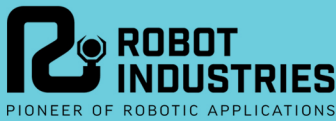


Industrial Handling Robots

All for simplicity!



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ROBOT INDUSTRIES
PIONEER OF ROBOTIC APPLICATIONS

Autonomous Mobile Robots

Autonomous navigation and flexible operation; equipped with LIDAR SLAM technology for precise environmental recognition and intelligent path planning, freeing operations from fixed track constraints; efficiently operates in complex industrial environments such as warehouses and factories, executing a variety of tasks with precision; enhances production efficiency, reduces labor costs, and creates a safe and efficient industrial environment.

Platform

Stable load-bearing and flexible movement, suitable for horizontal material handling such as transferring materials from production lines.

Lifting

Equipped with automatic lifting capabilities, easily handling material transfer needs at varying heights.

Heavy Load

Designed for carrying heavy cargo, featuring powerful performance and a stable structure.

Collaborative

Integrates high-precision robotic arms for human-robot collaboration, capable of performing more complex and precise tasks.

Roller Conveyor

Uses a roller-based conveyance mechanism, suitable for scenarios requiring continuous and smooth cargo transportation.

Material Box

Specially designed for standard material boxes, enabling precise handling and stacking to improve warehouse logistics efficiency.

RILOG15003000AE

360° Full-range Radar Obstacle detection

Ensures precise operation in complex industrial environments, guaranteeing safety and security.

Unique Lifting Design

Customized for bulk goods, with a load capacity of up to 600kg. Offers flexible handling options with a "robot turns, load stays" docking mechanism, adaptable to various transport needs.

Flexible Navigation

Supports LIDAR SLAM navigation and is compatible with QR code navigation, suitable for dense logistics in warehouse environments.

Maneuvering Through Narrow Aisles

Capable of seamlessly moving through tight spaces, enhancing logistics efficiency.



To be tailored based on customer requests.

Rated Load
600kg

Lifting Speed
60mm

Travel Speed
1.9m/s

AMR Forklift

With excellent autonomous navigation technology, combining LIDAR SLAM and visual recognition systems, it can accurately plan routes and effectively avoid obstacles. Its powerful load capacity easily handles various heavy-duty transport challenges, ensuring efficient and precise handling and stacking. Diverse product line ensures to meet the material handling needs of different scenarios. With highly intelligent design, it adapts flexibly to complex work environments, ensuring efficient and stable operation in busy warehouses or production lines.

Handling

Light, flexible, and generic, it can autonomously complete cargo handling tasks. Suitable for locations such as warehouses and production lines that require frequent material movement.

Counterbalance

Strong load capacity, suitable for transporting and stacking heavy materials. Equipped with multiple safety measures to ensure reliability during operation.

Reach

Capable of handling and stacking goods in limited spaces. The unique reach structure design allows deeper access to shelves, improving storage space utilization and operational efficiency.

Stacking

Features strong lifting capability and stable operation performance. Not only supports cargo handling but also has stacking functions, greatly reducing manual labor intensity and improving storage space utilization.

Towing

Mainly used for towing trailers or carts for long-distance transport, with strong towing capacity and stable driving performance. It can autonomously plan routes, ensuring safe and efficient transport of goods.

Handling Robot

RILOG1000TTAMR

Nimble Navigation in Narrow Aisles

Using advanced navigation technology, it operates flexibly in tight spaces, improving efficiency.

High-Precision Positioning and Planning

With positioning accuracy up to $\pm 10\text{mm}$ and autonomous navigation, ensuring precise and error-free transport.

Strong Load and Efficient Transport

Rated load of 1 ton, suitable for various industrial environments, enabling efficient transport and cost reduction.



Rated load
1000kg

Lifting height
155mm

Travel speed
0.7m/s

To be tailored based on customer requests.

Stacking Robot

RILOG15001600AM

Seamless High-Level Operations

Equipped with a powerful lifting system, it ensures stable and efficient performance, easily handling high-position stacking tasks.

