

# PUDU MT 1

Al Powered Robotic Sweeper

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# PUDU MT 1

#### AI Powered Robotic Sweeper

PUDU MT 1 is the world's first AI-powered sweeping robot designed for large-scale environments, delivering exceptional performance and comprehensive cleaning capabilities. With cleaning results rivaling ride-on sweepers, it is dedicated to providing users with an efficient and seamless cleaning experience. Equipped with an industry-leading multi-sensor fusion AI visual recognition system, MT 1 effortlessly enables 24/7 autonomous operation, setting a new standard in the cleaning industry revolution.



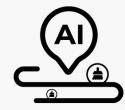
### **Key Features**



No Debris Too Big or Small



AI Trash Recognition



Al Spot Cleaning



Rapid Adaptation to Changing Environments



24/7 Continuous Operation



User-Friendly Design

#### **Product Introduction** VSLAM Camera RGBD Lidar Handle **RGB** Sensor PUDU MTT RGBD Line Laser RGBD Fill Light Stop Button Power Button **Bumper Sensor** Trash-bin 10-inch Screen Side Brush Side Brush Trash-bin Draw Bar

### **Product Specifications**

Robot Dimensions(L×W×H)	840mm × 600mm × 490mm (31.5 in*23.6 in*19.3 in)	
Robot Weight	65 kg (143 lbs)	
Cleaning Performance	Max. 1800m <sup>1</sup> /h (Standard Cleaning Mode), Max. 6000m <sup>1</sup> /h (Spot Cleaning Mode) Max. 19375.04 ft <sup>2</sup> /h (Standard Cleaning Mode), Max. 64583.46 ft <sup>2</sup> /h (Spot Cleaning Mode)	
Trash Bin Capacity	35 L (1.2 ft <sup>3</sup> )	
Battery Capacity	45Ah	
Run-time	4-8h (differentiated by cleaning levels )	
Cruise Speed	0.2 m/s ~ 1.2 m/s (0.66 ft/s–3.94 ft/s) (adjustable)	
Charging Time	< 3h	
Navigation Method	VSLAM+Marker+Lidar SLAM	
Path Clearance	Minimum 75cm (29.53 inches)	Sec.
Cleaning Width	70cm (27.56 inches)	

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## No Debris Too Big or Small

### 35L Trash-bin Capability 70cm Practical Cleaning Width

The dual-disc brushes easily handle larger debris like leaves and bottles, while efficiently sweeping up fine dust and dirt to ensure no small particles are left behind.

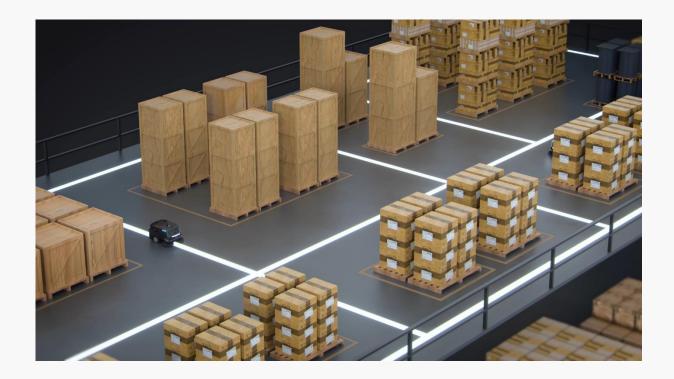


### **Active Dust Control**

Utilizes high-flow negative pressure ventilation and an efficient filter to trap particles in the debris box, effectively preventing secondary pollution.

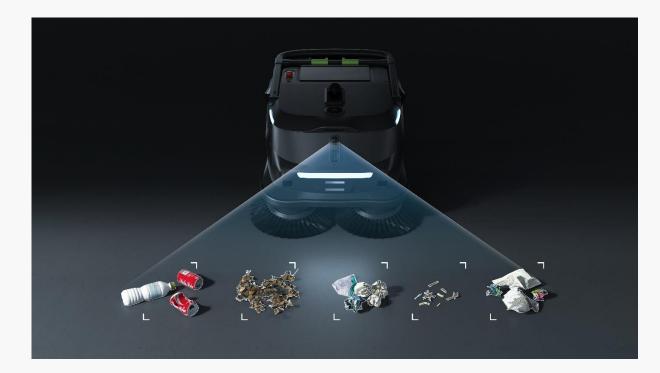


### **Designed for Big Venues**



It's designed to tackle areas exceeding 100,000 square meters with professional-grade dry cleaning.

### **AI Visual Trash Recognition**



The PUDU MT 1 is equipped with AI cameras that can recognize and identify various types of trash in real time, continually learning and evolving through deep learning and database updates.

PUDU MT1

## **AI Spot Cleaning**

#### **5x Efficiency Increase**

Targeted and Precise: the PUDU MT 1 features an ultra-wide scanning field of view, effortlessly covering large areas. During the routine patrols, it accurately detects and efficiently cleans up waste, making cleaning smarter and more convenient.



