集萃智造
JITRI INTELLIGENT MANUFACTURING

Autonomous Mobile Robot lead the new trend

Great wisdom, demonstrating the technological charm

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LinKedin

YouTube

Instagram

Easy moving assists every moment of life



INSTITUTE OF INTELLIGENT MANUFACTURING TECHNOLOGY, JITRI

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IIMT Autonomous Mobile Robot

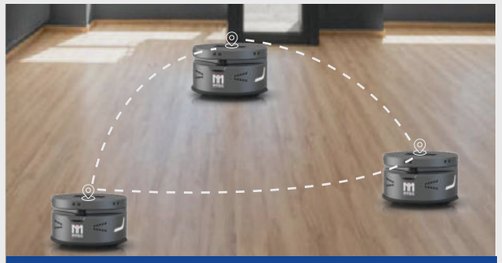
IIMT Intelligent Mobile Robot has advanced mobile robot technology, core technologies such as autonomous driving, environment simulation, artificial intelligence, and big data. Based on the real needs of the service, it has created a complete intelligent robot service solution.



Technical advantages



Deep environmental perception



Multi Robot collaborative work



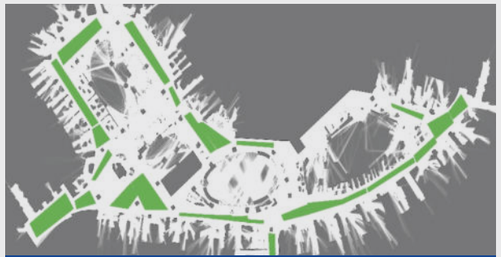
Elevator control for super high-rise buildings



