IMEC®

AI ROBOTIC

YOUR **AI** HYGIENE PARTNER

AI CLEANING ROBOTIC   AI DELIVERY ROBOTIC   AI LOGISTIC ROBOTIC

PUDU FLEET MANAGEMENT

- Multi-Robot Coordination
- Performance Analytics
- Energy Intelligence
- Traffic Management
- Task Dispatching & Scheduling
- Remote Control & Configuration

GS FLEET MANAGEMENT

- Remote Control & Configuration
- Multi-Robot Collaboration
- Cloud-Based Reporting
- Real-Time Monitoring
- Centralized Control Panel
- Task Dispatching & Scheduling

ECOBOT COMPARED WITH MANUAL CLEANING

TO CLEAN 4,000 SQM DAILY FOR 1 MONTH

HUMAN + EQUIPMENTS

660 HOURS
MANUAL OPERATION

75 HOURS DOWNTIME

HUMAN + MACHINE

45 HOURS
MANUAL OPERATION

195 HOURS DOWNTIME

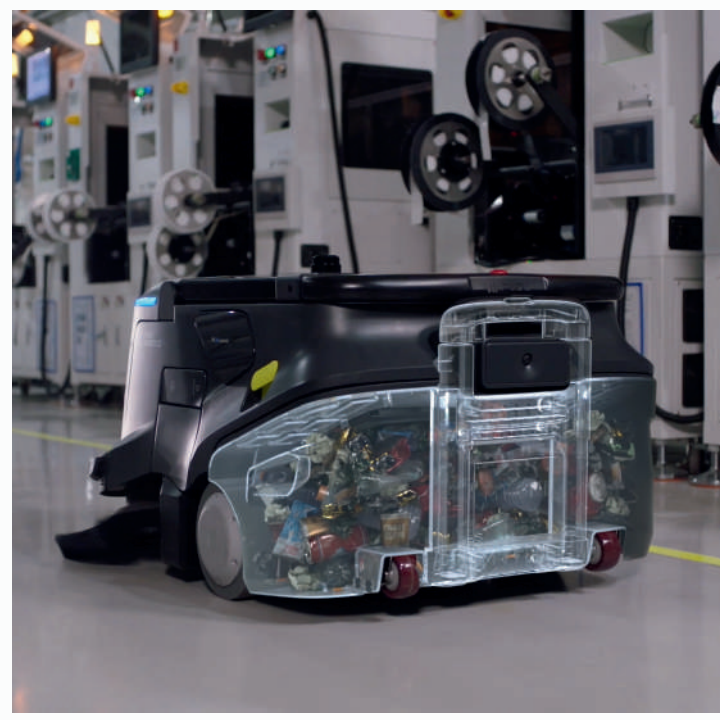**IMEC ROBOTIC**

75 HOURS
MANUAL OPERATION

50 HOURS DOWNTIME

AUTONOMOUS OPERATION (NO MAN-HOURS REQUIRED)

MANUAL OPERATION (MAN REQUIRED)
DOWNTIME (MAN REQUIRED FOR MAINTENANCE)

Commercial & Industrial Cleaning Robots

Ensuring thorough and consistent cleanliness with intelligent automation and transparent performance results.

IMEC PHANTAS
Compact but Comprehensive

All-in-one Floor Cleaning
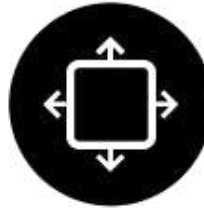Integrates vacuuming, scrubbing sweeping, dust mopping

Zero Distance from Edge
Able to clean along the edges zero distance-close, leaving the edges spot-free

Floor Type Recognition
Identifies flooring types and automatically adjusts brush height to protect flooring materials

Strong Passability
Effortlessly passes through and cleans narrow aisles and under-table areas

Auto Spot Cleaning*
Autonomously performs spot cleaning where waste is detected, bringing up to 4X efficiency improvement
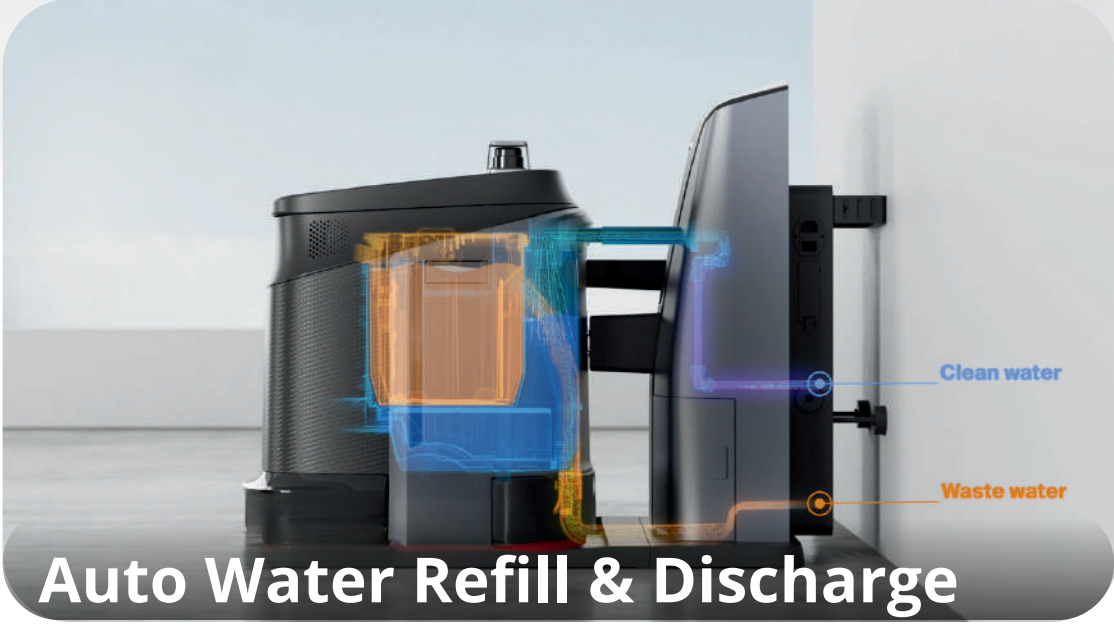
Smart Integrated Handle
Automatic mode shift (Auto/Manual) via handle position detection, and effortless control with power assistance and superb durability