Accurate Stacking Capability

Combining intelligent navigation and positioning systems, it guarantees precise stacking every time, enhancing warehouse efficiency.

Maximized Space Utilization

Specifically designed for dense storage, it operates efficiently to maximize warehouse space usage, reducing operational costs.

Rated load	Maximum lifting height	Travel speed
1500kg	1600mm	1.5m/s



AiTEN Counterbalanced Robot

RILOG15003000AE

High-Precision Navigation

LIDAR SLAM navigation provides precise positioning and flexible path planning.

Compatible with Multiple Pallet Types:

Supports both closed and open pallets, suitable for different scenarios regardless of the closed boarded design of the pallet.

High Load Capacity and Stability

The counterbalanced design offers strong load capacity and ensures stable, reliable transport.

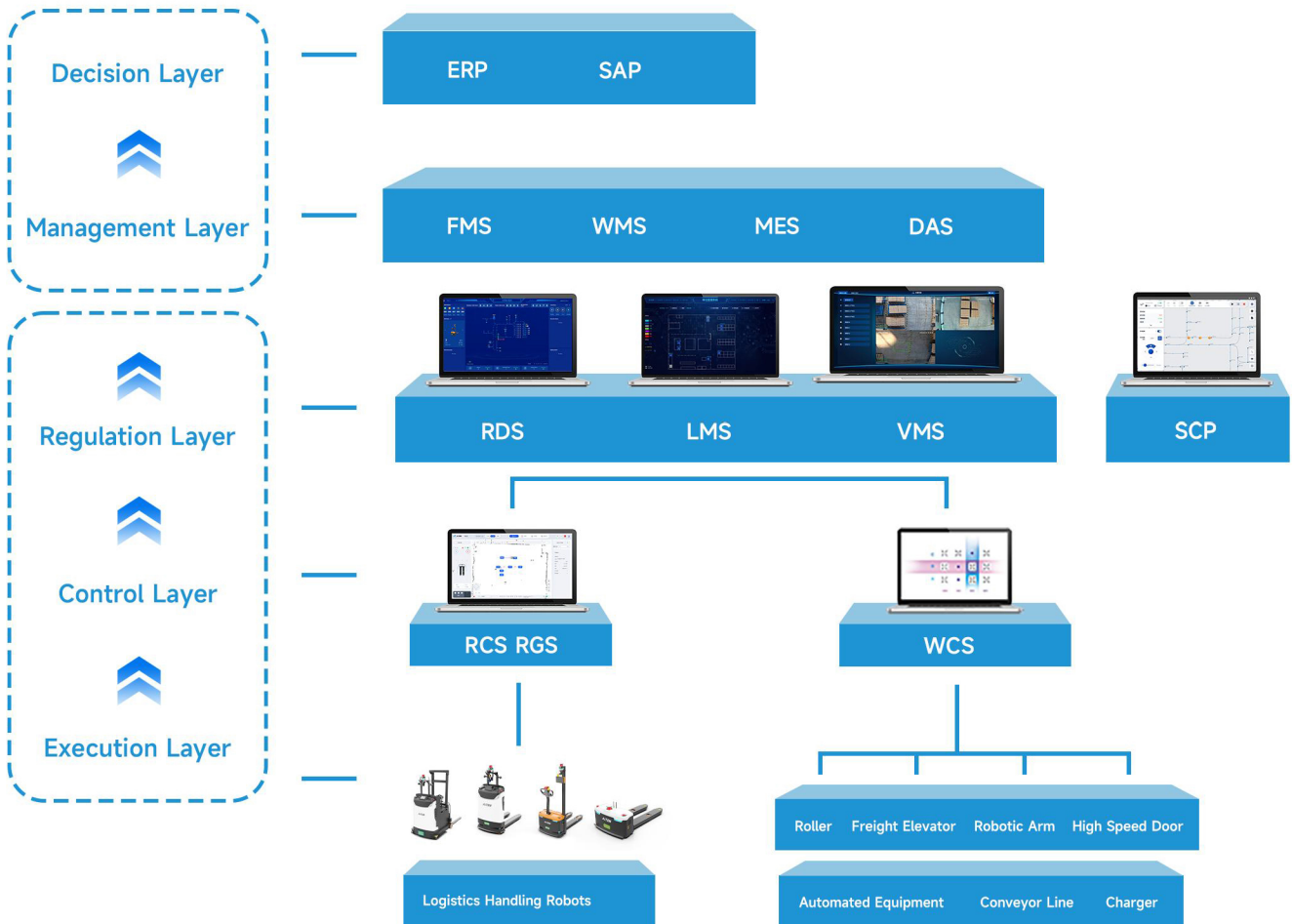
Comprehensive Safety Precautions

Comprehensive safety scanning and anti-collision systems ensure operational safety.

Rated load	Lifting height	Travel speed
1500kg	3000mm	2m/s



Intelligent Software Platform



Precise Task Coordination:

Achieves optimal task allocation and seamless coordination among multiple robots, reducing resource waste and enhancing operational efficiency.



Intelligent Operation Optimization:

Utilizes high-precision algorithms to optimize logistics handling, flexibly adjusts dispatching strategies to ensure efficient and agile operations.



Efficient Resource Utilization:

Optimizes resource allocation to minimize operational costs while maintaining high scalability for continued efficiency.



Safe Working Environment:

Automated and intelligent management creates an orderly workspace, combined with real-time monitoring and intelligent obstacle detection to ensure safety.



Core AI Brain