Intelligent edge cleaning



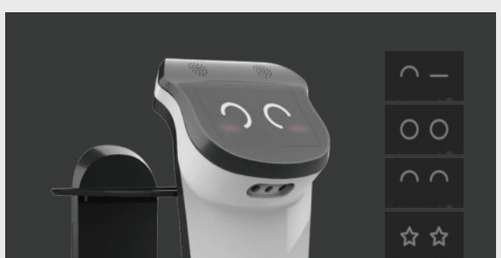
Cloud management platform



High precision map positioning



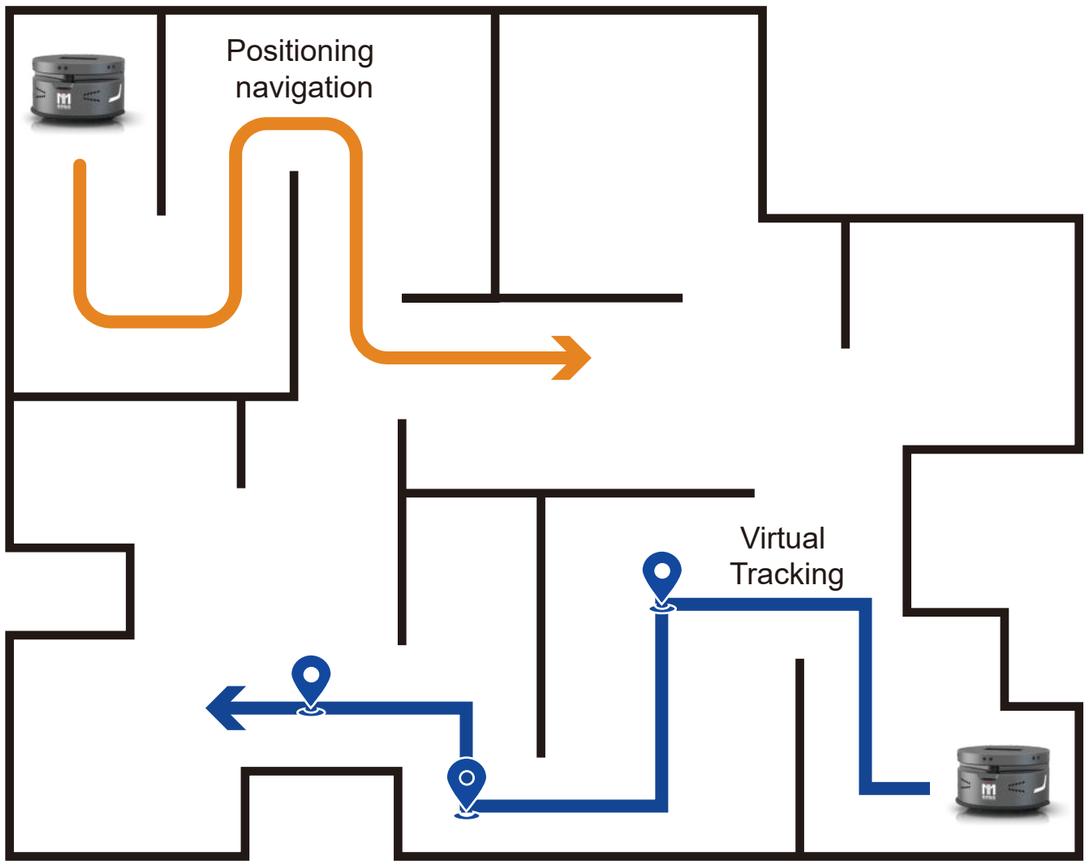
Decision planning and control



Human robot friendly interaction

Full scenario application

IIMT intelligent mobile robot integrates laser SLAM technology, 3D visual recognition technology, and integrates sensor technologies such as ultrasound and gyroscope. It is equipped with a self-developed robot core control system and can easily complete indoor autonomous positioning, navigation, and obstacle avoidance.



Virtual Wall

Virtual wall technology detects obstacles through sensors, constructs virtual safety boundaries, guides autonomous mobile robot to avoid obstacles, and ensures safe driving.

powerful function

- **Observing in all directions**

  Depth cameras and RGB cameras automatically recognize human figures, objects, etc., and can perform facial recognition, actively welcoming guests

- **keeping ears to the ground**

  A self-developed navigation system that constructs maps in real-time using multiple sensors and radars

- **Homepage customization**

  Brand display customization

- **Human-machine interaction**

  Provide various services (weather, music, MV, etc.)

- **Electronic fence**

  Convenient delineation of restricted areas and implementation of virtual wall functionality

- **Map management**

  Realize map upload, download, and multi machine map sharing A self-developed navigation system that constructs maps in real-time using multiple sensors and radars

- **Status management**

  management of multiple robots through one account, achieving multi-dimensional management of batteries, status, control

- **Navigation control**

  Unified management of multiple robots through a unified account, achieving multi-dimensional management of batteries, status, control

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simple operation

Convenient operation of mobile APP, supporting task scheduling, scheduled tasks, remote operation and maintenance, OTA one click upgrade