Compactly Designed

Auto Water Refill & Discharge

Clean water

Waste water

Mobile Tank

Seamless Auto/Manual Mode Transitions

Auto Water Refill & Discharge

Charging Dock

Workstation

ISSA SHOW 2022 INNOVATION AWARDS — INNOVATION OF THE YEAR

MIDDLE EAST CLEANING, HYGIENE & FACILITIES AWARDS

2023 SANITARY MAINTENANCE Distributor Choice Award WINNER

Specification

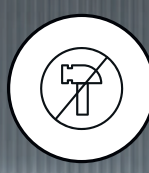|					
Product code	200-GSPT	**Cleaning coverage**	up to 3,000 m²/h	**Voltage**	20V
Noise level	65 dB(A)	**Dust bag**	6L	**Battery**	Li-ion (24Ah)
Unladen weight	48KG	**Water tank / Recovery tank**	12L / 9L	**Battery life span**	Up to 2,000 cycles (full charge)
Dimension (cm)	54(L) x 44 (W) x 61.7	**Cleaning width**	75 cm	**Charging time**	1.5 hours
Gradeability	Up to 8º	**Brush Pressure** **Brush speed**	10 kg 50 rpm	**Suction power**	7kPa
Sensing system	LiDARs,3D Depth Cameras, RGB Camera Anti-drop Sensor,Anti -collision Sensor	**Brush type**	1- Side brush 2- Roller brush	**Avg.run-time**	Up to 5 hours

IMEC PUDU CC1

All in One , One for All

- Diversified Consumables
- Dynamic Space Perception
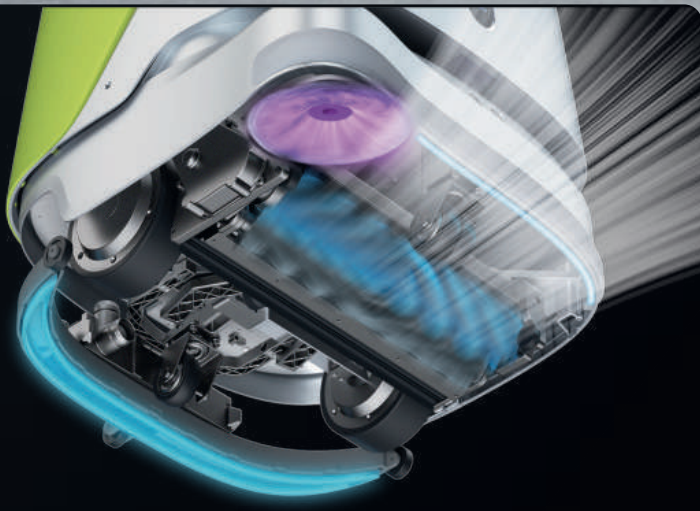- Auto Power Charging & Auto Water Addition and Drainage
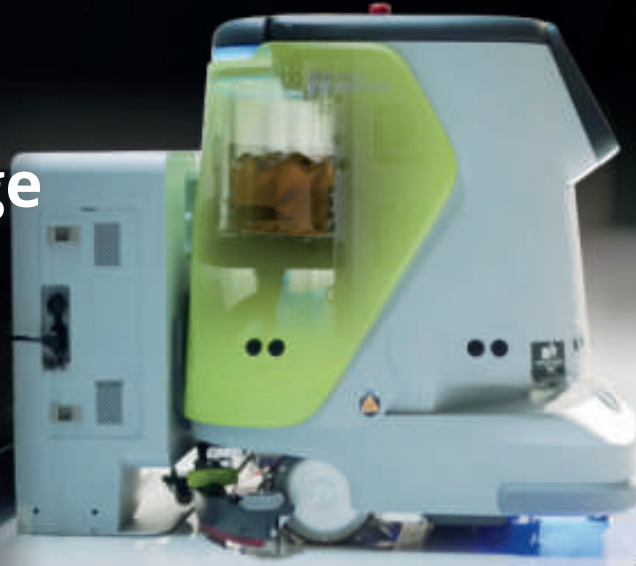- Mobile Water Tank No Plumbing Modification

Versatile Cleaning

Four-in-one cleaning robot. Sweeping, scrubbing, mopping & dust mopping

Auto Power Charging & Water Refill and Discharge

No manual intervention worry-free and labor-saving

Dynamic Space Perception

Ideal for environments that frequently change, with the ability to perform real-time route planning and intelligent touch-ups based on the current surroundings.

PUDU SLAM Navigation Solution

Supports both visual SLAM and laser SLAM to perform tasks more efficiently in complex scenarios.