Fully self-developed controller with the following capabilities



- Deep system synchronization for seamless connections, significantly improving stability and coordination of the robots.
- Highly integrated design with industrial-grade hardware to ensure durability and reliability.
- Industry-first controller chip designed specifically for industrial robots, delivering immense computing power.
- Broad compatibility, flexible adaptation to various robot models, accelerating deployment and maximizing cost efficiency.

RCS Intelligent Control System

Precise Sensory Control:

High-precision sensor positioning and real-time response to anomalies.

Smart Decision-Making:

Real-time data analysis and proactive maintenance.

Efficient Planning:

Automatic path optimization with flexible strategy adjustments.

Smooth Control:

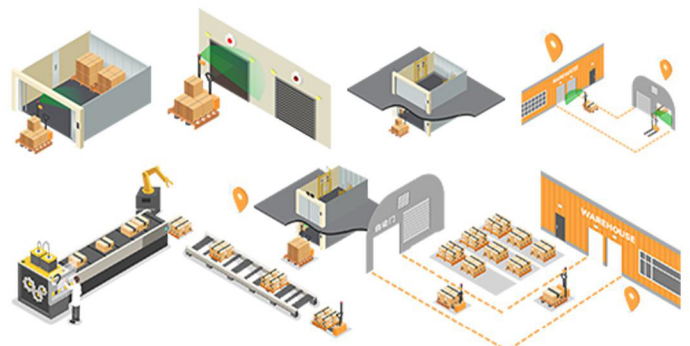
Easy and clear operation with remote monitoring support.



WCS Equipment Control System

Seamlessly docking with peripheral devices such as automatic doors, elevators, and conveyor lines, deeply integrated with the fleet manager to accurately transmit control commands to the motion control system.

Pushing automation process and enhances intelligent coordination and efficiency between devices, laying a solid foundation for building a smart factory.



RDS Intelligent Dispatching System

Leverages efficient algorithms and smart management functions to accurately allocate logistics resources and efficiently schedule tasks, ensuring accurate handling for both indoor transport and inter-area distribution. Its robust data analysis capabilities and intuitive visualization interface allow managers to track real-time logistics status, offering operational insights.



Efficient task scheduling and management.



Strong data processing and analysis.