- Map Editing
- Remote control
- Task scheduling
- Data report

Digital Operations

Automatically send refined and visualized data reports



Product Introduction

Multi functional commercial cleaning robot/ IIMT-CL-W

3 IN 1： scrubbing | sweeping | dust mopping

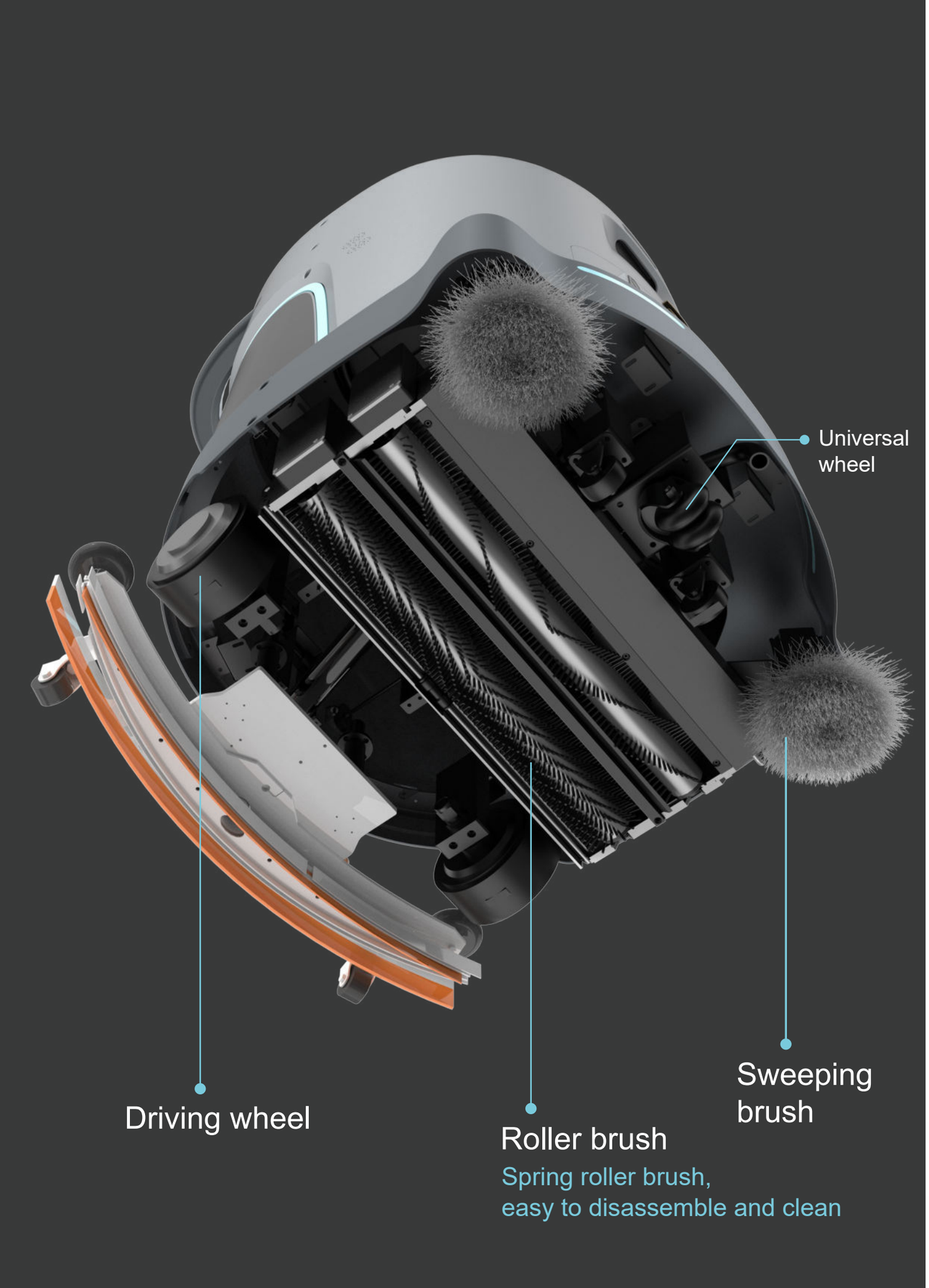
Indoor full scene floor cleaning expert

Ultimate obstacle avoidance pass rate ±50mm



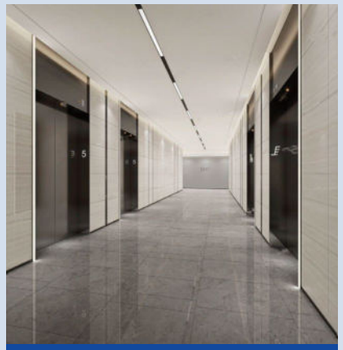
Parameter

	Item	Parameter
Basic information	Size	815*660*1020mm
	Weight	120kg
	Cleaning width/ Working width	344mm（washing） 630mm（including brush）（sweeping） 480mm（Dust pushing）
	Noise	65-75db
Cleaning ability	Maximum theoretical cleaning efficiency	2000m²/h
	Max. Moving Speed	1.2m/s
	cleaning rate	98%
	Brush pressure	25kg
	Capacity of clean/ sewage tank	32L/20L
	Trash bin capacity	1.2L
Mobility ability	Gradeability	5°
	Max. Moving Speed	1.2m/s
	Min. Passable Width	760mm
	Min. Turn-around Width	800mm
	Max crossing height	2cm
Electrical	Battery	24V,86AH,including brush
	Charging Time	4.3h
	Running capacity	8h（sweeping） 20h（dust pushing） 4h（washing）
	Max. vacuum degree	24kpa
	Max. suction volume	1550L/min
	Fan lifespan	22000h
Sensing system	Sensor configuration	LiDAR*1,RGBD Camera*2,Ultrasonic*4
	Perception	2D perception positioning, memory perception obstacle avoidance


