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OVERVIEW

Who We Are

We are a leader in the global AMR market. We offer a series of AMR solutions to empower warehouse fulfillment and industrial material transport, enhancing supply chain efficiency while reducing reliance on manual labor. We have been the world’s largest warehouse fulfillment AMR solution provider in terms of revenue in 2024, which is the sixth consecutive year we have maintained this leading position, according to CIC. We offer the most extensive range of warehouse fulfillment AMR solutions in the industry, according to CIC, covering a wide variety of use cases and technology approaches. Our technology innovations, commitment to product quality and long-term reliable service are well recognized and widely accepted by approximately 806 end customers worldwide, making us the warehouse fulfillment AMR solution provider with the largest global customer base, according to CIC. As of December 31, 2024, we have shipped approximately 56,000 AMRs across over 40 countries and regions worldwide. The global warehouse fulfillment AMR solution market in which we operate is a sub-set of the global warehouse automation solution market, and we occupied 9.0% market shares in the overall global warehouse fulfillment AMR solution market in 2024.

Market Challenges

Hindered by inefficiencies, unreliability, high operational costs and inflexibility, traditional unautomated warehouse solutions and current rigid warehouse automation solutions are facing significant challenges to keep up with the fast-paced demands of modern commerce, particularly as labor costs rise and the workforce shrinks.

- **Inefficiency:** Traditional warehouse solutions rely heavily on manual labor who spend 70% of time in walking to shelves to pick goods, according to CIC. In addition, manual operations typically require wide aisles and ample space for workers and usually lead to inefficient layout and space management, which limits the overall warehouse space utilization.
- **Unreliability:** Labor intensive warehouse solutions increase the risk of human errors, which may result in incorrect order processing, as well as inventory misplacement and delays.
- **High operational costs:** Rising global wages, combined with increasing labor shortages due to factors like an aging workforce, are significantly driving up operational costs. Businesses are incurring higher expenses to recruit, train and retain workers. Additionally, the need for extra staffing during peak period further escalates costs, making it difficult to maintain efficiency and profitability in warehouse process.

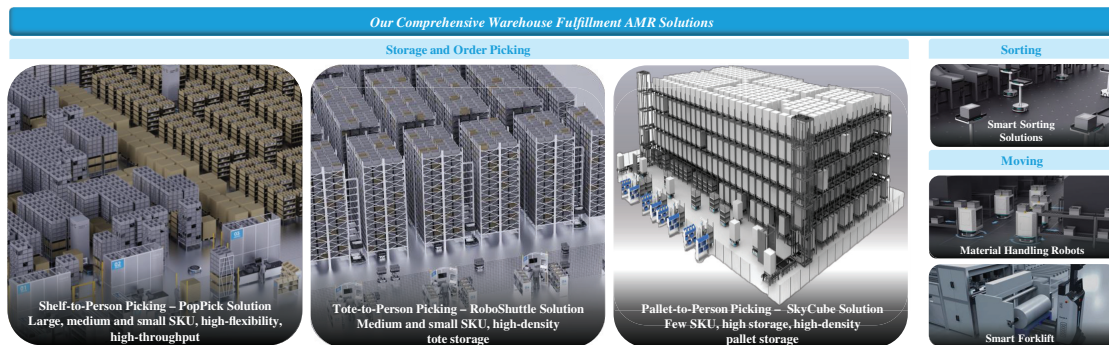
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- **Inflexibility:** Rigid warehouse automation solutions are designed for specific tasks, making them less capable of handling the variability and complexity of modern logistics operations. Any required changes often involve costly and time-consuming adjustments to the infrastructure.

As warehousing scenarios become increasingly complex, businesses today are yearning for solutions that are highly adaptable in the fast-changing and dynamic environments.

Our Solutions

We emerge as the facilitator in the industry, offering efficient, reliable and flexible AMR solutions that help businesses maintain operational efficiency and meet evolving market demands. As the global market leader, we pioneered a range of advanced AMR solutions, as demonstrated by the following diagram.



We offer flexible solutions and functionalities enabling the entire warehouse automation process:

- **Geek+ Shelf-to-Person Picking Solution:** Our Geek+ Shelf-to-Person Picking Solution comprises (i) standard solution featuring our P-series robots and (ii) our PopPick Solution empowered by P-series robots and PopPick workstations. Our PopPick Solution focuses on transporting movable shelves to designed workstations, offering high flexibility for handling various item sizes and types efficiently. We are the world’s first AMR solution provider to offer an innovative, all-in-one PopPick Solution, according to CIC, which swiftly brings the goods to the human picker, addressing customers’ needs for high throughput, compatibility, storage, and efficiency in warehousing. According to CIC, our PopPick Solution leads the industry in terms of compatibility, throughput efficiency, storage capacity, and overall operation effectiveness as compared to the solutions of our peers. The Geek+ Shelf-to-Person Picking Solution achieves a picking efficiency of up to 400 units per hour per workstation (with one operator), significantly higher than the industry average of less than 180 units, and delivers a picking accuracy of 99.99%, compared to the industry average of below 99.90%.

