

BG1

AI-Native Large Scrubber-Dryer Robot



The PUDU BG1 Series is an AI-native large scrubber-dryer robot designed for efficient, large-scale cleaning. Powered by an ultra-wide FOV and AI vision, the BG1 detects and targets messes in real-time and enables high-efficiency, continuous cleaning in various industrial and commercial environments.

Features



**One-Pass
Sweep & Scrub**



**Extendable
Edge Cleanng**



**User-Friendly
Maintenance**



**AI Magic
Cleaning**



**3D Perception
Enhancement**



**24/7 Continuous
Operation**

A Closed-Loop Cleaning Solution



One-Pass Sweep & Scrub

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



AI-Native Adaptive Cleaning

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.



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.



24/7 Continuous Operation

The all-in-one station automates refilling, drainage, and charging, ensuring 24/7 readiness. The automated system prevents residue buildup and odors, improving workflows.

Product Specifications

Feature	PUDU BG1	PUDU BG1Pro
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 $\geq$ 180V): approx. 3 h Low voltage (AC $\leq$ 180V): approx. 4.5 h	Automatic Voltage Detection: High voltage (AC $\geq$ 180V): approx. 3 h Low voltage (AC $\leq$ 180V): approx. 4.5 h
Run-time	Sweeping & Scrubbing: Max. 7.5 h	Sweeping & Scrubbing: Max. 7.5 h
Weight	approx. 758 lbs	approx. 758 lbs
Dimensions	47.0 x 29.9 x 51.3 in (with squeegee) 44.1 x 25.9 x 51.3 in (without squeegee)	47.0 x 29.9 x 51.3 in (with squeegee) 44.1 x 25.9 x 51.3 in (without squeegee)
Navigation Methods	Lidar + 3D VSLAM Fusion Positioning	3D Lidar + 3D VSLAM Fusion Positioning
Cruise Speed	0.66 ~ 3.28 ft/s	0.66 ~ 3.94 ft/s
Cleaning Width	21.65 in / 27.87 in (with side brushes)	21.65 in / 27.87 in (with side brushes)
Cleaning Performance	Covered Cleaning: Max. 21,528 ft ² /h Spot Cleaning Mode: Max. 64,583.4 ft ² /h	Covered Cleaning: Max. 21,528 ft ² /h Spot Cleaning Mode: Max. 64,583.4 ft ² /h
Tank Group Capacity	Trashbin: 1.32 Gal (US) Clean Water Tank: 19.81 Gal (US) Waste Water Tank: 15.85 Gal (US) Detergent Tank: Dual Detergent Tanks, total approx. 1.85 Gal (US)	Trashbin: 1.32 Gal (US) Clean Water Tank: 19.81 Gal (US) Waste Water Tank: 15.85 Gal (US) Detergent Tank: Dual Detergent Tanks, total approx. 1.85 Gal (US)



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.



User-Friendly Maintenance

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.



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.

Contact us

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