

## About FlashBot

**Product Overview** 

Product Advantages

**Product Values** 

About Pudu



## **FlashBot**

### **Building Delivery Robot**

FlashBot is Pudu's latest building delivery robot that can take the elevator to provide safe and reliable room delivery. Powered by cutting-edge technologies, FlashBot takes intelligent delivery to the next level, enabling digital management and services of hotels and office buildings.







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)



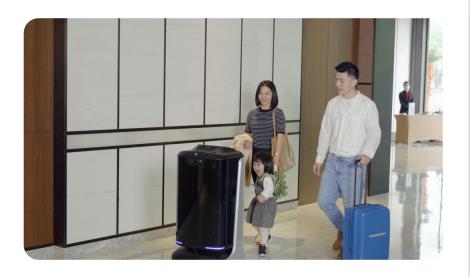






### **Auto Building Delivery Service**

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



### **Greeting and Guiding**

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





### **Auto Elevator Taking**

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



### **Arrival Notification**

FlashBot provides arrival notifications by phone calls and sends a pickup code for customers to pick up the deliveries.

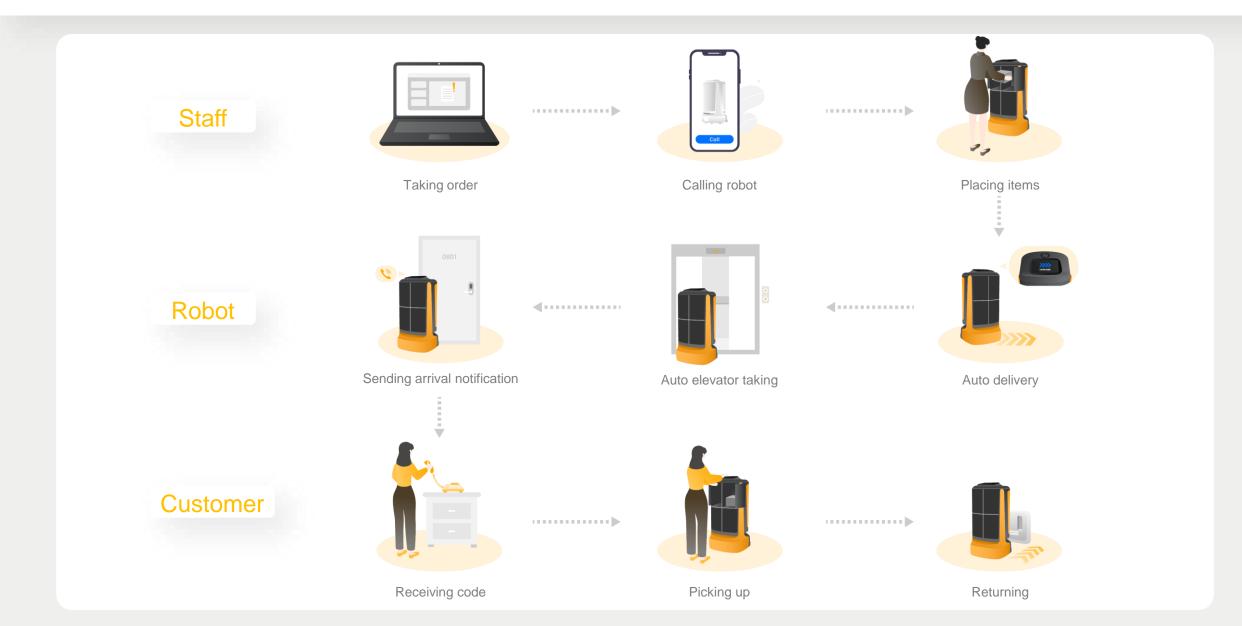


### **Auto Charging**

FlashBot charges itself automatically when its battery is running out.