### **Seamless Adaptation to Dynamic Environments**

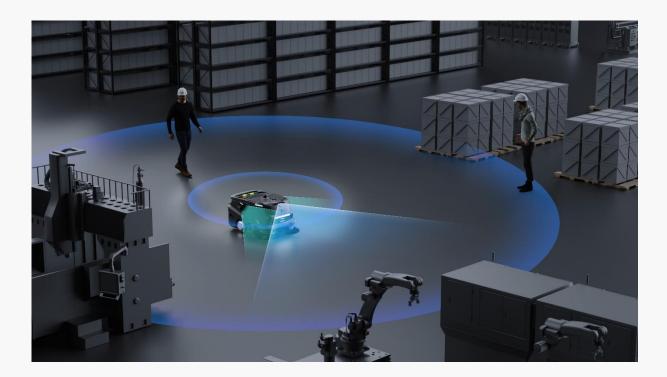


#### Lidar SLAM + VSLAM Integrated positioning: The PUDU MT 1 ensures flexible and

adaptive operation, quickly adjusting to dynamic environments.

### **Multi-sensor for All-around Protection**

Equipped with three-dimensional depth perception and multi-sensor fusion, the MT I navigates complex spaces smoothly, avoiding collisions and ensuring clear paths without blockages.



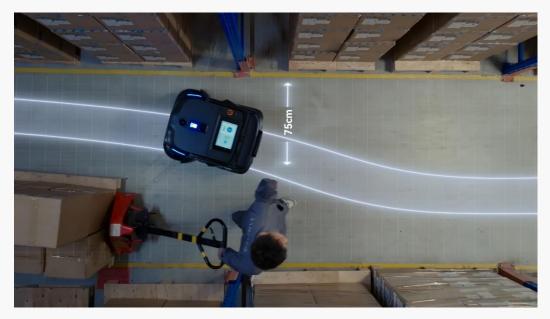
### **Manual & Automatic Integration**



Extendable Steering Handle: This feature is particularly useful for manual intervention, allowing staff to effortlessly transition the robot between areas.

## **Superior Mobility**

Boasting an exceptional 75cm path clearance, the PUDU MT1 ensures agile maneuverability in narrow human-robot cohabited spaces, effortlessly overcoming 20mm thresholds and 35mm grooves.



The PUDU MT 1 excels at close-edge cleaning, ensuring it hugs walls and corners tightly for thorough coverage without leaving gaps. Its precise sensors allow for accurate, efficient edge cleaning in all environments.



### **Modular Design**



#### Quick-release Design:

Trash-bin and other cleaning consumables feature quick-release modular designs for easy maintenance and replacement.

## 24/7 Continuous Operation



3h Fast Charging With its long run-time, fast charging, and automated docking, the PUDU MT 1

operates 24/7, completing three full-charge cycles per day to ensure continuous, roundthe-clock cleaning.

## **IOT Capabilities**



The PUDU MT 1 integrates with IoT devices, interacting with elevators, gates, and other infrastructure for multi-floor cleaning. Remote monitoring via apps and PC interfaces provides real-time updates, visualized cleaning reports, and notifications when the trash is full, ensuring efficient management.



PUDU Link (App)



**Elevator Control Module** 



**E-gate Control Module** 

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Home Improvement Retail



Warehouse and Logistics



Processing and Manufacturing



Public Transportation



Shopping Mall



### **Product Value**

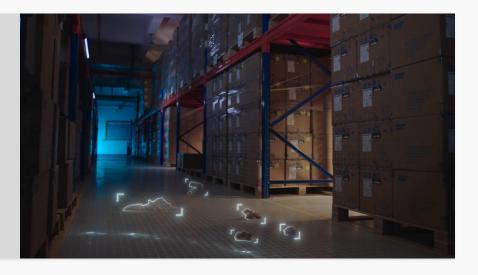


#### **Increases Overall Cleaning Efficiency**

The PUDU MT1 handles various debris sizes, from fine dust to larger fragments, reducing cleaning time and the need for manual intervention. Its continuous operation capability ensures large areas are thoroughly cleaned, keeping environments always tidy.

#### Intelligent Trash Recognition for Precision

With AI-powered trash detection, the PUDU MT1 automatically identifies and categorizes different types of debris, ensuring precise cleaning. This reduces missed spots and unnecessary overlaps, optimizing the cleaning process.

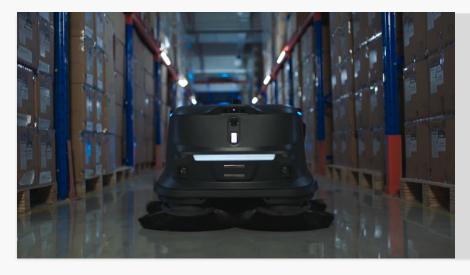


### **Product Value**

#### Adapts to Changing Environments

The robot's ability to quickly adjust to dynamic environments makes it highly adaptable. Whether in factories, malls, or airports, it navigates complex settings effortlessly, ensuring uninterrupted and efficient cleaning in any scenario.





