The information and statistics presented in this section and other sections of this document, unless otherwise indicated, were extracted from different official government publications and other publications, and from the industry report prepared by CIC, an independent market research and consulting company that was commissioned by us, in connection with this [**REDACTED**]. *The information from official government sources has not been independently verified by us, the Sole Sponsor,* [**REDACTED**], *the* [**REDACTED**], *the* [**REDACTED**], *the* [**REDACTED**], *the* [**REDACTED**], *the* [**REDACTED**], *the* [**REDACTED**], *any of our or their respective directors, officers, employees, agents, or representatives, or any other person or party involved in the* [**REDACTED**], *and no representation is given as to its accuracy.*

SOURCES OF INFORMATION

China Insights Consultancy was commissioned to conduct research, provide an analysis of, and to produce a report on the smart intralogistics solution industry in China, and other related economic data. The commissioned report has been prepared by China Insights Consultancy independent of the influence of the Company and other interested parties. We have agreed to pay a fee of RMB400,000 to CIC in connection with the preparation of the CIC Report.

China Insights Consultancy provides industry consulting services, commercial due diligence, strategic consulting and so on. Its consultant team has been tracking the latest market trends in intralogistics, consumer goods and services, manufacturing, chemicals, marketing and advertising, culture and entertainment, energy and industry, finance and services, healthcare, TMT, transportation, among others, and possesses the most relevant and insightful market intelligence regarding these industries.

CIC conducted both primary and secondary research using a variety of resources. Primary research involved interviewing key industry experts and leading industry participants. Secondary research involved analyzing data from various publicly available data sources, such as the National Bureau of Statistics. The market projections in the commissioned report are based on the following key assumptions: (i) the overall social, economic and political environment in China is expected to remain stable during the forecast period; (ii) related key industry drivers are likely to continue driving the growth of the smart intralogistics solution market during the forecast period; and (iii) the market will not be dramatically or fundamentally affected by any extreme force majeure events or unforeseen industry regulations.

ANALYSIS OF GLOBAL AND CHINA'S SMART INTRALOGISTICS SOLUTION MARKET

Booming Global Market for Smart Intralogistics Solution

Logistics serves as the backbone of China's economy, with social logistics expenditure reached RMB19.5 trillion in 2025. The logistics market can be broadly categorized into external logistics and intralogistics. External logistics primarily covers various modes of transportation and supply chain fulfillment, while intralogistics focuses on the integration of production lines and inventory systems, deployed within factory and warehouse environments. Therefore, smart external logistics and intralogistics solution providers possess distinct capabilities. The former excels in operational scale and platform-based resource coordination, while the latter specializes in intelligent manufacturing system integration.

Although external logistics accounts for the majority share of the logistics market, intralogistics, focusing on core processes such as manufacturing, warehousing, and distribution, remains an indispensable foundation for the efficient operation of the entire supply chain, despite its relatively smaller scale. Compared with the scale-driven nature of external logistics, providers of smart intralogistics solutions typically demonstrate stronger technological barriers and deeper value-creation capabilities. By leveraging automation and smart technologies, they address complex, high frequency, and real-time material handling challenges within confined spaces, directly enhancing production efficiency and operational resilience. As such, they play a pivotal role in driving the logistics industry's transformation toward greater intelligence and leaner operations. Since 2010, breakthroughs in IoT and other advanced technologies have propelled the

industry into an era of accelerated intelligent development. Smart intralogistics solution providers now offer integrated solutions that combine automated equipment with software, covering storage, conveyance, and sorting, fully meeting the needs of diverse scenarios such as factories and logistics hubs.

According to CIC, global smart intralogistics solution market grew from RMB379.8 billion in 2021 to RMB528.6 billion in 2025, with a CAGR of 8.6%. Currently, the global penetration rate of smart intralogistics solutions is approximately 20%, and the global smart intralogistics solution market is expected to maintain a growth momentum going forward, surpassing RMB850 billion in 2030.

China's Smart Intralogistics Solution Market Continues to Evolve and Upgrade

China's smart intralogistics solution market is experiencing robust growth, driven by the continued expansion of distribution industries such as e-commerce logistics and retail, the rise of emerging sectors such as new energy, the intelligent transformation of manufacturing industries such as automotive, and favorable national policies. As technology costs continue to decline and smart intralogistics systems prove effective in improving operational performance, businesses across sectors are accelerating adoption, fueling the market's ongoing expansion.