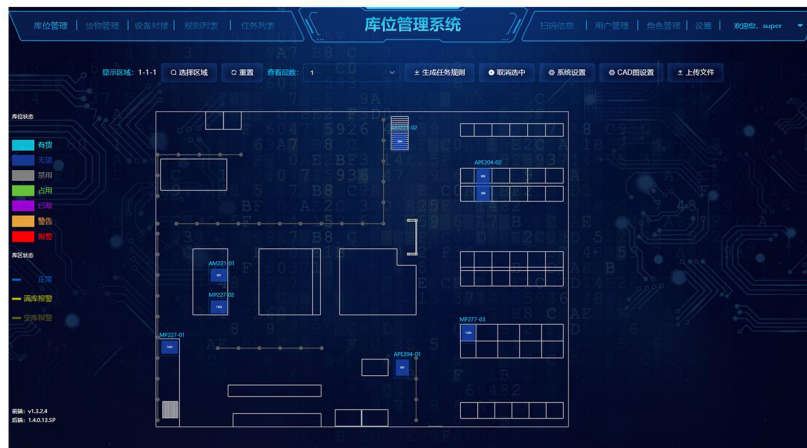


Flexibility and customization capabilities.

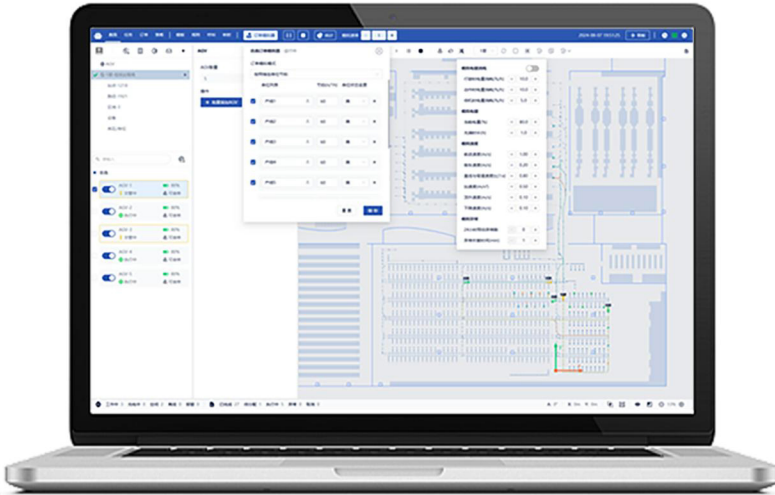


LMS Warehouse Location Management System

- **Flexible Strategy** Supports various inbound and outbound strategies, adapting to various scenarios.
- **Seamless Integration** Capable of integrating with mainstream enterprise management systems for data connectivity.
- **Precise Monitoring** Comprehensive monitoring of logistics processes, including picking and stocking, ensuring inventory accuracy.
- **Data Analysis** Provides key operational indicators to help enterprises optimize management strategies and improve



SCP Simulation System



High-Precision Simulation

Ensures accurate results to aid pre-sales decision-making.

Full Optimization Support

Optimizes the entire project lifecycle, reducing delivery time and improving overall efficiency.

DAS Data Analysis System

Real-time collection, storage, monitoring, and processing of various data to provide comprehensive support for all logistics processes, offering a clearer understanding of the robot's performance and operational effectiveness to make informed scheduling decisions.



RCT Tablet



Greatly simplifies the operation process by integrating control, anomaly handling, and location management. It quickly responds to complicated situations like robot malfunctions or poor pallet positions.



Digital Twin System

Powered by real-time simulation, it provides precise monitoring of logistics operations through 3D live simulations, offering an immediate experience to help enterprises optimize decision-making, improve efficiency, and reduce costs, creating intelligent logistics automation solution.



New Energy Industry Case Study

A prominent player in the new energy sector is currently grappling with challenges stemming from a vast and intricate warehouse setup, leading to inefficiencies in storage management. Traditional approaches are impeding production efficiency, hindering the ability to meet the demands for extensive customization. Mounting cost pressures and the burden of intensive operational tasks further compound operational complexities. The exigency lies in the adoption of efficient and intelligent maintenance solutions to effectively tackle these obstacles.

