



FlashBot

New Era of Auto Building Delivery



About FlashBot

Product Overview

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About Pudu



FlashBot

Building Delivery Robot

FlashBot is Pudu's latest building delivery robot. It is designed to utilize the elevator with unprecedented mobility, allowing you to automate delivery tasks safely, accurately, and frequently. It can navigate around people in hotels and office buildings without a human driver, which takes a great step in intelligent delivery.





Product Overview · FlashBot



Machine dimension	539*515*1050mm
Machine weight	55kg
Payload	15kg/layer, Max30kg
Machine material	ABS/Aviation-grade aluminum alloy
Compartment space	2-4 compartments (Adjustable)
	219*410*286mm (Single)
	438*410*286mm (Double)
Charging time	4.5H
Battery life	12H
Charging mode	Auto-charging
Cruise speed	0.5~1.5m/s (Adjustable)



Product Overview · FlashBot



RGBD Depth Camera

Lidar



2*RGBD Cameras

Charging Contact



Screen

Gull Wing Door

Indicator light

Six-wheel Independent Suspension



Product Overview · FlashBot



Auto Building Delivery Service

Automatic, contactless delivery of customer-ordered items and takeaways.



Greeting and Guiding

Check-in guidance is provided based on optimal path planning and voice announcements.



Product Overview · FlashBot



Auto Elevator Taking

Powered by IoT technology, FlashBot calls and takes the elevator automatically for delivery across floors.



Auto Calling

FlashBot provides arrival notifications by telephone calls for customers to pick up the deliveries.



Easy Charging

FlashBot charges itself automatically when we click charging button.



Product Overview · Operation Process

Staff

Operation Process

Robot

Customer



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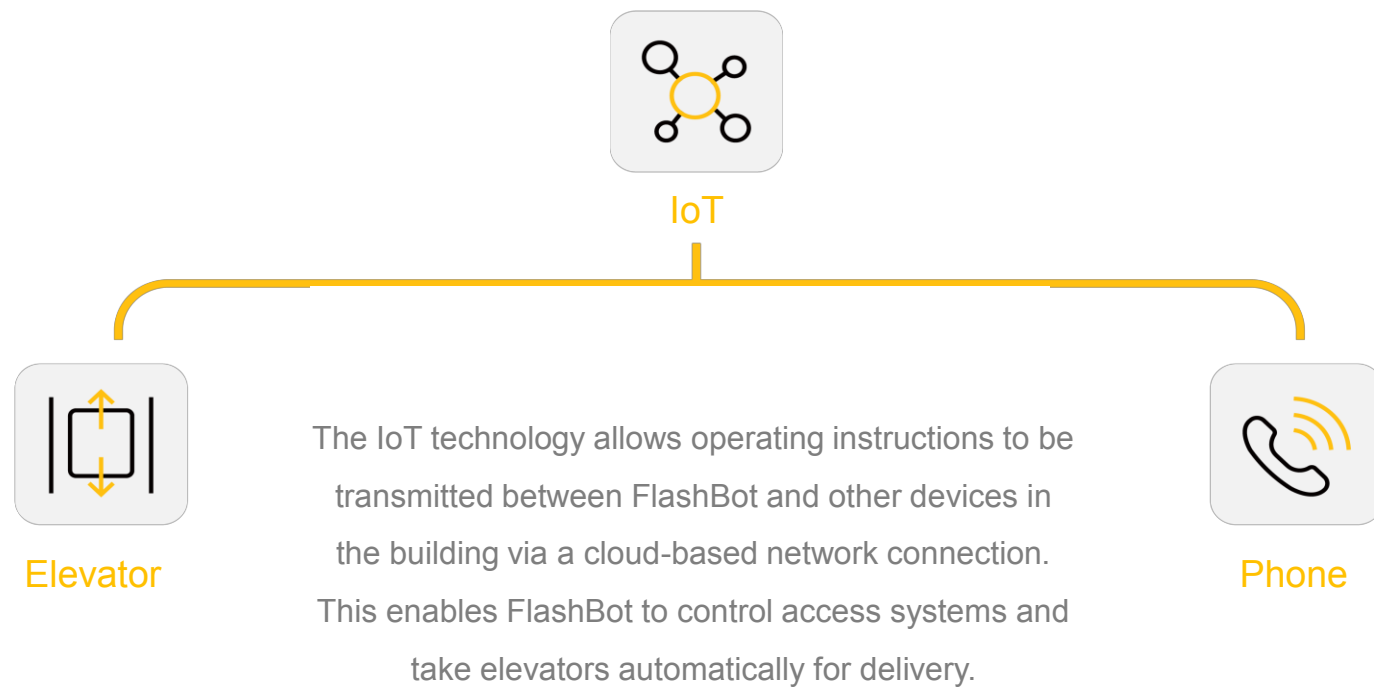
FlashBot · Building Delivery Expert



- IoT technology
- Safe and efficient
- Advanced digital management



What makes FlashBot a building delivery expert?