By integrating in-house and purchased hardware with deeply embedded software systems, and leveraging insights into diverse scenarios, smart intralogistics solution providers deliver tailored, integrated solutions to customers. Therefore, they possess industry know-how, a broad customer base, intelligent technological capabilities, and strong project implementation skills, enabling them to empower the entire industry chain and drive overall efficiency. As the variety of intralogistics equipment expands and robotics technology advances, leading solution providers are increasingly capable of coordinating and managing multiple devices and processes, further optimizing resource allocation, and improving collaboration efficiency.

Smart intralogistics solution, categorized by solution type, encompasses key hardware devices such as AS/RS, conveyors, sorters, and robots. Supporting software systems primarily include Warehouse Control Systems (WCS), Warehouse Management Systems (WMS), and other applications focused on robots and various equipment scheduling, warehouse process optimization, and production management.

Key Components of Smart Intralogistics Solution, 2025

	AS/RS	Conveyors	Sorters	Robots	Software
Description	• AS/RS has different types, including heavy-load and light-load systems. They are primarily composed of stacker cranes, high-rise racking, and shuttles	• Conveyors include powered roller lines, belt conveyors, etc.	• Sorters include cross-belt sorters, sliding shoe sorters, etc.	• Robots include industrial robots, mobile robots, etc.	• The software solutions for smart intralogistics include warehouse control, warehouse management, order management systems, etc.
Core Function	• High-density storage and automated retrieval	• Continuous transportation and sorting	• Efficient sorting and order processing	• Flexible material handling and agile scheduling	• Real-time resource and equipment scheduling and end-to-end visibility

Source: CIC

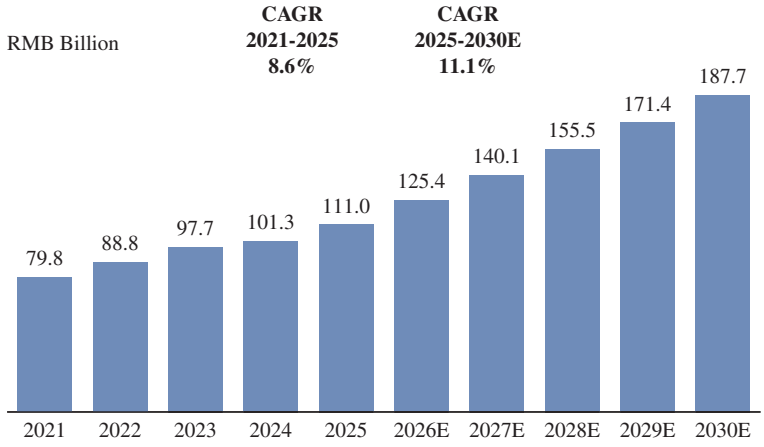
The AS/RS significantly enhances storage density by efficiently utilizing vertical space, leading to substantial reductions in land costs. As its core equipment, the stacker crane offers high-precision positioning and fast retrieval capabilities, enabling fully automated inbound and outbound operations. It adapts to various shelf heights and load requirements, making it ideal for large-scale storage, high-frequency retrieval, and high-informatization scenarios. It is the preferred solution for companies seeking warehouse intensification and standardized processes, serving as a key infrastructure for advancing smart intralogistics.

Robots play a supporting role in smart intralogistics solutions, replacing and optimizing labor in critical functions such as material handling, picking, and transportation. Their application in material flow and production line integration breaks down barriers between intelligent manufacturing processes, facilitating end-to-end automation and transcending the boundaries of traditional human-machine collaboration.

Software systems, including WCS and WMS, are also critical components of smart intralogistics solution. By integrating holistic data and coordinating processes, these systems enable dynamic scheduling of storage resources, precise control of equipment operations, and intelligent optimization of order fulfillment, thereby supporting efficient and transparent logistics operations.

According to CIC, China's smart intralogistics solution market exceeded RMB110 billion in 2025. In 2030, China's smart intralogistics solution market is projected to grow rapidly to RMB187.7 billion, representing a CAGR of 11.1%.