Universal wheel
Driving wheel
Roller brush
Spring roller brush,
easy to disassemble and clean
Sweeping brush


High definition touch
Emergency stop
Depth camera
Sweeping brush

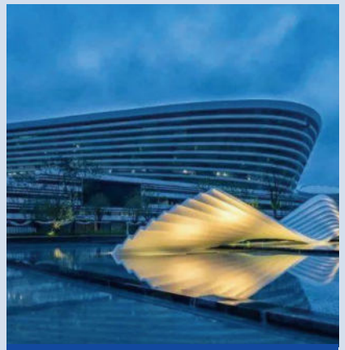
Application



Office building



Shopping mall



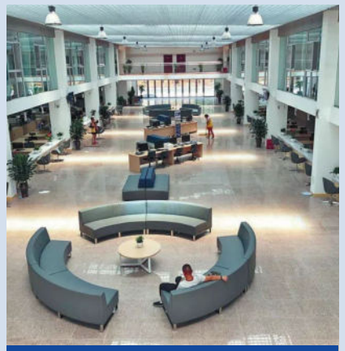
Company Park



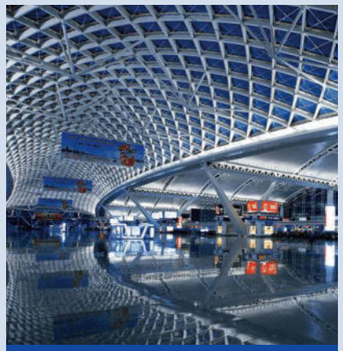
School



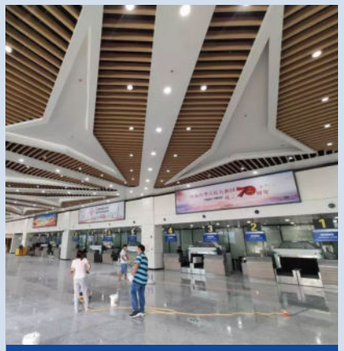
Exhibition Hall



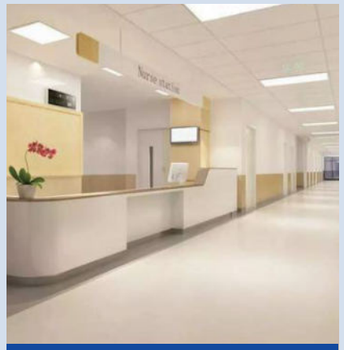
Municipal



Railway station



AIRPORT



Hospital

Applicable ground



Marble



Plastic flooring



Ceramic tile



Epoxy flooring

Features Highlights

Multi purpose	hard floor cleaning with worry free operation, integrating floor cleaning, dust pushing, and free switching
Long term battery life	Combined with scene optimization and cleaning configuration, reducing water consumption and increasing single use
Cleaning Inspection	Automatic identification of garbage types, timely disposal of temporary garbage, significantly improving cleaning efficiency
No one involved	Automatic charging and drainage, autonomous linkage of elevator cross floor operation, with dual roller brush differential rotation design, realizing self-cleaning of cloth brush
Efficient floor cleaning	With a 270 rpm high-speed disc brush for thorough cleaning; Ultra sealed soft water absorbing scraper, the ground dries instantly without any residual water stains
Easy to use	All-round easy to maintain design, with integrated head cover and water tank cover, magnetic suction side door, magnetic suction brush disc, etc., for quick disassembly and assembly
Operations	Our self-developed cloud platform supports multi-dimensional and data analysis, enabling refined and visualized data management
Intelligent management	Supports task scheduling, scheduled tasks, remote operation and maintenance, and other management methods

Product Introduction

Intelligent commercial cleaning robot/ IIMT-CL-V

4 IN 1： sweeping/scrubbing/dust mopping/vacuuming

Intelligent cleaning, multi-mode combination, cloud monitoring, cross building work, precise and efficient