What makes FlashBot a building delivery expert?



FlashBot taking an elevator



FlashBot calling the customer

Thanks to the IoT technology, FlashBot can send operating instructions to other devices in the building via a cloud-based network connection. This means FlashBot can call and take the elevator automatically without manual intervention, and remind customers of the pickup by calling the customer. With autonomous positioning and navigation, cross-floor delivery is now easier than ever.



Product Advantages · IoT Technology

Upgraded Auto-Level Suspension



The newly upgraded auto-level **6-wheel** independent linkage suspension can adjust the damping based on different floor conditions, so that the robot can always remain in the optimal stable state.

Surmount obstacles of **2 cm** high and gaps of **3.5 cm** wide, offering **50%** higher operating stability.

3D Obstacle Avoidance



3 RGBD cameras & customized lidar empower FlashBot with sensitive perception to detect obstacles as low as **3 cm** and suspended obstacles at a height of **70 cm** from the floor, making it ideal for dynamic environments with many obstacles.

70 CM Superior Passability



With a minimum clearance of **70 cm**, FlashBot can navigate through the passages in **99.9%** of building scenarios.



Product Advantages · Safe and Efficient



Modular Adjustable Compartment

The multi-functional compartment maximizes space utilization, enabling FlashBot to perform multiple tasks with a single tap.



UV Sterile Compartment (UV Can be turned off)

The compartment features a UV germicidal lamp that offers a sterilization rate of up to 99.9%.



Product Advantages · Safe and Efficient



Laser Positioning and Navigation Tech.

FlashBot adopts Laser SLAM which supports unlimited heights and does not require location code stickers. It supports multiple starting points and simple to deploy.