Measurable Cleaning

Cleaning results are clearly visible in the automatically generated reports

Mobile Water Station | Compatible products | Charging Station | Docking Station

reddot winner 2023

Specification

Product code	200-1000-GRN	Cleaning coverage	up to 8,000m²/h	Voltage	24V
Noise level	70 dB(A)	Trash tray	2.5L	Battery	Li-ion (60Ah)
Unladen weight	75 KG	Water tank / Recovery tank	15L / 15L	Battery life span	2,000 cycles (full charge)
Dimension (cm)	63(L) x 62(W) x 66(H)	Cleaning width	up to 50 cm	Charging time	2.5 hours
Gradeability	Up to 8°	Brush Pressure Brush speed	18 kg 180 rpm	Suction power	17kPa
Safety system	Visual SLAM, Lidar SLAM	Brush type	1- Side brush 2- Roller brush	Run-time	Up to 6 hours

IMEC ECOBOT 50 PRO PLUS

Ai Robotic Deep Cleaning Scrubber

2 in 1 Cleaning
Integrating scrubbing & dust mopping

5-Stage Filtration System
Reducing around 80% of freshwater consumption

Superb Productivity
Say goodbye to wasted time and laborious cleaning routine with a cleaning efficiency up to 10,000 m²

Minimal Human Intervention
Optional workstation for self-docking power charging, water refill and discharge

Ergonomic Manual Mode
Easy manual operation - effortlessly walking and steering the machine with the ergonomic handle
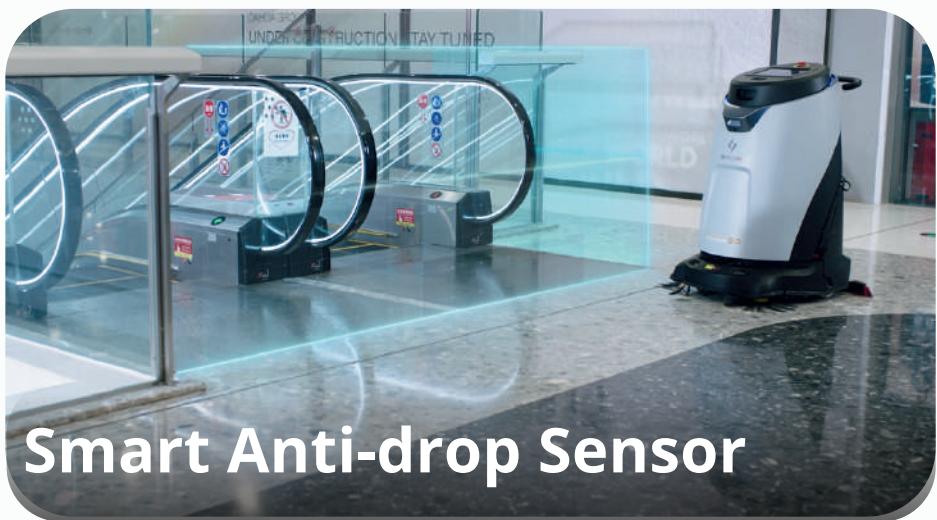
Auto Spot Cleaning*
Scanning the cleanliness of the nearby floor and autonomously performing spot cleaning where wastes are detected, bringing up to 4X efficiency improvement
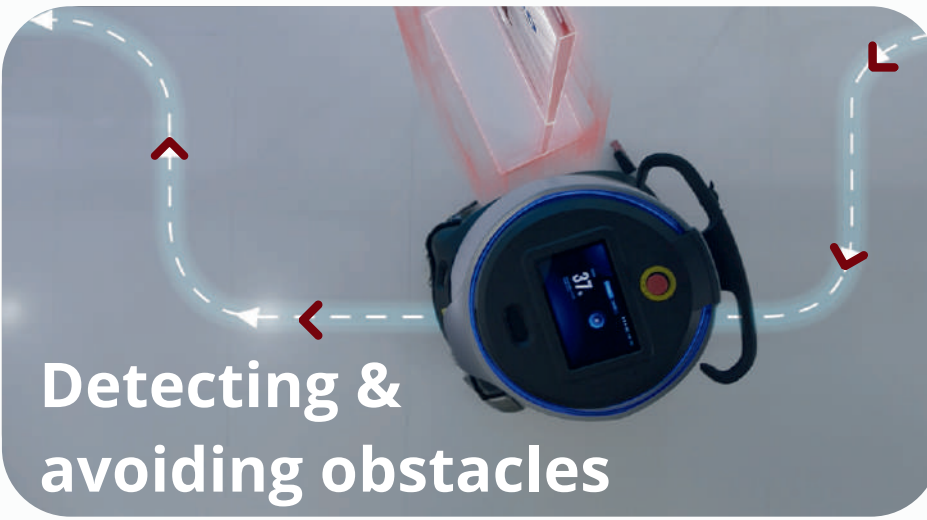
High Pressure Scrubbing

Advanced Navigation Engine

Smart Anti-drop Sensor

Detecting & avoiding obstacles

Charging Dock

Workstation

Specification

Product code	200-GS50-00	**Cleaning coverage**	Up to 10,000 m²	**Voltage**	24V
Noise Level	55 dB(A)	**Cleaning water tank**	30L	**Battery**	Li-ion (60Ah)
Unladen weight	155kg	**Recovery water tank**	15L	**Battery life span**	Up to 2,000 cycles (full charge)
Dimension (cm)	81 (L) X 70 (W) X 107 (H)	**Cleaning width/Suction width**	46 cm / 70cm	**Charging time**	1.5 hours
Gradeability	Up to 8°	**Brush pressure** **Brush speed**	25 kg 150 rpm	**Suction power**	24kPa
Safety system:	LIDAR, 3D Depth Camera, RGB Camera, Anti-Collusion Sensor	**Brush Type**	2- Disc brush	**Run-time**	Up to 6 hours

IMEC ECOBOT 50X PRO PLUS

Ai Robotic Floor Sweep - Scrub

3 in 1 Cleaning
Integrating sweeping, scrubbing & dust mopping

5-Stage Filtration System
Reducing around 80% of freshwater consumption

Superb Productivity
Say goodbye to wasted time and laborious cleaning routine with a cleaning efficiency up to 10,000 m²

Minimal Human Intervention
Optional workstation for self-docking power charging, water refill and discharge