Production Efficiency Increased by 30%:

The automated production line significantly shortened the delivery cycle, enhancing the company's market competitiveness.

Inventory Accuracy at 99.9%:

Optimized warehouse management improved turnover rates by 50%, reduced inventory backlogs, and accelerated cash flow recovery.

Cost Savings of Several Million:

Labor demand was reduced by 40%, while material waste and error rates were lowered, leading to substantial cost savings.

Inspection Efficiency Improved by 80%:

Operations and maintenance cost was significantly reduced while the fault detection rate increased to over 95%, significantly boosting the safety and stability of the power station.



Food Industry Case Study

While being a top-three contender in the food industry, the company boasts exceptional production capabilities and a significant market presence. Nevertheless, amidst a surge in market requirements and complexities in operation, challenges persist. These include soaring labor expenses, diminished efficiency, notable safety risks, intricate inventory supervision, and sluggish market responsiveness. Urgent measures are imperative to streamline operational workflows and elevate the overall operational efficacy.

30% Cost Savings:

Achieve significant labor cost reductions and optimize the company's expenditure structure.

50% Efficiency Improvement:

Technological innovation drives optimization of logistics processes, leading to a significant increase in efficiency.

83% Reduction in Safety Hazards:

Substantially reduce operational risks and ensure employee health and safety.

40% Improvement in Market Response Speed:

Adapt flexibly to the market, swiftly responding to changes in customer demand.



Home Appliance Industry Case Study

As a frontrunner in China's home appliance sector, the client offers a diverse range of products encompassing air conditioners, refrigerators, washing machines, kitchen appliances, and more. With an expansive production infrastructure and intricate supply chain operations, the company is dedicated to achieving streamlined and intelligent manufacturing processes. However, it grapples with obstacles such as production bottlenecks, cost management constraints, the imperative for heightened product quality, and ensuring production safety. The immediate requirement for the company is to implement cutting-edge automation solutions to amplify overall operational efficiency.

50% Reduction in Labor Costs:

Achieved unmanned handling operations on the production line, significantly reducing the number of handling workers, while also improving handling efficiency and accuracy.

90% Reduction in Safety Hazards:

Robots undertake high-risk, high-intensity handling tasks, effectively reducing human errors and the incidence.

Over 25% Improvement in Operational Efficiency:

Overall operational efficiency on the production line has been significantly enhanced, markedly shortening the product delivery cycle.

Comprehensive Upgrade in Production Management:

Deep integration with the MES system enables real-time data collection, analysis, and feedback, providing comprehensive and accurate data support for production management.



3C Industry Case Study

In the fiercely competitive 3C electronics industry, our client, a renowned brand, confronts numerous challenges. The industry's swift product evolution and diversified market requisites incessantly compress production timelines. Conventional manual handling and logistics protocols fall short in meeting the demands for streamlined and accurate manufacturing processes. Issues like inadequate material handling efficiency, outdated data monitoring, disorganized site supervision, and inventory bottlenecks are prevalent, resulting in escalated operational expenses, compromised product standards, and delayed delivery schedules, thereby significantly impeding the company's competitive edge.

Cutting labor by at least 20 workers:

Drastically reduces labor costs for the company.

Boosted production efficiency by 50%:

Automated systems markedly sped up operations, leading to a substantial efficiency leap.

Full data tracking efficiency:

Unmanned handling and real-time data updates ensure error-free tracking.

Over \$600,000 in annual economic benefits:

Significant overall gains poised to drive substantial yearly economic growth for the company.



3PL Industry Case Study

9 AM1516 Robots + Dispatching System

As a titan in the Chinese e-commerce realm, this company grapples with substantial logistics challenges stemming from its ever-expanding business footprint, especially during peak sales seasons marked by a surge in order volume. Conventional manual handling and sorting techniques not only prove inefficient but also incur steep labor expenses, elevated error rates, and overwhelming work demands. An immediate imperative lies in streamlining logistics processes, bolstering operational efficiency and precision, and fortifying market competitiveness.

