

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





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.



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



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.



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.

21.65 in Cleaning Width

Max. 64,583.4 f/h Cleaning Efficiency

Max. 7.5H Long Battery Life

19.81 + 15.85 Gal Water Tank

Min. 33.5 in Path Clearance



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

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



24/7 Continuous Operation

The all-in-one station automates refilling, drainage, charging, and tank self-cleaning, 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. 758 lbs	approx. 758 lbs
Dimensions	47.0x29.9 x 51.3 in (with squeegee) 44.1x25.9 x 51.3 in (without squeegee)	47.0x29.9 x 51.3 in (with squeegee) 44.1x25.9 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 ft²/h Spot Cleaning Mode: Max. 64,583.4 ft²/h	Covered Cleaning: Max. 21,528 ft²/h Spot Cleaning Mode: Max. 64,583.4 ft²/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)