ROBOT Outsourcing Provider Co., Ltd.

Under Drive Lifting Robot R500LT

INS + LiDAR SLAM Navigation + 500kg load

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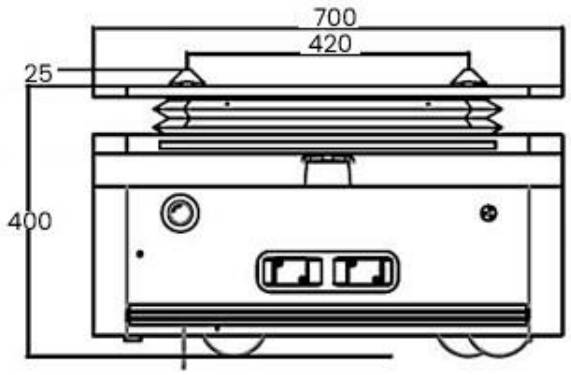
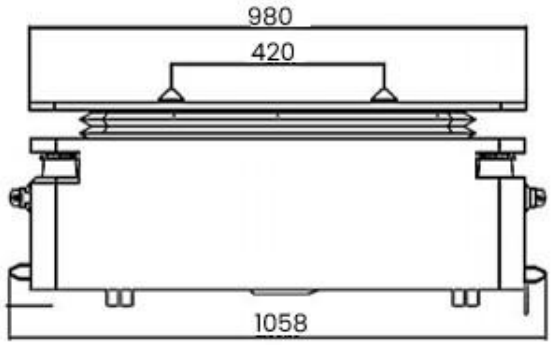
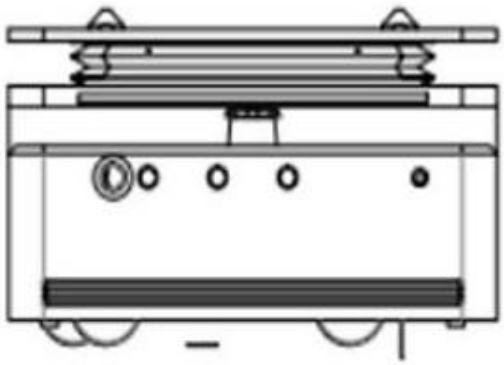
Product Features

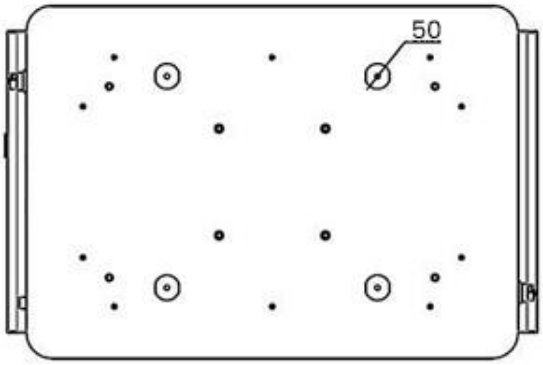
1. R500LT latent Lifting AGV is a LiDAR SLAM navigation and handling robot independently.
2. Equipped with LiDAR SLAM + inertial navigation, convenient deployment, flexible route and flexible obstacle avoidance.
3. The carrying capacity is 500kg.
4. Intelligent power management: preset multi-level power threshold, and charge autonomously if it is lower than the threshold.
5. The product is based on LiDAR SLAM navigation, assisted by inertial navigation, with navigation accuracy of ± 10 mm
6. Cluster scheduling, in the robot control system, you can view the working status, electricity, location and other information of all robots at the same time. Dispatch and manage all equipment through the system.
7. Equipped with LiDAR to avoid obstacles, front and rear contact anti-collision strips, left and right emergency stop buttons to protect equipment and goods Safety.

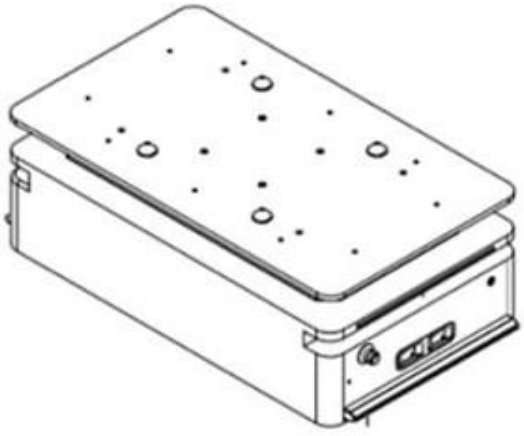
Dimension











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Specification	
Basic parameters	
Name	Under Drive Lifting Robot R500LT
Navigation mode	LiDAR SLAM
Drive mode	Double wheel differential
Dimension (L x W x H)	980 x 700 x 425 mm
Weight (with batteries)	220 Kg (±10 Kg)
Maximum payload	500 Kg
Maximum lifting height	60±2 mm
Jacking height	60 mm
Ambient temperature and humidity range	Temperature: 0~50℃ / Humidity: 10~90%, No compression condensation
Performance Parameters	
Form of motion	Horizontal linear motion
No load maximum speed	1.7 m/s
Full load operation speed	1 m/s
Jacking time	< 12 s
Orientation accuracy	±0.5°
Battery Parameters	
Driving voltage	DC48V
Battery capacity	40AH
Battery type	Lithium iron phosphate
Battery life	1500 cycles, capacity ≥ 80%
Endurance time	≥ 8 hr.
Charging time	≤ 1.5 hr.
Charging mode (optional)	Off line charging/automatic charging
Safety Parameters	
Anti-collision mode	Front and rear lidar obstacle avoidance Front and rear anti-crash strips to avoid obstacles
Emergency stop	Front and rear emergency stop buttons

[1] Designed for indoor transport, not recommended for outdoor environments.

[2] Road surface is smooth, clean and without significant undulations. Slope5%= arctan (0.05) ≈ 2.8°. The robot may not stop or turn at ramps, steps, or gaps, but may only pass quickly perpendicular to them.

[3] Navigation accuracy usually refers to the repeated accuracy of the robot navigation to the target site. When the environment scanned by the robot LiDARis relatively stable (change rate <30%), the repeated accuracy of the robot navigation from the fixed direction to the target site can reach the expected value. When the robot runs along the virtual path, it will try to fit the path, but it does not guarantee repeatability. That is, the robot can guarantee the accuracy of the point, without guaranteeing the accuracy of the navigation path. The minimum site spacing supported by the robot is 1cm.

[4] The basic functions include map editing, model editing, positioning and navigation, basic motion model (differential), API interface, etc.