coverage, full area cleaning**



Parking Lot



Expressway Service Area



Subway Station



Airport



Stadium



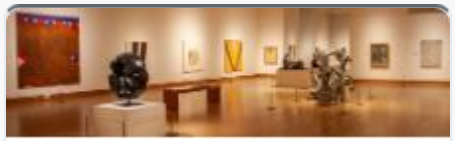
Aquarium



General Hospital



Resort



Museum

more industries...

Select the most suitable cleaning robot

Scrubbing



BG1 Pro: World's first AI-native Large Scrubber-Dryer Robot Pro
Best for: Parking lots and other large-area deep cleaning



BG1: World's first AI-native Large Scrubber-Dryer Robot
Best for: 2500~10000+㎡ cleaning area, stubborn stain removal



CC1 Pro: World's first AI-native medium-sized floor Scrubbing robot
Best for: 500-2500㎡ cleaning area, stubborn stain removal



CC1: World's first 4-in-1 medium-sized cleaning robot
Best for: 500-1500㎡ cleaning area, light to moderate stain removal



SH1: Multifunctional compact floor scrubber with powerful cleaning capability
Best for: Small scenarios such as restaurants and restrooms

Sweeping



MT1: World's first AI-native sweeping robot
Best for: Suitable for 500-20000㎡ ultra-large indoor areas, easily sweeps all types of large debris.



MT1 Max: World's first AI-native complex scenario sweeping robot
Best for: 500-20000㎡ parking lots, outdoor and other complex scenarios, easily sweeps all types of large debris.

Carpet Vacuuming



CC1: World's first 4-in-1 medium-sized cleaning robot
Best for: 500-2000㎡ carpeted areas, easy daily carpet vacuuming



MT1 Vac: World's first AI-native large-area dry cleaning robot
Best for: 500-15000㎡ large carpeted areas, efficient and thorough vacuuming.

Hard Floor Dust mopping/ Vacuuming



MT1 Vac: World's first AI-native large-area dry cleaning robot
Best for: 500-15000㎡ indoor hard floors, easy dust mopping and vacuuming.

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About PUDU

About US

Pudu Robotics, a global leader in the service robotics sector, is dedicated to enhancing human productivity and living standards through innovative robot technology, with a mission to serve 10 billion people worldwide.

With a focus on R&D, manufacturing, and sales of service robots, PUDU emphasizes three core technologies: mobility, manipulation, and artificial intelligence. PUDU has taken the lead in establishing a comprehensive range of specialized, semi-humanoid, and humanoid robotic products in the industry.

Currently, PUDU offers four product lines: service delivery robots, commercial cleaning robots, industrial delivery robots and embodied intelligent robots, which are deployed across ten major industries, including food and beverage, retail, hospitality, healthcare, entertainment and sports, industrial facilities, education, and more. To date, Pudu Robotics has successfully shipped over 120,000 units to a variety of markets, with a presence in more than 1,000 cities across 80+ countries and regions worldwide.



* Relevant statistics as of Jan 2026

Global Footprint



80+ Countries and Regions Covered

1,000+ Cities Covered

700+ Global Distributors

800+ Total Employees

* Relevant statistics as of Sep 2025

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

Revolutionizing Ten Major Industries with Smart Robotic Solutions



Food & Beverage



Hospitality



Retail



Warehousing & Logistics
& Industrial Facility



Health Care



Real Estate & Property Services



Education



Entertainment & Sport



Transportation and Related
Service



Public Service



Thank You

PUDU Robot Official WeChat

PUDU Robot Official

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