PUDU BG1 Series

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



roboplanet

PUDU

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.



One-Pass Sweep& Scrub

Combine sweeping and deep scrubbing into one efficient workflow. Featuring smart dosing, superior down pressure, and an ultra-wide path clearance to cover more ground in less time.

550 mm Cleaning Width
Max. 6000 m²/h Cleaning Efficiency
Max. 7.5H Long Battery Life
75 L+ 60 L Water Tank
Min. 850 mm Path Clearance



3D Perception Enhancement

The BG1 Series maps accurately and dodges obstacles in real time. It ensures reliable, efficient cleaning - even in dark, high-ceiling, or high-interference environments.

3D VSLAM + LiDAR + Multi-sensor fusion



AI Magic Cleaning

AI-Driven Adaptive Mechanism

Upon detecting wet spills, it instantly retracts the sweeping modules to prevent secondary spreading. For stubborn stains, it automatically boosts brush pressure for a spotless, single-pass clean.

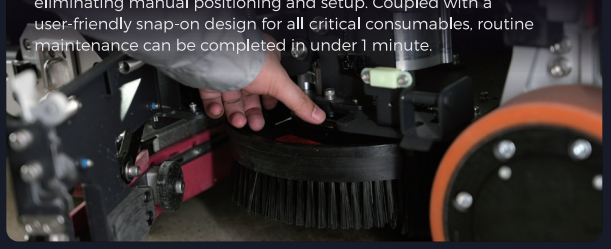
AI-Driven Auto-dosing System

7 L tanks with milliliter-level accuracy. It automatically scales detergent strength to match floor conditions, maximizing cleaning impact while minimizing waste.



Instant, User-friendly Maintenance

The PUDU BG1 Series features automatic disc-brush attachment, eliminating manual positioning and setup. Coupled with a user-friendly snap-on design for all critical consumables, routine maintenance can be completed in under 1 minute.



24/7 Continuous Operation

The all-in-one station automates refilling, drainage and charging, ensuring 24/7 mission-readiness.





Human-Robot Interaction

Ride-on Mode: Deploy the platform for instant manual control. It accelerates site mapping and long-distance transitions, ensuring rapid response to unforeseen situations beyond autonomous operation.

	PUDU BG1	PUDU BG1 Pro
Battery Capacity	90 Ah (48V platform, equivalent to 180 Ah at 24V)	90 Ah (48V platform, equivalent to 180 Ah at 24V)
Charging Time	Automatic Voltage Detection: High voltage (AC≥180V): approx. 3 h Low voltage (AC≤180V): approx. 4.5 h	Automatic Voltage Detection: High voltage (AC≥180V): approx. 3 h Low voltage (AC≤180V): approx. 4.5 h
Run-time	Sweeping & Scrubbing: Max. 7.5 h	Sweeping & Scrubbing: Max. 7.5 h
Weight	approx. 344 kg	approx. 344 kg
Dimensions	1195x760 x 1303 mm (with squeegee) 1120x660 x 1303 mm (without squeegee)	1195x760 x 1303 mm (with squeegee) 1120x660 x 1303 mm (without squeegee)
Navigation Methods	Lidar + 3D VSLAM Fusion Positioning	3D Lidar + 3D VSLAM Fusion Positioning
Cruise Speed	0.2~1.0m/s	0.2 ~ 1.2 m/s
Cleaning Width	550 mm / 708 mm (with side brushes)	550 mm / 708 mm (with side brushes)
Cleaning Performance	Covered Cleaning Mode: Max. 2000 m²/h Spot Cleaning Mode: Max. 6000m²/h	Covered Cleaning Mode: Max. 2000 m²/h Spot Cleaning Mode: Max. 6000m²/h
Tank Group Capacity	Trashbin：5L, Clean Water Tank：75L, Waste Water Tank：60L Detergent Tank：Dual Detergent Tanks, total approx. 7 L	Trashbin：5L, Clean Water Tank：75L, Waste Water Tank：60L Detergent Tank：Dual Detergent Tanks, total approx. 7 L