China's Smart Intralogistics Solution Market, 2021-2030E



Source: Mobile Robot and AGV/AMR Industry Alliance, Annual Reports, CIC

Market Trends and Drivers of Smart Intralogistics Solution Market

- ***Rising Land and Labor Costs***: Under tightening land resources and rising labor costs, China's manufacturing sector is accelerating its shift toward digitalization and intelligent operations. Smart intralogistics solutions, featuring integrated automation and smart capabilities, effectively reduces labor dependency, optimize warehouse layout, save space, and enhance logistics efficiency and accuracy. These advantages work together to strengthen operational performance and sharpen market competitiveness.

- ***Deep Integration of Frontier Technologies***: AI is reshaping the role of robots in intralogistics by enabling real-time learning to optimize processes, allowing them to handle more diverse tasks and adapt flexibly to dynamic environments. Advancements in foundational mobile robot navigation technology, combined with the integration of multimodal perception, have

significantly improved path planning efficiency in complex environments. The rapid iteration of cobots, embodied intelligence, and humanoid robotics technologies is poised to further overcome the limitations of automation, driving the industry toward a flexible transformation across all scenarios.

- ***Refined Scenario Adaptation***: As industries upgrade and demand diversifies, smart intralogistics solutions are transitioning to deeply customized solutions tailored to specific operational environments, workflows, and needs. Diverse industry-specific pain points are prompting solution providers to rapidly develop flexible delivery capabilities that combine reusable technology modules with scenario-based knowledge frameworks.

- ***Maturing Industry Chain***: The maturation of hardware technology, coupled with the rise of cost-effective Chinese manufacturers, has driven a significant reduction in the hardware costs of smart intralogistics systems, further accelerating innovation and iteration in smart intralogistics equipment. At the same time, the ever-improving industry chain enables solution providers to collaborate with multiple resources, offering customers more efficient integrated solutions.

- ***Acceleration of High-Quality Industry Growth***: The widespread adoption of more intelligent solutions has raised higher expectations for providers. Leading smart intralogistics solution providers, leveraging their technological expertise and cross-industry adaptability, can efficiently respond to customized client needs, further consolidating market share and driving the industry toward higher-value, quality-driven growth.

- ***Supportive Government Policies***: Governments around the world are vigorously promoting the upgrade of smart intralogistics technologies and infrastructure through strategic planning and financial support. Initiatives such as "*Made in China 2025*" (中國製造2025) call for the manufacturing sector to become more connected, intelligent, and flexible, pushing enterprises to restructure their supply chain logistics. The "*14th Five-Year Plan for Modern Logistics Development*" (《"十四五"現代物流發展規劃》) outlines the construction of smart and green logistics systems, while the "*Large-Scale Transportation Equipment Renewal Action Plan*" (《交通運輸大規模設備更新行動方案》) issued by 13 departments including the Ministry of Transport specifically calls for the intelligent transformation of logistics hubs and parks. "Development Plan on Smart Manufacturing in the 14th Five-Year Plan" (《"十四五"智能製造發展規劃》), calls for the vigorous development of smart manufacturing equipment, including smart intralogistics systems such as large-scale AS/RS. "the Guiding Opinions on Accelerating Scenario Innovation and Promoting High-quality Economic Development with High-level Application of Artificial Intelligence" (《關於加快場景創新以人工智能高水平應用促進經濟高質量發展的指導意見》), proposes prioritizing the exploration intelligent scenarios such as robotic sorting and handling, material transportation, AS/RS, and traceability terminals in the intralogistics sector. Local governments have also rolled out tailored supporting measures to accelerate the deployment of "lights-out factories," further driving the rapid growth of the smart intralogistics solution industry.

ANALYSIS OF GLOBAL AND CHINA'S SMART INTRALOGISTICS SOLUTION MARKET FOR INDUSTRIAL SECTOR

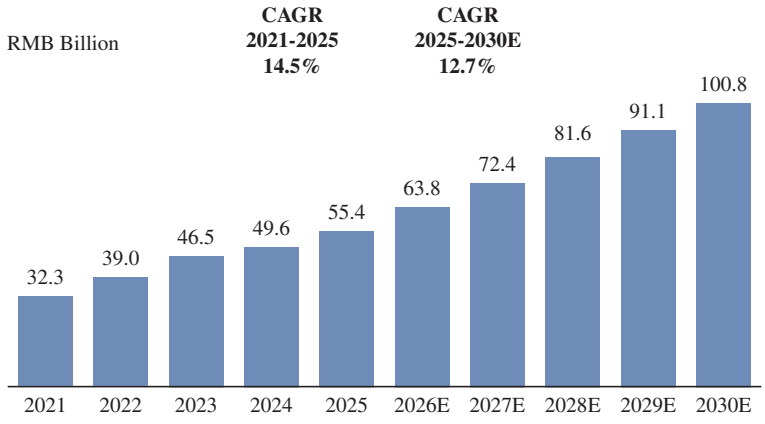
Smart Intralogistics Solutions Empower Intelligent Upgrades Across Industrial Systems