## **Product Overview - Operation Process**



## About FlashBot

**Product Overview** 

Product Advantages

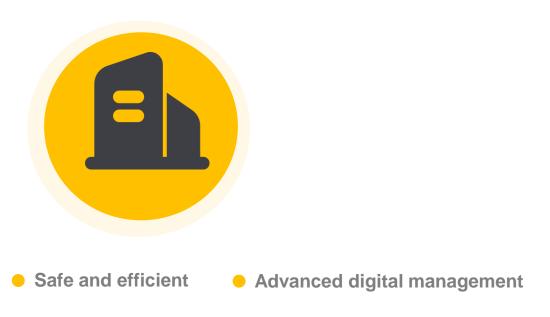
**Product Values** 

About Pudu

## Product Advantages - Building Delivery Expert

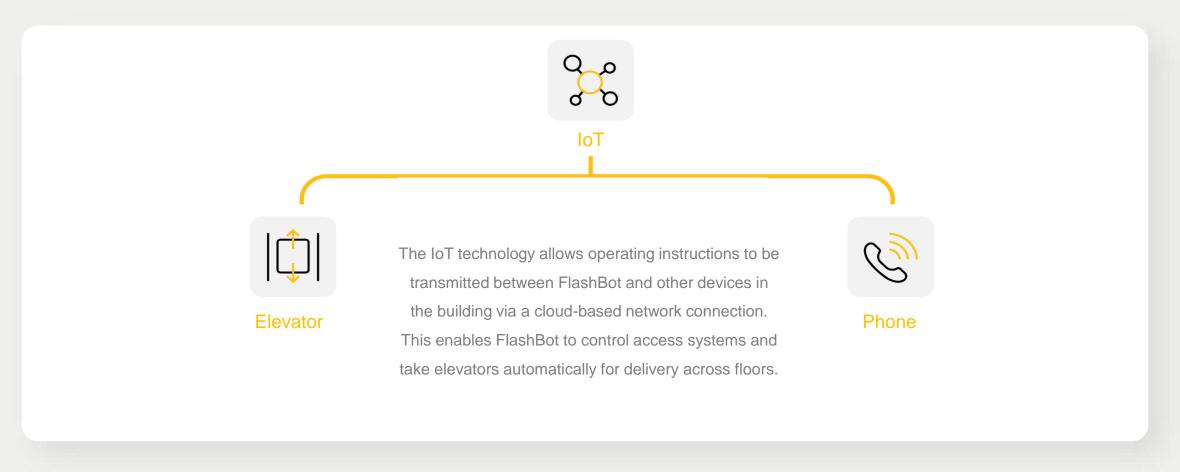
loT technology





## Product Advantages - IoT Technology

# What makes FlashBot a building delivery expert?





## Product Advantages - IoT Technology

# What makes FlashBot a building delivery expert?



FlashBot taking an elevator



FlashBot sending an arrival notification

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 sending a message with the pickup code or 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.



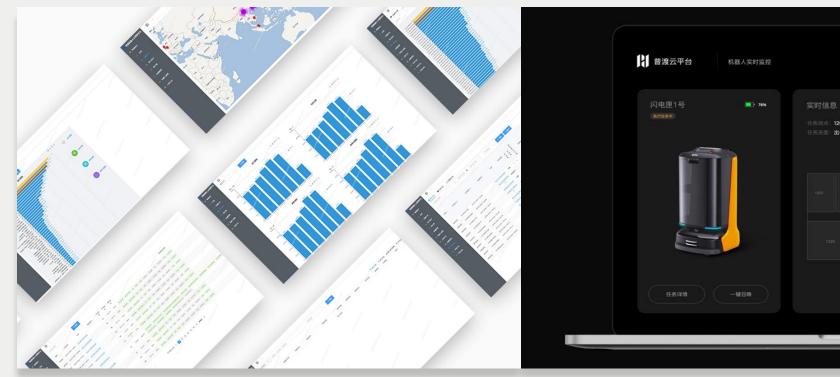
### **Multiple Robot Cooperation**

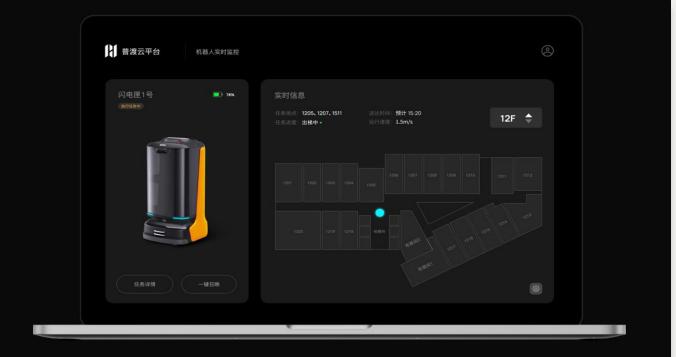
Powerful ad hoc network allows FlashBot to adapt flexibly to dynamic environments and schedule more than 20 robots to work together.