Ergonomic Manual Mode
Easy manual operation - effortlessly walking and steering the machine with the ergonomic handle
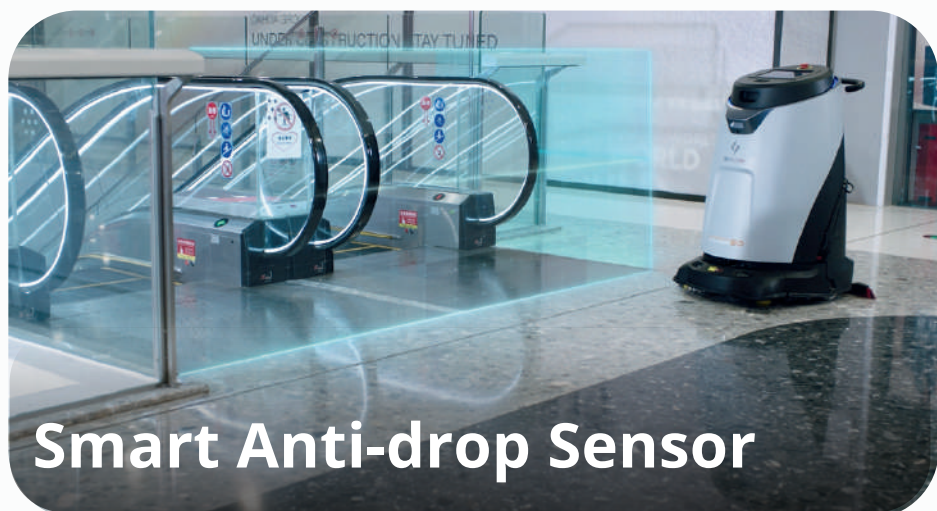
Auto Spot Cleaning*
Scanning the cleanliness of the nearby floor and autonomously performing spot cleaning where wastes are detected, bringing up to 4X efficiency improvement

Edge-to-Edge Cleaning
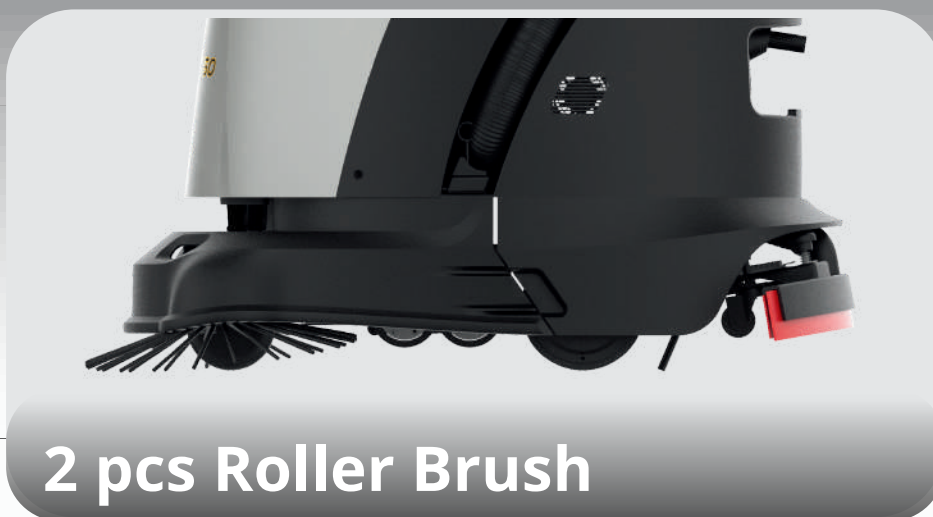
2 pcs Roller Brush

Smart Anti-drop Sensor

Auto Spot Cleaning

Charging Dock

Workstation

Specification

Product code	200-GS50X	Cleaning coverage	Up to 10,000 m²	Voltage	24V
Noise Level	55 dB(A)	Trash tray	5L	Battery	Li-ion (60Ah)
Unladen weight	128kg	Cleaning water tank Recovery water tank	30L 15L	Battery life span	Up to 2,000 cycles (full charge)
Dimension (cm)	81 (L) X 70 (W) X 107 (H)	Cleaning width/ Suction width	46 cm / 70cm	Charging time	1.5 hours
Gradeability	Up to 8°	Brush pressure Brush speed	18 kg 150 rpm	Suction power	24kPa
Safety system:	LIDAR,3D Depth Camera, RGB Camera, Anti-Collusion Sensor	Brush Type	2- Roller brush 2- Side brush	Run-time	Up to 6 hours

IMEC ECOBOT V40

Ai Robotic Commercial Vacuum

3 in 1 Cleaning
Integrating vacuuming, sweeping, dust mopping

Zero Distance from Edge
Able to clean along the edges zero-distance-close with side brushes and high-precision sensors
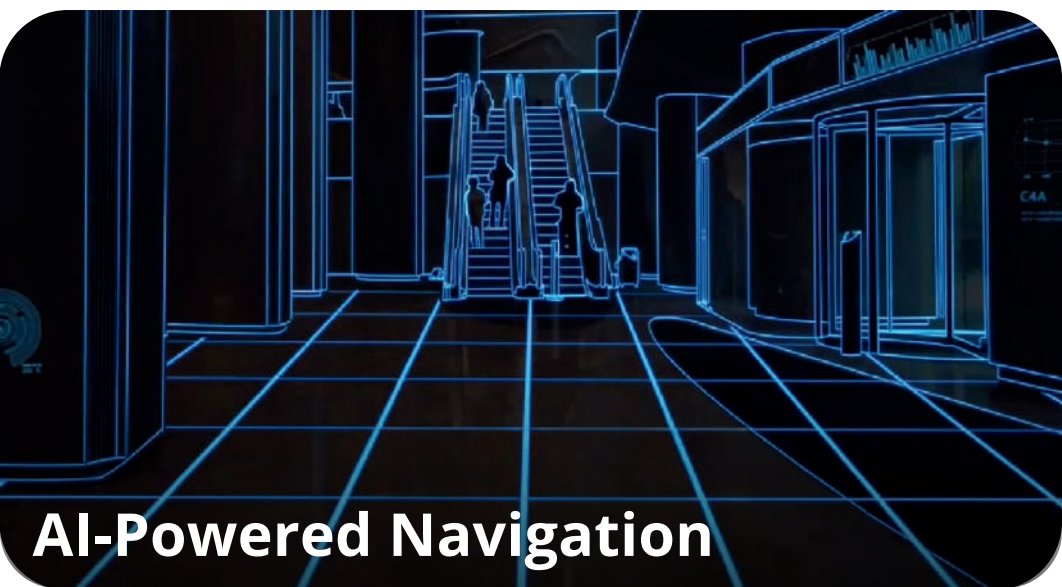
H13 HEPA Filter
Medical-grade air purifying capability