Global industrial manufacturing is rapidly advancing toward intelligent manufacturing, shifting its focus from capacity expansion to greater flexibility, efficiency, and optimized resource allocation. As a critical enabler of this transformation, smart intralogistics systems eliminate bottlenecks in the flow of information and materials across production, warehousing, and distribution, fostering high levels of collaboration and the evolution towards unmanned manufacturing. According to CIC, global smart intralogistics solution market for industrial sector is expected to maintain strong growth momentum in the years ahead, increasing from RMB223.4

billion in 2025 to over RMB360 billion in 2030. China is the world's largest manufacturing powerhouse, accounting for nearly 40% of global industrial output, and with the maturing application of cutting-edge technology, intelligent manufacturing is further emerging as a vital path to improving quality, efficiency, and resilience.

Industries such as automotive have witnessed increased demand for smart intralogistics solutions following their digital and intelligent upgrades. At the same time, the rapid growth of the new energy industry, particularly in lithium-ion batteries and photovoltaics, is generating substantial downstream market demand. According to CIC, China's smart intralogistics solution market for industrial sector exceeded RMB50 billion in 2025, accounting for almost half of the total smart intralogistics solution market. The market is projected to maintain strong growth, reaching RMB100.8 billion in 2030, with a CAGR of 12.7%.

China's Smart Intralogistics Solution Market for Industrial Sector, 2021-2030E



Source: Mobile Robot and AGV/AMR Industry Alliance, Annual Reports, CIC

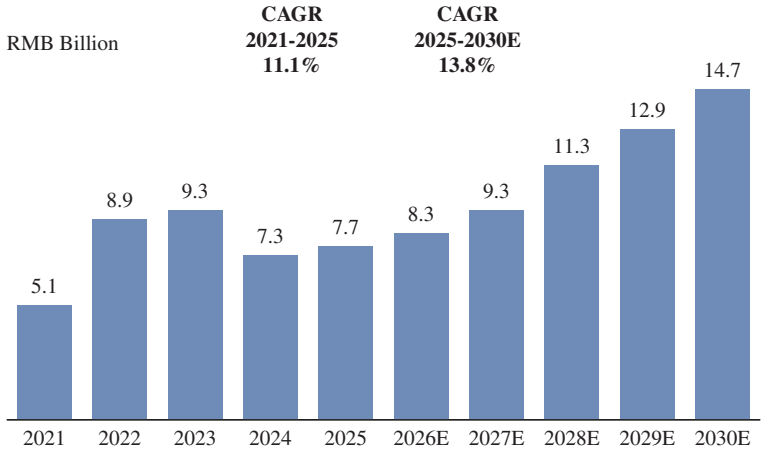
New Energy Industry Emerges as a Driver for China's Smart Intralogistics Solution Market

Driven by the global energy transition and China's goals of carbon neutrality and carbon peaking, China's new energy industry has entered a phase of large-scale development. China's installed capacities of solar and wind power continue to expand, while both the production and sales of new energy vehicles (NEVs) exceeded 16.4 million units in 2025, with a penetration rate reaching around 50%. The rapid growth of the new energy industry is driving capacity expansion across manufacturing processes and accelerating the shift toward larger-scale and more flexible factory operations.

Due to the high degree of customization, complex system integration, and the need for deep alignment with production lines, smart intralogistics solution projects in the new energy sector typically involve longer construction cycles and larger investment scales. Triggered by fast expansion of downstream applications for lithium-ion battery such as EV, energy storage system, consumer electronics, etc., the market size of China's smart intralogistics solution market for new energy sector grew rapidly. According to CIC, the market size of China's smart intralogistics solution for new energy sector grew from RMB5.1 billion in 2021 to RMB7.7 billion in 2025, representing a CAGR of 11.1% and reaching nearly 7% of the total smart intralogistics solution market. Since the second half of 2024, leading lithium-ion battery manufacturers have resumed their capacity expansion plans amid a gradual recovery in downstream demand. This has ushered in a new wave of industry growth, marked by structural overcapacity. The Chinese lithium battery market is increasingly transitioning from competition centered on scale and cost to differentiators rooted in technological innovation and product quality. Rising requirements for higher energy density,