Ultimate obstacle avoidance pass rate ±50mm



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Parameter

	Item	Parameter
Basic information	Size	710*720*820mm
	Weight	80kg
	Cleaning width/ Working width	344mm（washing） 580mm（including brush）（sweeping） 480mm（Dust pushing） 394mm（Vacuuming）
	Noise	65-75db
Cleaning ability	Maximum theoretical cleaning efficiency	2000m²/h
	Max. Moving Speed	1.2m/s
	cleaning rate	98%
	Brush pressure	25kg
	Capacity of clean/ sewage tank	15L/14L
	Trash bin capacity	1.2L
Mobility ability	Gradeability	5°
	Max. Moving Speed	1.2m/s
	Min. Passable Width	760mm
	Min. Turn-around Width	800mm
	Max crossing height	2cm
Electrical	Battery	24V,50AH,including brush
	Charging Time	2.5h
	Running capacity	5h（sweeping） 12h（dust pushing） 2.5（washing） 2.5（Vacuuming）
	Max. vacuum degree	24kpa
	Max. suction volume	1550L/min
	Fan lifespan	22000h
Sensing system	Sensor configuration	LiDAR*1,RGBD Camera*4,Ultrasonic*6
	Perception	2D perception positioning, memory perception obstacle avoidance



Smultiple Professional Cleaning

Scrubbing

Sweeping

Dust mopping

Suction integrated

Side brush

Roller brush

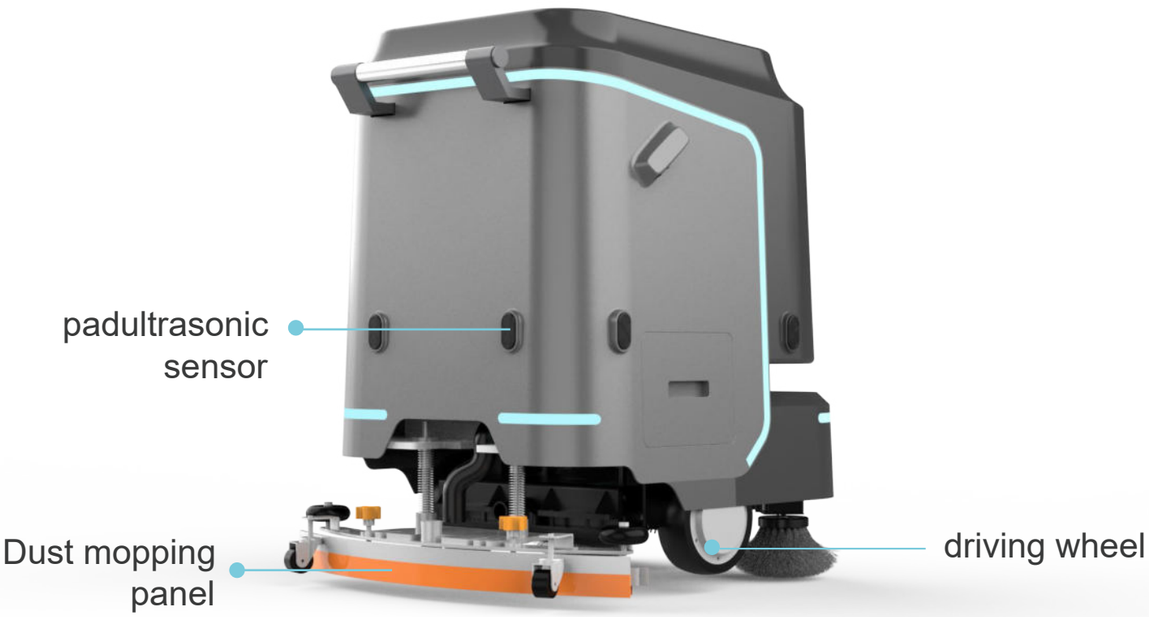
Spring roller brush, easy to disassemble and clean