#### 24/7 Autonomous Operation to Reduce Labor Costs

With round-the-clock autonomous operation, the robot performs cleaning tasks independently, significantly cutting down on the need for human intervention. This makes it ideal for large commercial spaces, greatly reducing operational and labor costs.

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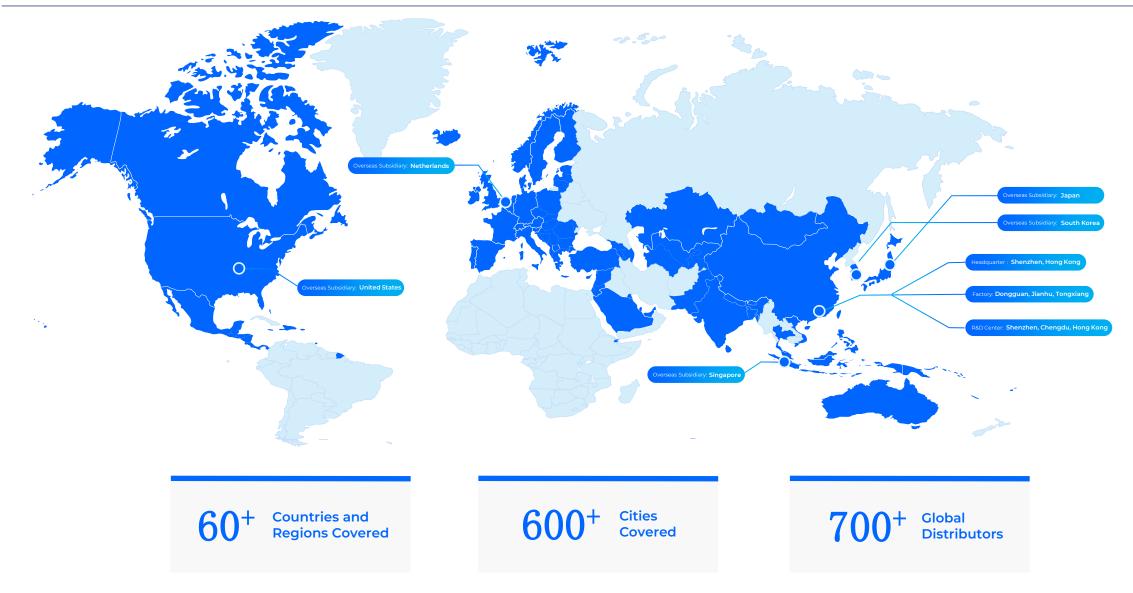
#### **About US**

Pudu Robotics, a global leader in the service robotics sector, is dedicated to enhancing human productivity and living standards through innovative robot technology.

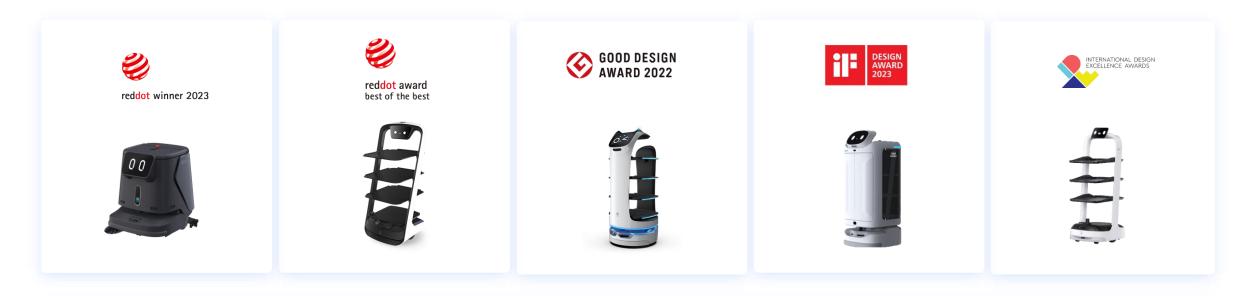
With a focus on R&D, manufacturing, and sales of service robots, Pudu Robotics holds nearly a thousand authorized patents worldwide, encompassing a wide range of core technologies. The company's robots have been widely adopted in various industries, including dining, retail, hospitality, healthcare, entertainment, education and manufacturing. To date, Pudu Robotics has successfully shipped nearly 80,000 units to a variety of markets, with a presence in more than 60 countries and regions worldwide.



#### **Global Footprint**



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





#### **Revolutionizing Ten Major Industries with Smart Robotic Solutions**







Hospitality

Education

Retail



Industrial Facility



Health Care



Residential and Office Buildings



Entertainment & Sport



Transportation and Related Service



**Public Service** 

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