enhanced safety, and extended cycle life are accelerating the commercialization of advanced battery technologies, including large cylindrical cells and solid-state batteries. These developments have continued to stimulate a rebound in the smart intralogistics solutions market for China's lithium-ion battery sector in 2025, with positive ripple effects across the broader new energy industry. Looking ahead, against the global backdrop of carbon neutrality, increasing consumer adoption of electric vehicles, and accelerated advancement of emerging technologies, China's smart intralogistics solution market for the new energy sector is expected to grow significantly and reach RMB14.7 billion by 2030.

China's Smart Intralogistics Solution Market for New Energy Sector, 2021-2030E



Source: Mobile Robot and AGV/AMR Industry Alliance, Annual Reports, CIC

Given the high energy density and complex electrochemical properties of lithium-based new energy products, stringent safety standards are essential for their storage and handling. For instance, the formation and aging process in lithium-ion battery production requires precise control over temperature, humidity, static electricity, gas composition, and equipment cleanliness. Smart intralogistics solution, with its proven strengths in safety, efficiency, and smart operations, has emerged as the ideal choice to support stable, secure, and high-performance production processes. In 2025, China's smart intralogistics solutions market for new energy lithium-ion batteries accounted for approximately 80% of the overall smart intralogistics market in the new energy sector.

Against the background of rapid-developing new energy industry, China's lithium-ion battery sector is experiencing unprecedented growth momentum, solidifying its global standing. China's lithium-ion battery shipments expanded from less than 200GWh in 2021 to over 1,100GWh in 2025, accounting for over 50% globally. Looking ahead, shipments are projected to reach approximately 2,600 GWh by 2030, indicating a promising growth outlook for smart intralogistics solutions in downstream applications. Besides, lithium-ion battery technology is shifting toward higher energy density solid-state batteries and large-scale production, significantly driving demand in the smart intralogistics system solutions market. The manufacturing requirements of solid-state batteries, such as oxygen-free settings and precise handling, are accelerating the development of high-cleanliness customized equipment and deep integration with the Industrial Internet of Things (IIoT).

The following are the key market trends in China's smart intralogistics solution market for new energy sector:

- ***Technological advancements drive incremental demand***: Taking lithium-ion battery technology as an example, its continuous evolution, particularly the development of next-generation technologies such as solid-state batteries, places higher demands on production environments. This trend is pushing smart intralogistics solutions to achieve more precise adaptation in areas such as multi-sensor integration, flexible gripping, and dynamic temperature and humidity control, accelerating the upgrading of warehousing and handling operations.

- ***Enhancing Policies and Standards***: Policies, such as the Ministry of Industry and Information Technology's "Regulations for the Lithium-ion Battery Industry," (《鋰電池行業規範條件》) stipulate the need for intelligent risk management in warehousing and transportation, compelling companies to adopt smart intralogistics systems with real-time monitoring and early warning functionalities. "Development Plan for the New Energy Vehicle Industry (2021-2035)" (《新能源汽車產業發展規劃(2021-2035年)》), promotes the development of the new energy vehicle industry while calling for core technology enhancements in both vehicle manufacturing and power batteries, thereby generating strong downstream demand for China's smart intralogistics solution market for new energy sector.

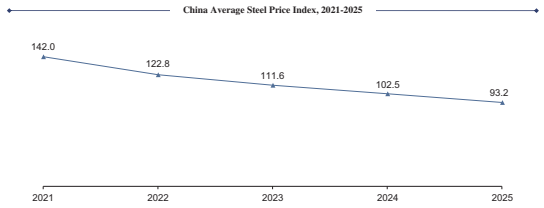
- ***Technological Integration and Scenario Innovation***: Providers of smart intralogistics solutions for new energy sector are continuously exploring the application of emerging technologies, to enhance system intelligence and automation. These innovations enable end-to-end visibility and dynamic optimization of logistics processes delivering more efficient and intelligent intralogistics support for the new energy industry.

- ***Trend Toward Modular Development***: As the application scope of new energy products, such as lithium-ion batteries, continue to diversify, modular design has become a key trend in the industrial smart logistics solutions for the new energy sector. By adopting modular designs, companies can rapidly respond to customer needs, flexibly combine different functional modules, and enable planned, quick deployment.