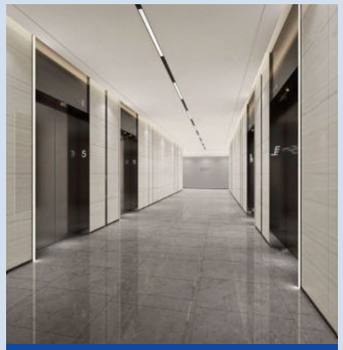
Clean 0 edge distance

Hygiene without blind spots





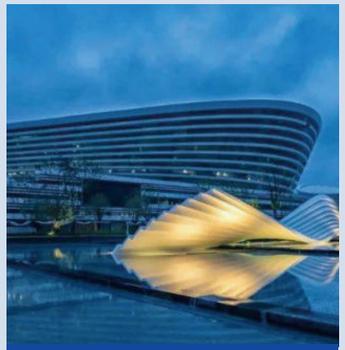
Application



Office building



Shopping mall



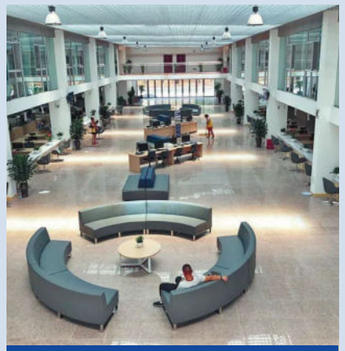
Company Park



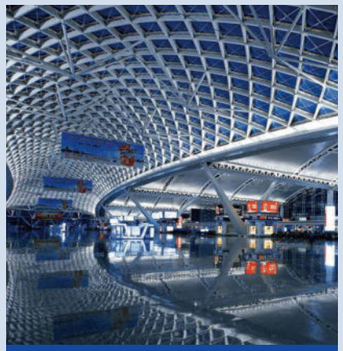
School



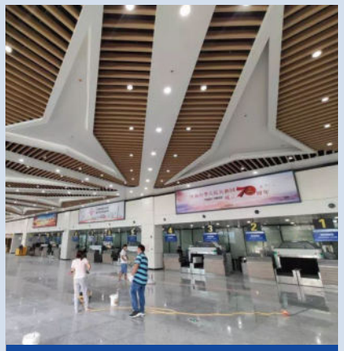
Exhibition Hall



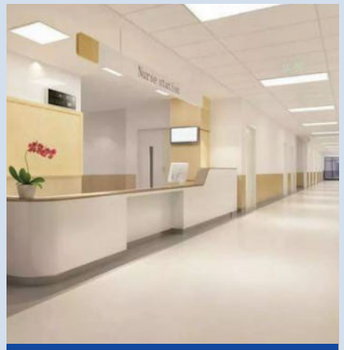
Municipal



Railway station



AIRPORT



Hospital

Applicable ground



Marble



Plastic flooring



Ceramic tile



Epoxy flooring



Short haired carpet

Features Highlights

Multi purpose	Combinations including edge sweeping, floor cleaning, dust mopping, and vacuuming
Rapid mapping	precise scanning and sensing, greatly improving deployment efficiency
cleanning inspection	Plan the optimal path for handling and flexibly respond to unexpected situations
Compatible with soft and hard flooring	Suitable for hard floors and short haired carpets, intelligently recognizing changes in floor
Intelligent IoT	Autonomous linkage elevator control, fully automatic cross floor operation
Simple operation	Convenient operation on PC and mobile devices, supporting remote monitoring and scheduled tasks
Digital Operations	Automatically send refined and visualized data reports
Safe and worry free	multi-sensor fusion, achieving perfect obstacle avoidance

Product Introduction

Intelligent universal mobile chassis/ IIMT-UC

Make services more convenient

Multi purpose, intelligent sensing and obstacle avoidance, all grand conditions applicability, cross floor work, Flexible development of multi scenario services.

Ultimate obstacle avoidance pass rate ±50mm



Eight Functions

Ultra Wide Mapping

Accurate Navigation

Autonomous Obstacle Avoidance

Overall Unit Developing

Real Time Monitoring

Remote Operation

Super Backend

Multi Machine Linkage

Parameter

	Item	Parameter
Exterior	Size	505mm*505mm*315mm
	Weight	30kg
	Material	ABS+Metal
Battery	Battery type	24V,50Ah,Li-batter
	Charging Time	3h
	Running capacity	8h
	Charging method	Manual & Automatic
	Standby time	≥24h
Hardware performance	Running power & Speed	≤400W & 0-1.5m/s
	Max climbing angle	≤5°
	Max crossing height	20mm
	Ultrasonic sensor	three，500mm
	Anti-drop sensor	Supportable
	Depth camera sensor	400~1500mm
	Work temperature	-10℃~50℃
Software performance	Software Application Interface	API(TCP/Websocket)
	Control method	PC

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Product Introduction

Delivery Robot/IIMT-DR-01

0 salary | No rest | No complaints

Multi sensor navigation obstacle avoidance, integrating fun, safety, and intelligence, flexible operation, upgraded human-machine .