Adaptability
Working perfectly on varying flooring types, be it a hard surface, a low pile carpet or a high pile carpet

24 kPa Powerful Suction

Flexible Task Combination

Auto Recharge

Large-Capacity Performance

AI-Powered Navigation

Charging Dock

Specification

Product code	200-GS40	**Cleaning coverage**	up to 8,000 m^2/h	**Voltage**	24V
Noise level	55 dB(A)	**Dust bag**	12L	**Battery**	Li-ion (60Ah)
Unladen weight	80KG	**Trash tray**	2.5L	**Battery life span**	Up to 2,000 cycles (full charge)
Dimension (cm)	70 (L) X 72 (W) X 87.5 (H)	**Cleaning width**	40 cm	**Charging time**	1.5 hours
Gradeability	Up to 8°	**Brush Pressure** **Brush speed**	15 kg 120 rpm	**Suction power**	24kPa
Safety system	2D Lidar, 2D camera, long-range Lidar, secondary damage collision bumper sensor	**Brush type**	2- Side brush 2- Roller brush	**Run-time**	Up to 6 hours

IMEC PUDU MT1
Ai Robotic Sweeper
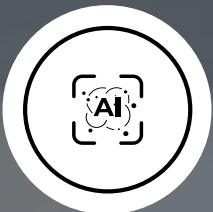
- **No Debris Too Big or Small**
- **AI Trash Recognition**
- **AI Spot Cleaning**
- **User-Friendly Design**
- **24/7 Continuous Operation**
- **Rapid Adaptation to Changing Environments**

No Debris Too Big or Small

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.

AI Trash Recognition

The PUDU MT1 uses AI cameras to identify trash in real time, continually improving through deep learning and database updates.
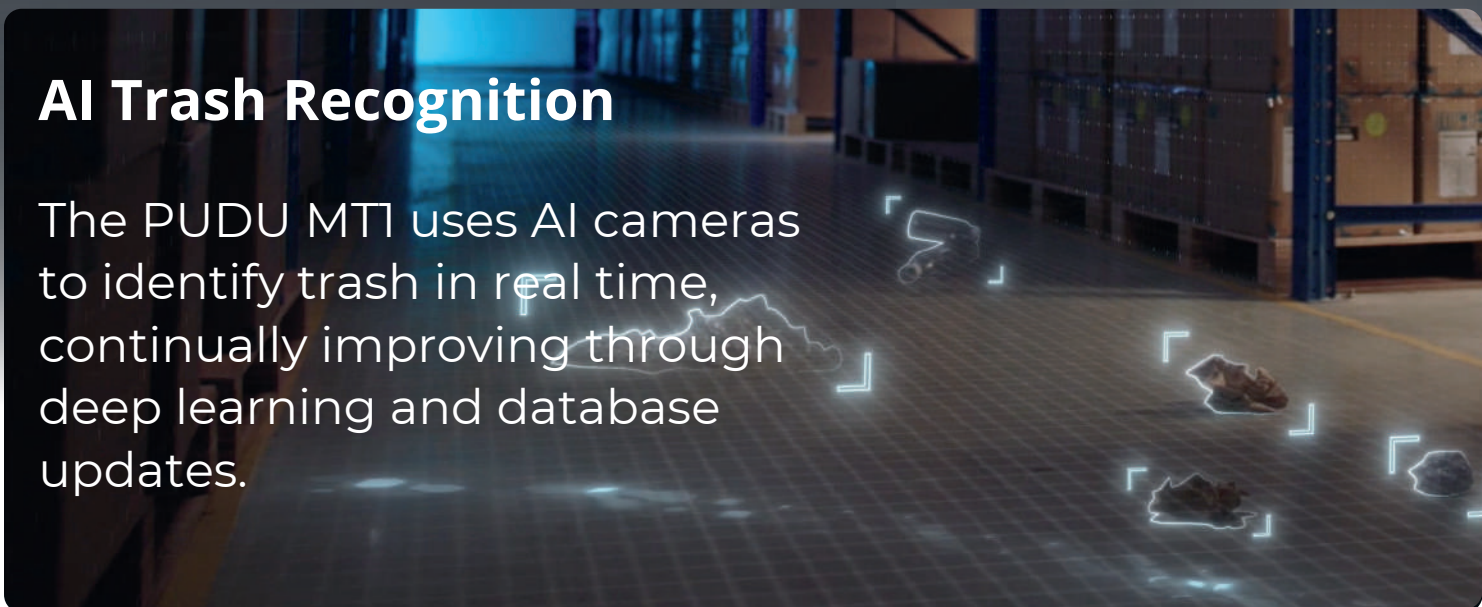
Multi-sense Safety

With three-dimensional depth perception and multi-sensor fusion for navigation and obstacle avoidance, the MT1 navigates complex spaces with ease.