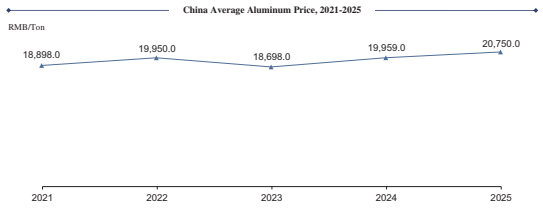
- ***Development of the Lithium Energy Storage Industry***: The demand for production capacity from diversified application scenarios, such as peak load regulation of power systems and industrial and commercial energy storage, has grown significantly, accelerating the transition to an ultra-large scale and continuous production model of the lithium-ion batteries. At the same time, the trend towards large-capacity development of energy storage batteries, together with their heat-sensitive characteristics and explosion-proof safety requirements, has further improved the technical threshold of smart intralogistics solutions and facilitated their continuous upgrade to specialization and high precision.

Analysis of Major Raw Material

Smart intralogistics solution providers usually procure most of their equipment and hardware from external sources, leveraging specialized expertise and optimizing resources. They generally manufacture only a limited number of equipment items in-house. Regarding solution providers that manufacture their own stackers, steel and aluminum are raw materials used in their equipment production. In recent years, the prices of these two raw materials have experienced significant fluctuations, primarily due to changes in supply and demand dynamics, policy interventions, and macroeconomic conditions. Given that self-manufactured stackers account for a limited portion of the overall revenue of smart internal logistics solutions, these price fluctuations have a limited impact on the overall cost structure of smart internal logistics solutions providers.



Source: China Iron and Steel Association (CISA), CIC



Source: Shanghai Futures Exchange (SHFE), Annual Report, CIC

COMPETITIVE LANDSCAPE IN CHINA'S SMART INTRALOGISTICS SOLUTION MARKET

Ranking of Players in China's Smart Intralogistics Solution Market

China's smart intralogistics solution market is sizable and highly competitive. Leading players with strong hardware-software integration capabilities have established a significant scale advantage. According to CIC, the market size of China's smart intralogistics solution industry reached approximately RMB111.0 billion in 2025, with the top five players collectively accounting for nearly 9% of the total market share. Based on our revenue in China in 2025, we ranked as the fourth largest provider of smart intralogistics solutions in China. Meanwhile, we ranked as the second-largest provider of industrial smart intralogistics solutions and the largest smart intralogistics solution provider in the new energy lithium-ion battery segment in China.

Rank	Company	Smart Intralogistics Solution Related Revenue, RMB Billion, 2025	Market Share, %, 2025
1	Company A[1]	~2.3	~2.1%
2	Company B[2]	~2.2	~2.0%
3	Company C[3]	~2.1	~1.9%
4	**The Company**	**~1.8**	**~1.6%**
5	Company D[4]	~1.4	~1.2%

Source: Annual Reports, Expert Interviews, CIC

Notes:

1. Company A: Established in 2000, headquartered in Shenzhen, listed on Shenzhen Stock Exchange in 2016.
2. Company B: Established in 2016, headquartered in Wuxi, listed on Shanghai Stock Exchange in 2021.
3. Company C: Established in 2018, headquartered in Beijing, listed on Shanghai Stock Exchange in 2024.
4. Company D: Established in 2001, headquartered in Jinan, listed on Shanghai Stock Exchange in 2020.

Ranking of Players in China's Smart Intralogistics Solution Market for Industrial Sector

China's smart intralogistics solution market for industrial sector is characterized by intense competition, with hundreds of active industry participants. According to CIC, the top five players accounted for approximately 13% of the total market share in 2025. In terms of related revenue in 2025, the Company ranked as the second-largest provider of industrial smart intralogistics solutions in China.

Rank	Company	Smart Intralogistics Solution for Industrial Sector Related Revenue, RMB Billion, 2025	Market Share, %, 2025
1	Company A	~2.2	~3.9%
2	**The Company**	**~1.8**	**~3.2%**
3	Company C	~1.5	~2.6%
4	Company E	~0.9	~1.7%
5	Company F	~0.9	~1.5%

Source: Annual Reports, Expert Interviews, CIC

Note:

1. Company E: Established in 2002, headquartered in Wuxi, listed on Shenzhen Stock Exchange in 2015.
2. Company F: Established in 2007, headquartered in Hefei, listed on Shanghai Stock Exchange in 2022.
3. The above-mentioned competitors includes Shen Zhen New Trend International Logistics Technology, Wayzim Technology, BZS (Beijing) Technology Development, BlueSword Intelligent Technology, Wuxi Lead Intelligent Equipment and Hefei Jingsong Intelligent Technology.