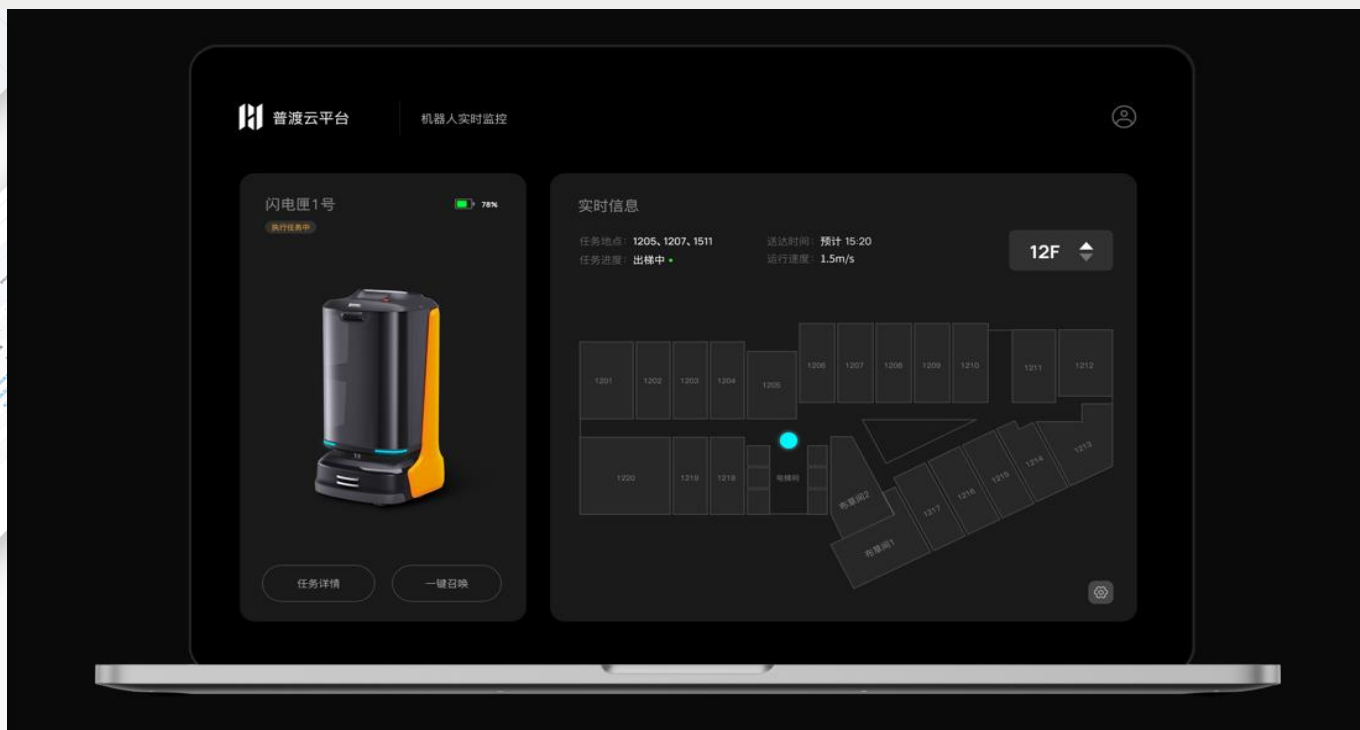
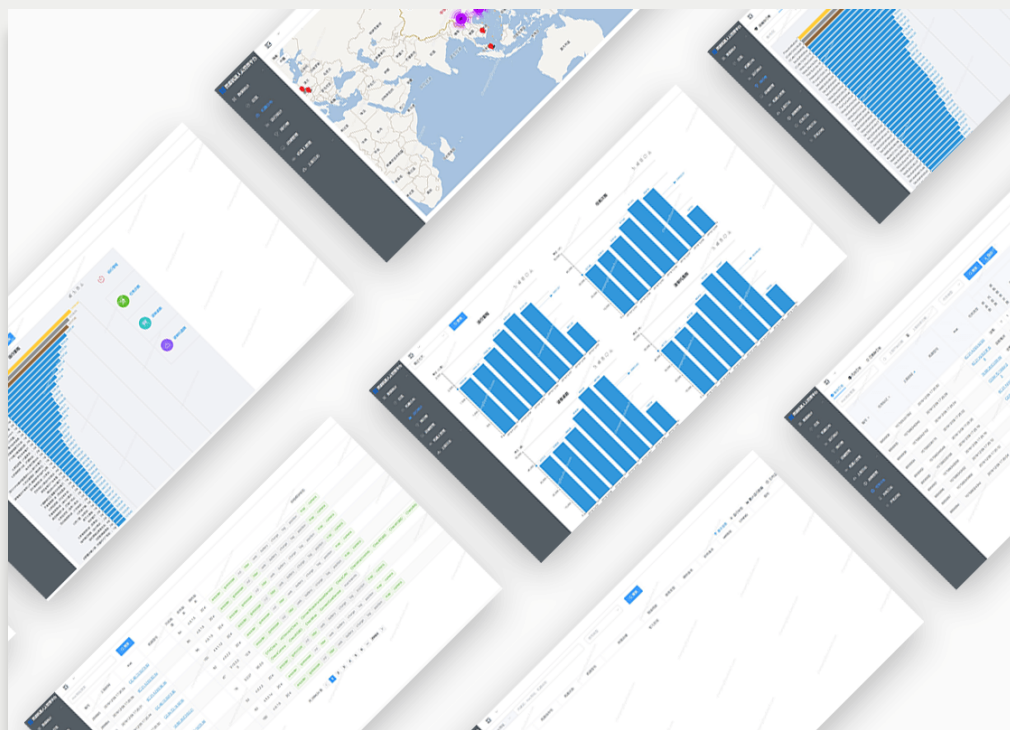


Multiple Robot Cooperation

Powerful ad hoc network allows FlashBot to adapt flexibly to dynamic environments and schedule more than 20 robots to work together.

Digital Hotel Transformation

PUDU CLOUD platform uploads the operating status and data of each robot in store 24*7, collects business data in real-time, generates data reports automatically, monitors the operation of robots, and upgrades the robot software remotely, driving the digital transformation of hotels.



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Manager

Optimized Staffing and Reduced Costs



- Robot-human collaboration frees the staff from the repetitive and tedious work, optimizing the staffing for each position and bringing significant cost savings.

Enhanced Competitiveness with Differentiation



- Digital management and remote real-time monitoring allow for optimized accommodation services.
- Innovative services differentiate the brand from traditional hotels.
- The new OTA encourages customers to promote the hotel, which helps attract more potential customers.

Improved Accommodation Service Quality



- 24*7 contactless delivery and quick response to customer needs at any time create an excellent and safe customer experience.
- FlashBot frees the staff from the repetitive and tedious work, allowing them to focus more of their time and efforts on serving customers better.