Proactive Dust Control

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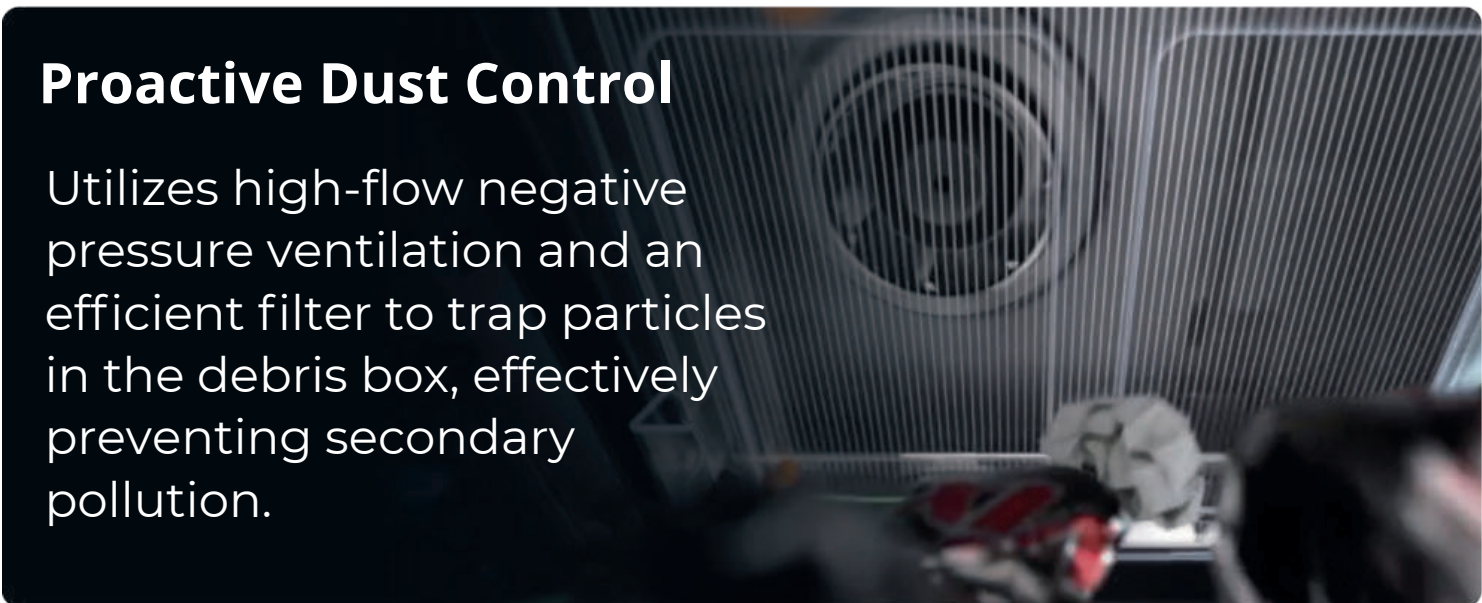
AI Spot Cleaning

5× Efficiency Boost, Smarter Cleaning: The PUDU MT1's ultra-wide scanning covers large areas with precision, detecting and cleaning waste efficiently during routine patrols.
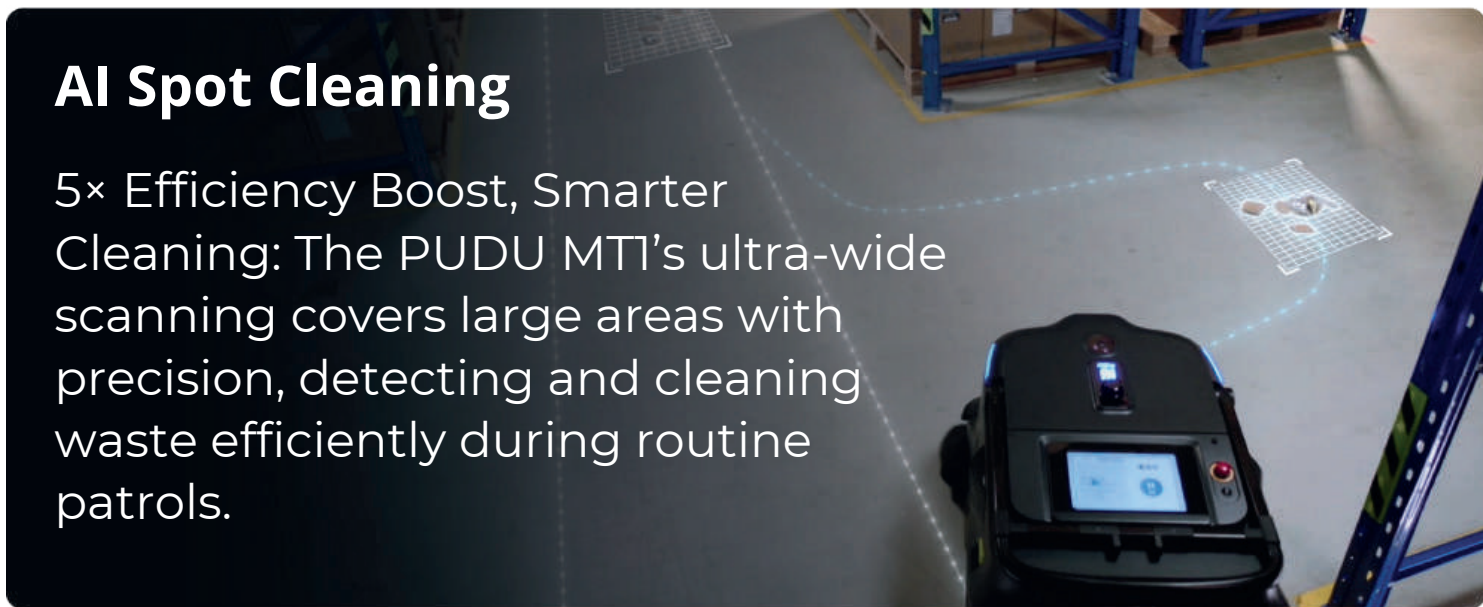
Charging station