Ranking of Players in China's Smart Intralogistics Solution Market for New Energy Sector

In China's smart intralogistics solution market for new energy sector, leading players have a deep understanding of the new energy industry and profound technical accumulation. By meeting the high standards of downstream customers, they establish strong customer trust and create high entry barriers, resulting in a highly concentrated market. According to CIC, the top three players accounted for approximately 50% of the total market share in 2025. In terms of related revenue in 2025, the Company ranked as the largest provider of smart intralogistics solutions for new energy sector and the largest smart intralogistics solution provider in the new energy lithium-ion battery segment in China.

Rank	Company	Smart Intralogistics Solution for New Energy Sector, RMB Billion, 2025	Market Share, %, 2025
1	**The Company**	**~1.7**	**~21.7%**
2	Company A	~1.4	~17.8%
3	Company E	~0.8	~10.9%

Source: Annual Reports, Expert Interviews, CIC

Rank	Company	Smart Intralogistics Solution Market for New Energy Lithium-ion Battery Segment, RMB Billion, 2025	Market Share, %, 2025
1	**The Company**	**~1.6**	**~25.6%**
2	Company A	~1.0	~16.7%
3	Company E	~0.8	~12.9%

Source: Annual Reports, Expert Interviews, CIC

Entry Barriers and Key Success Factors in China's Smart Intralogistics Solution Market

- ***Deep Industry Insight and Established Client Base***: The downstream applications of smart intralogistics solution are highly diverse, requiring solution providers to possess deep insights into the logistics demands of various industries. Leading providers are distinguished by their ability to deliver tailored solutions that address the specific pain points and operational characteristics of different sectors. In addition, delivering reliable products, long-term maintenance services, and cultivating a broad client base and strong brand reputation are essential for building trust, enhancing market visibility, securing high-quality customer resources, and driving sustainable growth in market share.

- ***Diversified Product Portfolio and High Performance***: A wide product offering across diverse applications, coupled with supporting software systems, allows providers to deliver full-stack solutions. High product performance — marked by efficiency, reliability, and precision — offers customers greater flexibility and adaptability to meet the evolving demands of modern logistics, strengthening the provider's market competitiveness. Meanwhile, top-tier providers leverage self-developed hardware deeply integrated with scheduling algorithms, enabling fast coordination between equipment and system layers.

- ***Continuous Software Development and Coordination Capabilities***: Leading solution providers showcase robust technological foundations and application capabilities, particularly in core areas including scheduling algorithms, motion control, and navigation. Their systems can integrate and coordinate a diverse range of smart intralogistics equipment and robots, encompassing stacker cranes, shuttle systems, and articulated robots, achieving unified scheduling and collaborative management across brands and equipment models.

- ***Modular Development and Deployment with Supply Chain Integration***: Modular design and deployment capabilities can speed up project implementation, cut on-site assembly time, and lower overall costs. Integrated control over the supply chain, from research to sales, enables resource optimization and cost-efficiency.

Threats and Challenges of China's Smart Intralogistics Solution Market

- ***Rapid Technological Evolution Imposes Continuous R&D Pressure***: With the increasing application of technologies such as AI and machine vision in smart intralogistics scenarios, customers are demanding higher levels of system flexibility and intelligence. To remain competitive, solution providers must commit to ongoing R&D investment. Delayed responses to evolving technical requirements may result in customer attrition or marginalization in the market.

- ***System Complexity Creates Challenges in Delivery and Operations***: Smart intralogistics solutions typically involve the integration of diverse hardware and software components, placing significant demands on project management, system coordination, and delivery schedules. Misalignment in solution design, system debugging, or client collaboration may lead to project delays, reduced customer satisfaction, and increased after-sales service burden.

- ***Downstream Demand Volatility Introduces Performance Uncertainty***: The market is closely tied to capital investment cycles in downstream industries, particularly in the new energy sector. A slowdown in capacity expansion or capital expenditure can directly impact project execution timelines and order conversion. Coupled with the long lead times and complex delivery nature of such projects, these factors may result in fluctuations in financial performance of smart intralogistics solution providers.