Reduction of 13+ Workers:

By implementing the solution, at least 13 handling workers are no longer required, resulting in a significant reduction in labor costs.

Zero Congestion:

Enhanced on-site management leads to a cleaner, more organized environment with smooth material flow.

Delivery Accuracy Rate Exceeding 95%:

Enables thorough digitization of the delivery process, furnishing robust data backing for inventory management, order tracking, and beyond.

50% Increase in Efficiency:

Accomplishes a greater number of tasks within reduced timeframes, markedly amplifying overall operational efficiency and offering robust backing to manage logistics surges during key sales periods.



Auto Parts Industry Case

A Industry-Leading Automotive Parts Company specialized in various product ranges including high-performance turbochargers, maintaining stringent benchmarks for production efficiency, quality assurance, and meticulous logistics oversight. However, its facing challenges like elevated labor expenses, subpar logistics efficacy, substantial inventory bottlenecks, and recurrent errors. To address these hurdles, the enterprise urgently requires automated and intelligent robotic solutions to revamp production methodologies and achieve a significant efficiency breakthrough.

Labor Cost Reduction by 10 Employees:

Automated robots replace manual workers, decreasing the need for porters and leading to substantial cost savings.

45% Productivity Boost:

Continuous automated operations expedite material handling and distribution, significantly enhancing productivity.






On-time Delivery Rate Surpasses 98%:

Streamlined production and precise inventory oversight ensure timely order fulfillment, elevating customer satisfaction and brand reputation.







Enhanced Site Management:

Transition from chaos to organized, eliminating accumulation and blockages, and enhancing operational safety. Seamless material flow integration across plants and elevators is achieved.

Autonomous Mobile Robots

Product Image								
Product Model			RILOG150TTAMR	RILOG30060TPAMR	RILOG60060TPAMR	RILOG100060TPAMR	RILOG150060TPAMR	
Basic Features	1	Driving Mechanism	Differential	Differential	Differential	Differential	Differential	
	2	Navigation Technology	LIDAR SLAM/QR Code	LIDAR SLAM/QR Code	LIDAR SLAM/QR Code	LIDAR SLAM/QR Code	LIDAR SLAM/QR Code	
	3	Rated Load	kg	150	300	600	1000	1500
	4	Weight	kg	50	90	155	300	300
	5	Tires		Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane
	6	Braking System		Regenerative	Regenerative	Electromagnetic	Electromagnetic	Electromagnetic
	7	Network for communication		Wi-Fi/5G	Wi-Fi/5G	Wi-Fi/5G	Wi-Fi/5G	Wi-Fi/5G
	8	Charging modes		Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic
Dimensions	1	Length/Width/Height	mm	640/510/225	750/540/230	930/660/250	1180/860/265	1180/860/265
	2	Minimum Ground Clearance	mm	25	25	30	25	25
	3	Standard Safe Aisle Width	mm	840	950	1130	1460	1460
	4	Lifting Height	mm	/	60	60	60	60
Performance	1	Travel Speed (Full Load/Empty Load)	m/s	1.5/2	1.3/1.9	1.3/1.9	1.3/1.7	1.3/1.7
	2	Maximum Climbing Ability (Full Load/ Empty Load)	%	3/5	3/5	3/5	3/5	3/5
	3	Positioning Accuracy	mm	±10	±10	±10	±10	±10
	4	Battery	V/Ah	48/15	48/20.8	48/30	48/50	48/50
	5	Rated Battery Life	h	6~8	6~8	6~8	6~8	6~8
	6	Full charge time	h	≤1.5	≤2.1	≤2.1	≤2.5	≤2.5
Safety	1	Obstacle Avoidance		√	√	√	√	√
	2	Mechanical Collision Protection		√	√	√	√	√
	3	Audible and Visual Alarms		√	√	√	√	√
	4	Emergency Stop Button		√	√	√	√	√
	5	Charging and Discharging Protection		√	√	√	√	√