## Product Advantages - Digital Management Transformation

### **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.





## About FlashBot

**Product Overview** 

Product Advantages

**Product Values** 

About Pudu



### **Product Values - Manager**

## 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.

### Product Values- Staff

## Staff



### **Reduced Workload and Pressure**

- Repetitive and tedious work  $\downarrow$
- 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.



## Product Values - Customer

## Customer

## **Efficient, Private, and Contactless Building Delivery Services**

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



## About FlashBot

**Product Overview** 

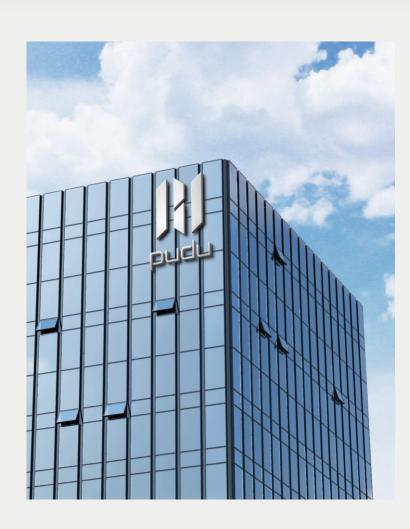
Product Advantages

**Product Values** 

About Pudu



## 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



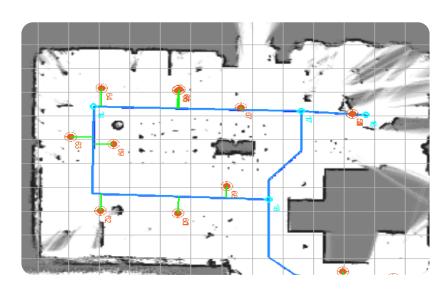
#### **PUDU MIR**

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.



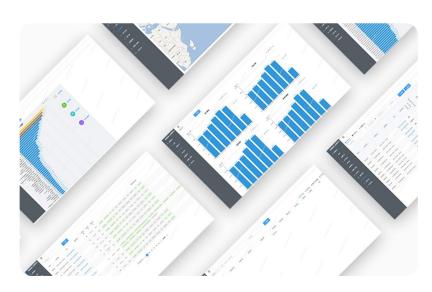
## About Pudu - Core Technologies



### **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

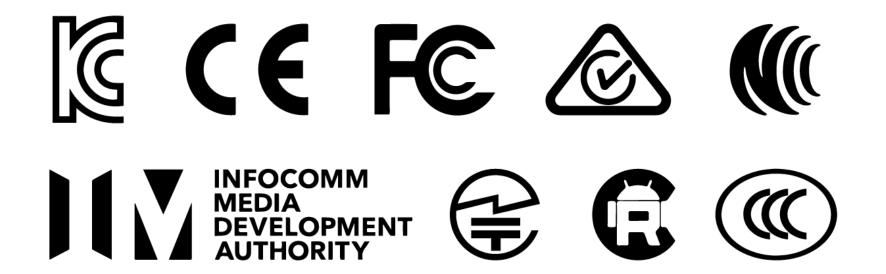
The delivery data of each robot is uploaded in real-time, enabling datadriven management of the restaurant.



## 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.



## **Quality Services That You Can Rely On**

Hundreds of after-sales service centers across the globe | 1-year free warranty | Free custom deployment | Free operation training | Fast service within 24 hours IoT service: Over 90% of technical issues can be solved remotely

#### Contact Us:

Email: global sales@pudutech.com

### Connect with Us:











Pudu Robotics

#### Shenzhen Pudu Technology Co., Ltd.

Tel.: +86-755-2641-3101(GMT+8, 9:00 to 21:00 on weekdays)

5F, Building 1A, Shenzhen International Inno Valley Phase 1, Dashi 1st Road, Nanshan District,

Shenzhen, China

Website: https://www.pudurobotics.com