reddot winner 2025

Specification

Product code	200-1400	**Cleaning coverage**	up to 10,000 m²/h	**Voltage**	24V
Noise level	60 dB(A)	**Trashbin capacity**	35L	**Battery**	Li-ion (45Ah)
Unladen weight	65 kg	**Path clearance**	Min.75 cm	**Battery life span**	Up to 2,000 cycles full charge)
Dimension (cm)	84 (L) X 60 (W) X 49 (H)	**Cleaning width**	70 cm	**Charging time**	2.5 hours
Gradeability	Up to 8°	**Safety system**	VSLAM,Lidar SLAM,RGBD,RGB sensor,Line laser sensor,bumper sensor,anti-drop sensor	**Run-time**	Up to 8 hours

IMEC ECOBOT 75P

Ai Robotic Heavy-Duty Floor Scrubber

- Integrating scrubbing, sweeping, dust mopping and degreasing
- Up to 3,000 m²/h cleaning efficiency

Integrates 4-in-1 Cleaning Task
Scrubbing, Sweeping, Dust Mopping & Degreasing

Advanced Lighting System
Adopting flashing light, blue projection light and supplement light, distinctively communicating the machine position through vehicle-identifiable signals

Oil Stain Cleaning
Able to mark oil stains in the map and perform thorough oil cleaning

5-Stage Filtration System
Reducing around 80% freshwater consumption

Minimal Human Intervention
Reducing around 80% freshwater consumption

270° Front-Mounted Brush Head

Reverse Dry Cleaning

Ergonomic Step-on Mode

Advance Lighting & Sensing System

Workstation

IDS
Best-in-Class Sensing

Specification

Product code	200-GS75P	**Cleaning coverage**	Up to 20,000 m²/h	**Voltage**	29V
Noise level	55-70 dB(A)	**Cleaning water tank /** **Recovery water tank**	75L 50L	**Battery**	Li-ion (240Ah)
Unladen weight	400KG	**Trash tray /** **Chemical**	5L 5L	**Battery life span**	Up to 2,000 cycles (full charge)
Dimension (cm)	137 (L) X 96.2 (W) X 141.7 (H)	**Cleaning width**	75cm	**Charging time**	3 hours
Gradeability	Up to 8°	**Brush Pressure** **Brush speed**	50 kg 270 rpm	**Suction power**	26kPa
Safety System:	3D Lidar, 3D camera, long-range Lidar, touch sensor (rear wheel), tilt laser, secondary damage collision bumper sensor, millimeter wave radar system	**Brush type**	3- Disc brush 2- Roller brush	**Avg. run-time**	Up to 6 hours

Commercial Delivery Robots

Enhancing delivery efficiency and brand promotion through reliable robotic solutions.

IMEC PUDUBOT 2

Universal Delivery Robot

- **VSLAM+**
- **Developed Servo In-wheel Motor**
- **Fully Enclosed Machine Design**
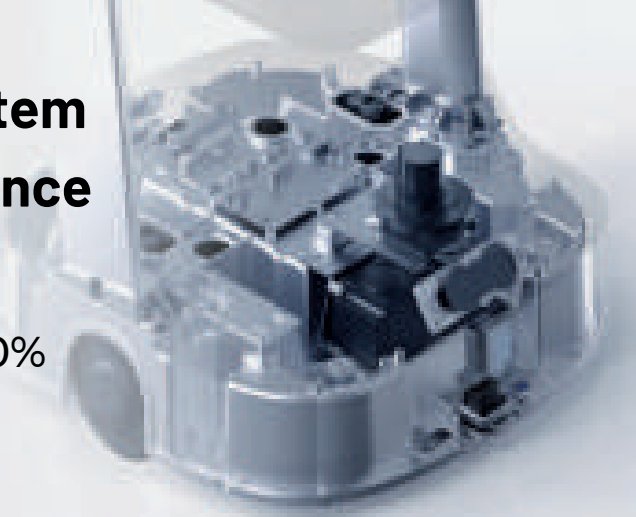- **Industry-leading Chassis System**
- **Dual Lidar, Precise Perception**

PUDU VSLAM+
New Generation Technology

- Marker - less technology reducing 75% deployment time
- Capable of operating in high-ceiling environments up to 30meter

Industry-leading Chassis System
Better Stability and Performance

Adapt to various road surfaces, 30% improvement in moving stability

Developed Servo In-wheel Motor

- 33% increase in load capacity
- 16% improvement in energy utilization

High Performance Li-ion Battery

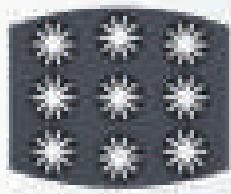Operates up to 24h on a 4h charge. Enhanced safety and reliability

Calling and Notification Autonomous and Flexible

Support 4G Watch, Pager, and Link, allowing one-click task assignment and management
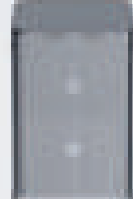
Accessories

| Fixed Cup Holder | Elevator Control System | Protection Case | Charging Station |

Specification

| Product Code	200-1300	Voltage	29V	Battery	24Ah
Material	ABS	Speed	Up to 1.2 m/s	Battery life span	Up to 2,000 cycles (full charge)
Unladen weight (kg)	40 kg	Loading capacity	Up to 40 kg	Charging hour	2 Hours
Dimension (cm)	58 (L) X 53.5 (W) X 129 (H)	Path clearance	60 cm	Avg. Run-time	Up to 8 Hours