AGF Stacker

Product Display									
Product Model			RILOG15001600AM	RILOG1000155/165	RILOG10001600AE	RILOG15003000AE	RILOG20003000DAE	RILOG30003000DAE	
Basic Characteristics	1	Drive Type	Steering Wheel	Differential Drive	Steering Wheel	Steering Wheel	Steering Wheel	Steering Wheel	
	2	Navigation Method	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	
	3	Rated Load	kg	1500	1000	1000	1500	2000	3000
	4	Load Center	mm	600	600	600	600	600	600
	5	Self-weight	Kg	800	270	1685	2530	4310	4735
	6	Tires		Polyurethane Wheels	Polyurethane Wheels	Polyurethane Wheels	Polyurethane Wheels	Polyurethane Wheels	Polyurethane Wheels
	7	Braking Method		Electromagnetic Braking	Electromagnetic Braking	Electromagnetic Braking	Electromagnetic Braking	Electromagnetic Braking	Electromagnetic Braking
	8	Communication Method		Wi-Fi/5G	Wi-Fi/5G	Wi-Fi/5G	Wi-Fi/5G	Wi-Fi/5G	Wi-Fi/5G
	9	Charging Method		Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic
Basic Dimensions	1	Length/Width/Height	mm	1635/880/1890	1475/735/450	2477/996/2200	2478/1047/1975	2828/1450/2700	3080/1200/2560
	2	Lifting Height	mm	1600	155	1600	3000	1600	1500
	3	Fork Ground Clearance (Minimum)	mm	87	86	40	40	50	50
	4	Fork Dimensions	mm	70/180/1150	86/186/1150	40/110/1150	40/110/1150	50/125/1150	50/125/1150
	5	Fork Outer Width	mm	680	570	680	680	680	680
	6	Right-Angle Stacking Aisle Width (1000x1200 Pallet, 1000 Fork Entry)	mm	2080	1940	2820	2820	3350	3520
	7	Minimum Ground Clearance	mm	31	20	50	50	50	45
	8	Turning Radius	mm	1163	990	1200	1200	1560	1890
Basic Performance	1	Travel Speed (Full Load/No Load)	m/s	1/1.5	0.7/0.6	1.0/1.5	1.5/2	1.5/2	1.7/2.5
	2	Lifting Speed (Full Load/No Load)	mm/s	80/100	50/60	90/120	90/120	100/150	200/300
	3	Lowering Speed (Full Load/No Load)	mm/s	120/80	60/50	100/90	100/90	150/100	380/260
	4	Maximum Climbing Ability (Full Load/No Load)	%	3/5	1/4	5/10	5/10	5/10	5/10
	5	Battery	V/Ah	24/100	48/30	24V/210Ah	24V/210Ah	48V/310Ah	48V/310Ah
	6	Rated Battery Life	h	6~8	6~8	6~8	6~8	6~8	6~8
	7	Charging Time After Full Discharge	h	≤1	≤1.5	≤2.1	≤2.1	≤3.1	≤3.1
Safety	1	Laser Obstacle Detection		√	√	√	√	√	√
	2	Mechanical Collision Prevention		√	√	√	√	√	√
	3	Audible and Visual Alarms		√	√	√	√	√	√
	4	Emergency Stop Button		√	√	√	√	√	√
	5	Charging and Discharging Protection		√	√	√	√	√	√
	6	Fork Tip Detection		√	√	√	√	√	√
	7	Cargo Positioning Detection		√	√	√	√	√	√
Mast Options	1	Single-Stage Mast Lifting Height	mm	0-1000		0-1600	0-1600	0-1600	0-1600
	2	Two-Stage Mast Lifting Height	mm	0-2000		0-6000	0-6000	0-6000	0-6000
	3	Three-Stage Mast Lifting Height	mm	/		0-7000	0-7000	0-7000	0-7000