Supplies Allocation Adapted to Customer Needs



- The allocation of supplies can be optimized based on the automatically generated report of supplies delivered. This helps prevent waste and enables a cost-effective solution.



Staff



Reduced Workload and Pressure

- Repetitive and tedious work ↓
- Night shift requirements ↓
- Workload and pressure ↓



Improve Satisfaction

- A happier team translates to an elevated customer experience.
- High-quality service improves customer satisfaction.
- Reduction in customer complaints, thus enhances employee engagement.



Redefined Employee Values

- Staff feels valued when they are relieved from repetitive and strenuous tasks. Customers can be served in the best way possible.
- Staff can gain recognition from customers and their managers for their excellent performance, thus improving job satisfaction.



Customer

Efficient, Private, and Contactless Building Delivery Services

The contactless delivery by FlashBot provides sense of safety in the post-COVID-19 era.



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About Pudu · Company Profile



- National high-tech enterprise
- More than 600 patents, over 60% of which are patents for invention
- R&D staff accounts for over 50% of the total staff
- Products are sold to more than 60 countries and regions around the world
- Hundreds of after-sales service centers across the globe

Shenzhen-based and founded in 2016, Pudu Robotics is a world-leading tech-focused enterprise dedicated to the design, R&D, production and sales of commercial service robots on a mission to use robots to improve the efficiency of human production and living. Since its inception, Pudu Robotics has heavily invested in R&D, obtained multiple awards such as Red Dot and applied over 600 core patents to lead the development of the robotics category and provide high technology products that would appeal to targeted markets. Pudu Robotics has been rapidly growing in recent years to become a “leader” in the global markets with coverage of over 60 countries worldwide. The robots are widely applied in restaurant, coffee shop, hospital, school, office building, shopping mall, hotel, factory.



About Pudu · Core Technologies



PUDU SCHEDULER

- Powerful ad hoc network
- Easy scheduling of up to 100 robots in the same working environment
- Flexibly adapted to dynamic environments
- From subway-level scheduling to road-level scheduling



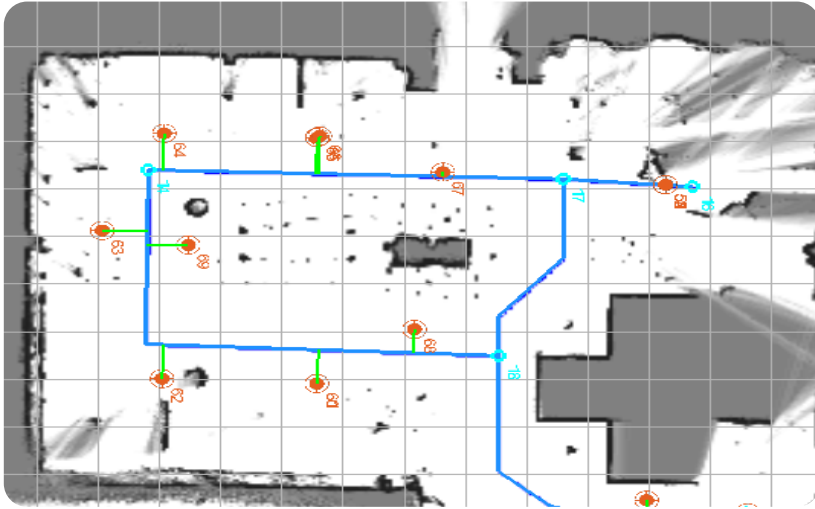
PUDU MIR

PUDU MIR is the world's first robot development platform designed to improve the efficiency in robot development.

More features can be unlocked through remote OTA software update.



About Pudu · Core Technologies



PUDU SLAM

PUDU SLAM is a new SLAM solution that integrates Lidar, Camera, RGBD, IMU, Encoder and other sensors.

The high positioning accuracy (10cm) allows the robot to effectively recognize and avoid 3D obstacles.



PUDU CLOUD

- Cloud-based intelligent service platform
- Scenario data collection platform
- Automated operation and maintenance platform
- Business management platform

The delivery data of each robot is uploaded in real-time, enabling data-driven management of the restaurant.



About Pudu · Safety Certifications

BellaBot robot has received KC certification from Korea, CE certification from the EU, FCC certification from USA, RCM certification from Australia, and NCC certification from Taiwan, China

IMDA certification from Singapore, MIC/TELEC certification from Japan, CR (China robot certification) and many other certifications both domestically and abroad to ensure the safety and compliance of our robots.



**INFOCOMM
MEDIA
DEVELOPMENT
AUTHORITY**

