

Heavy-load Delivery Robot

S300



Key Features

- **Heavy-load Delivery Ability** : Capable of **300kg** objects lifting and transporting.
- **Vslam Development** : Utilizing multiple sensors and modules, including dual LiDAR, tri-stereo vision, and image modules, to enhance localization accuracy.
- **360° Obstacle Detection and Avoidance**: Capable of accurately identifying and avoiding low-lying and suspended obstacles, ensuring safe movement of the robot.
- **Human-Robot Coexistence**: Providing ultimate safety assurance in environments where humans and robots coexist, ensuring secure interaction between humans and machines.
- **IoT Connection with Essential Facilities**: Support lift taking , passing through automatic doors, and support the integration of complete call systems.
- **7*24H Working** : 15-second battery swap for uninterrupted 24/7 delivery, supports auto, manual charging and battery swap for diverse operational needs.
- **Stability and Maneuverability**: The machine exhibits exceptional stability and maneuverability, adapting to various complex terrain environments to ensure smooth motion.

Specifications
Performance

Robot Dimension	925mm*620mm*1282mm
Load Capacity	300kg
Minimum Passage Width	900mm（without rotation）； 1100mm(able to turn around)
Maximum Compatible Shelf Size	1000mm*1000mm
Standard Shelf Size	800mm*850mm
Lifting Height	5cm
Lifting Time	6s
Moving Speed (Unloaded)	0.2~1m/s
Moving Speed (Fully Loaded)	0.2~0.8m/s
Robotic Travel Direction	Unidirectional Travel
Rotation Capability	360° rotation in place
Multi-robot Collaboration	10 robots
Slope Angle	≤ 5°
Precise Docking Accuracy	2-3cm（shelf points, charging points and other special points）
Gap Crossing Ability	≤30mm
Obstacle Crossing Ability	≤10mm
Chassis Ground Clearance	≤25mm (safe for normal footwear)

Environment

Operating Temperature and Humidity	0 - 45°C, RH: 5% ~ 95%
Operating Environment	Indoor environment, flat ground, no dust
Storage Temperature	-20-50°C

Battery and Charging

Battery Life	6h (<300kg)
Charging Time	3.5h (0-100%)
Battery Type	Ternary lithium battery
Battery Capacity	DC48V15Ah
Battery Dismountable	Yes
Charging Mode	Automatic charging with charging pile, manual charging by recharger and battery Swap
Charging Input	100-240V~,3.5A(MAX.)50/60Hz
Charging Output	54.6V,5A
Charging Pile Dimension (W*D*H)	220mm*146mm*305mm

Hardware

Machine Material	ABS & aluminum alloy
Robot Weight	115KG
Positioning Method	Vslam
Sensing Techniques	Lidar, Image module, Stereo vision, Collision sensor, IMU
Emergency Stop Button	Front, Side, Rear
Network	Wi-Fi/4G
Touch Screen	10.1inch(1280*800)
Interactive Ability	Light/Touch/Voice Prompt
WIFI	802.11b/g/n transmission
WIFI Frequency	2.4-2.484GHZ
LoRa Frequency	850.125MHz~930.125MHz

System and Function

System	Linux(Control) & Android(Interaction)
App Language	Chinese, English, Japanese, Korean, Thai, Traditional Chinese, French, German
App Functions	Direct delivery, Multi-point delivery, Cycle , Lift , Follow mode
Voice Reminder	Different voice prompt in different working mode and general operation.

Official Standard and Optional Parts

Package Main Contents	Robot*1, Battery Recharger*1, Charging Pile, Product Manual*1
Optional Part	Calling System

Package Content



Battery Recharger*1

*The actual recharger may be different.



Product Manual*1



Charging Pile*1

Optional Parts



Call Button



Control Center