Ultimate obstacle avoidance pass rate ±50mm



01.Simple interaction

Voice and touch screen dual channel interaction, simple and convenient operation.

02.Precise intelligent control

Multi sensor fusion technology, adapted to different application scenarios, achieves precise positioning.

03.Infrared intelligent return

Infrared object perception, detecting the status of item retrieval, and autonomously returning to the original

集萃智造 JITRI INTELLIGENT MANUFACTURING

Product function

Human computer interaction

Agile obstacle avoidance

Intelligent delivery

Automatic return to recharge pile

Parameter

Size	505mm*505mm* 1180mm
Weight	73kg
Driving Wheels	2 Wheels driving
Navigation System	Laser, IMU, Encoder, multi-sensor positioning and navigation
Tray Size	450×380mm per tray
Max crossing height	2cm
Maximized Running Speed	0-1.5m/s
Max climbing angle	≤5°
Battery Size	350*340*150mm
Battery Weight	5kg
battery type	24V,50Ah,Li-batter
Standby time	>24h
running capacity	8h continuous work
Collision Avoidance System	Multisensor Obstacle Avoidance for Stereo Vision, Ultrasonic Wave, Collision Strip, etc
Stand-by power	<25w
Charging method	Auto charging and wire charging
Network	wifi/4G
Touch Screen	10.1 touches screen, 800*1280 resolution, 16:10 262*176*36mm



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Product Introduction

Closed Delivery Robot/IIMT-DR-02

0 salary | No rest | No complaints

Multi sensor navigation obstacle avoidance, integrating fun, safety, and intelligence, flexible operation, upgraded human-machine .

Ultimate obstacle avoidance pass rate ±50mm



01.Simple interaction

Voice and touch screen dual channel interaction, simple and convenient operation.

02.Precise intelligent control

Multi sensor fusion technology, adapted to different application scenarios, achieves precise positioning.

03.Infrared intelligent return

Infrared object perception, detecting the status of item retrieval, and autonomously returning to the original

集萃智造 JITRI INTELLIGENT MANUFACTURING

Product function

Human computer interaction

Agile obstacle avoidance

Intelligent delivery

Automatic return to recharge pile

Parameter

Size	505mm*505mm* 1000mm
Weight	67kg
Driving Wheels	2 Wheels driving
Navigation System	Laser, IMU, Encoder, multi-sensor positioning and navigation
Tray Size	404×457mm per tray
Max crossing height	2cm
Maximized Running Speed	0-1.5m/s
Max climbing angle	≤5°
Battery Size	350*340*150mm
Battery Weight	5kg
battery type	24V,50Ah,Li-batter
Standby time	>24h
running capacity	8h continuous work
Collision Avoidance System	Multisensor Obstacle Avoidance for Stereo Vision, Ultrasonic Wave, Collision Strip, etc
Stand-by power	<25w
Charging method	Auto charging and wire charging
Network	wifi/4G
Touch Screen	10.1 touches screen, 800*1280 resolution, 16:10 262*176*36mm





UI Touch screen

4 trays



Ultrasonic sensor

lidar

Anti-Collision Sensor

Depth camera



Driving wheel

Product Introduction

Intelligent coffee delivery robot/IIMT-CD-01

0 salary | No rest | No complaints

Precise navigation and obstacle avoidance, warm voice interaction, autonomous battery recharge, 24-hour standby, worry free service.

Ultimate obstacle avoidance pass rate ±50mm

- Autonomous obstacle avoidance
- intelligent elevator control
- Automatic return to recharge pile
- Accurate
- Human computer interaction