IMEC PUDU BELLABOT

Premium Delivery Robot

Upgraded All-New Delivery Capabilities
Master in delivery, cruising , and escorting guests
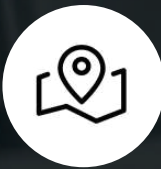
Industry First Dual SLAM Technology
Support both Visual SLAM and Laser SLAM navigation solutions full coverage in any scenario

Four Core Escort Functions
Centimeter-level real-time positioning high-precision optimal route planning, and 0.5 second instant response for obstacle avoidance
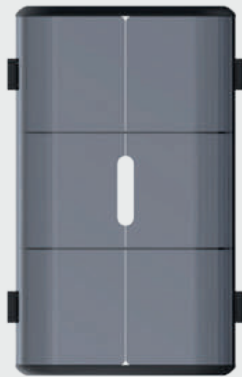
Superlative Trafficability - Stable Operations
A minimum clearance at 70cm, and auto level suspension to ensure smooth and steady operation

PUDU Cloud Service
Intelligent Cloud Scenarios & Robot Service Cloud provide data support for scenario-based operations

Enclosed Dish Cover

3 layers of large space, magnetic door opening method, contactless delivery, safer service.

Cover material	Plexiglass / Mg-Al alloy
Cover weight	16kg
Cover dimensions	514*420*677mm
Load capacity	3 trays, 10 kg/tray
Door opening method	Magnetic Switch

Multimodal Interaction

Light interaction, touch feedback and smart expression bring an unprecedented human robot interaction experience.
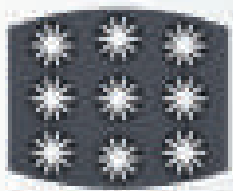
Intelligent Tray

The modular quick release structure and intelligent infrared sensing ability create intelligent trays and a more efficient delivery.

Accessories

Fixed Cup Holder

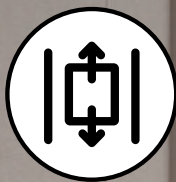Elevator Control System

Protection Case

Charging Station

Specification

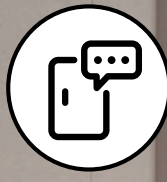| Product Code	200-1200	Voltage	29V	Battery Capacity	29Ah
Material	ABS	Speed	0.50 - 1.2m/s	Battery LifeSpan	Up to 2,000 cycles (full charge)
Unladen weight (kg)	57 kg	Loading Capacity	Up to 40 kg (10kg / Shelf)	Charging Hour	2.5 Hours
Dimension (cm)	53.7(L) X 56.5(W) X 129(H)	Path clearance	70cm	Avg.run-time	Up to 12 Hours

IMEC FLASHBOT

Building Delivery Expert

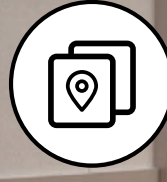- **Cloud & Hardware Solutions for Elevator Control**
- **VSLAM+ Semi-outdoor Delivery**
- **Multiple Compartment Access Verifications**
- **Full-Scope IoT Integration**
- **Rapid Multi-floor Deployment**
- **Modular Adjustable Compartments**

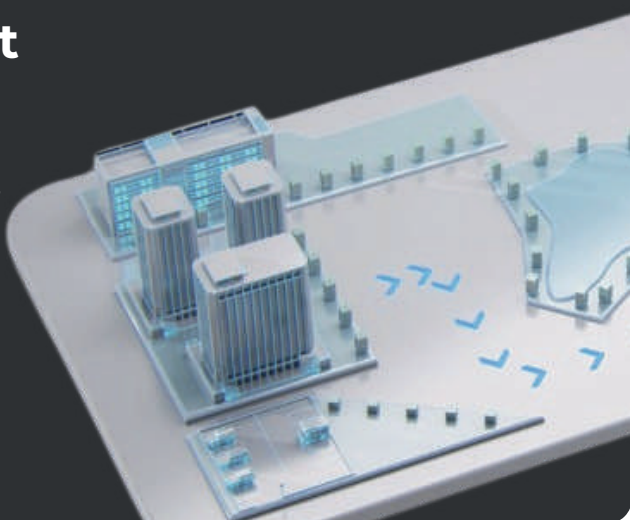### VSLAM+ Semi-outdoor Delivery

Autonomous Elevator Control

Effortlessly navigates narrow corridors in various buildings and easily adapts to diverse elevator environments.

Rapid Multi-floor Deployment

Supports rapid multi-floor map replication, enabling quick mapping and enhancing deployment efficiency and ease of operation.

Multiple Compartment Access Verifications

Supports password verification, phone number verification, and NFC sensing for compartment access

Modular Adjustable Compartments
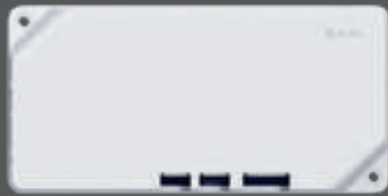
2-Compartment

3-Compartment

4-Compartment

Accessories

Charging Station

Turnstiles/Automatic doors Control Components

Elevator Control System

Pager

Specification

Product Code	200-1100	Voltage	29V	Battery capacity	24Ah
Material	ABS	Speed	0.5-1.2 m/s	Battery lifespan	Up to 2,000 cycles (full charge)
Unladen weight (kg)	50 kg	Loading Capacity	Up to 40 kg. 10kg Shelf	Charging hour	2.5 Hours
Dimension (cm)	53.9(L) X 51.5(W) X 105(H)	Path clearance	70cm	Avg.run-time	Up to 8 Hours

Leading the Future of Hygiene Automation

COMING SOON

📞 +603 8734 9255

📠 +603 8734 9055

✉️ inquiry@imec.com.my

🌐 www.imec.com.my

f ⓞ ▶️ ♪ imec hygiene

33 & 35, Jalan BA 2/1,
Kawasan Perindustrian Bukit Angkat
Sungai Chua, 43000 Kajang,
Selangor Darul Ehsan , Malaysia