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- **Geek+ Tote-to-Person Picking Solution:** We are the world’s first AMR solution provider to offer Geek+ Tote-to-Person Picking Solution featuring RS-series and P-series robots with a high degree of personalization, according to CIC, which is designed to optimize the efficiency of box-based picking operations. It is specifically designed for vertical storage, making it ideal for industries that require high storage density with moderate throughput. This solution is engineered for optimizing storage density, cost efficiency, and operational flexibility. According to CIC, our Geek+ Tote-to-Person Picking Solution sets industry-leading standards in the utilization of storage volume. Additionally, our Geek+ Tote-to-Person Picking Solution features a storage height of up to 12 meters, exceeding the industry average of less than 10 meters, and supports a minimum aisle width of 1000 mm, compared to the industry average of over 1100 mm.
- **Geek+ Pallet-to-Person Picking Solution:** We are the first in the world to launch the Geek+ Pallet-to-Person Picking Solution, a high-density, high-throughput integrated storage and picking system which increases both storage capacity and operational efficiency, according to CIC. This solution is designed for handling whole pallets and original containers, making it ideal for bulk operations where quick access to large quantities is essential. According to CIC, our Geek+ Pallet-to-Person Picking Solution offers industry-leading storage capabilities, with the highest storage height reaching up to 28 meters. Moreover, our Geek+’s Pallet-to-Person solution can increase storage efficiency by over five times, saving 60% of aisle space compared to traditional forklifts, and maximize warehouse capacity by up to 500%, according to CIC.
- **Smart Sorting Solution:** We adopted one of the world’s first robotic flexible sorting solutions, namely our FleetSort Solution, according to CIC. We are the first in the AMR market to introduce a flexible sorting solution that operates without the need for a steel platform, according to CIC. This solution is designed to efficiently sort small to medium-sized parcels at floor level. It offers versatile sorting capabilities that support replenishment, returns and fulfillment processes. Moreover, the sorting efficiency achieved by our robotic flexible sorting solution is 10 times more efficient than manual processing, with rapid deployment times enabling quick returns on investment. According to CIC, our robotic flexible sorting solution leads the industry in automation, efficiency, flexibility, and ROI.
- **Smart Moving Solution:** Our smart moving solution comprises (i) material handling solution and (ii) forklift solution. Our smart moving solution covers various processes in warehouses and factories, spanning across raw material storage and retrieval, material handling and transportation, and finished product warehousing. Our smart moving solution is designed for production lines that require raw material feeding, improving material flow and streamlining loading and unloading processes on conveyors or production lines. It replaces manual carts with automated systems. Our forklift solution automates pallet transportation, efficiently addressing the needs of various inter-area transport scenarios. According to CIC, we are one of the leaders in the global AMR solution market that introduces laser-vision fusion SLAM navigation technology that equips our AMRs with one of the most advanced positioning capabilities in the industry.

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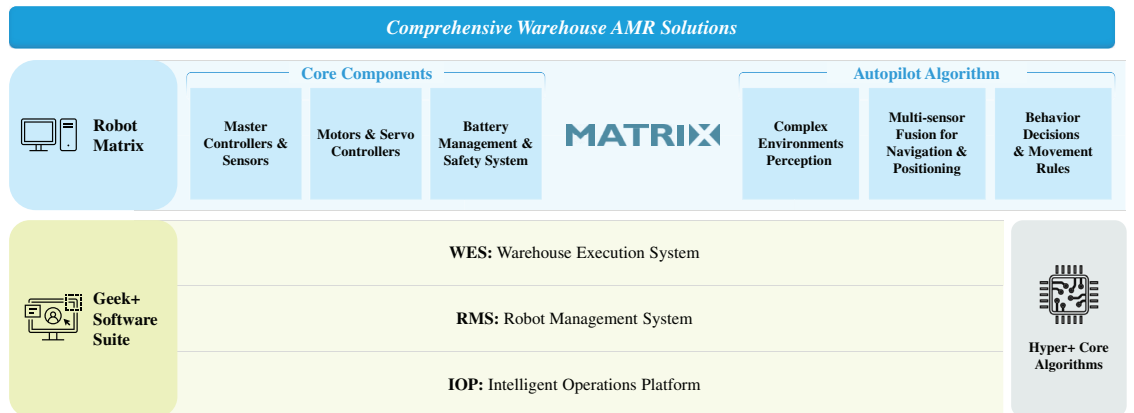
Our Value Propositions

Our modular and standardized design allows our AMR solutions to adapt, scale, and adjust to diverse scenarios, providing significant value to end customers.

- **Optimal Operating Efficiency.** Our AMR solutions significantly enhance operational efficiency and reduce labor costs through fully automated process management and rapid deployment. According to CIC, our AMRs have industry leading performance in moving speed and endurance, with a 4.5 m/s maximum no-load speed — significantly higher than the industry average maximum no-load speed of less than 2 m/s — and a work duration of over eight hours under rated conditions. Moreover, according to CIC, the P-series robots have a maximum no-load speed of 4.5 meters per second and a full-load speed of 2 meters per second, well above the industry average level.
- **High Reliability and Accuracy.** Our AMR solutions are powered by proprietary technologies that ensure exceptional reliability and precision. According to CIC, our AMRs demonstrate industry leading robot control and scheduling technology as compared to AMRs developed by our peers. The AMRs achieve a 99.99% picking accuracy rate and support complex mixed scheduling for various robot types and operations, making them highly effective in diverse industrial environments.
- **Fast Payback Period.** Our AMR solutions deliver a significant reduction in labor costs, typically achieving a short payback period of within 12-36 months, while the industry average is more than 24 months.
- **Dynamic Flexibility and Scalability.** Our diverse range of robots can meet specific operational needs, offering high flexibility and rapid deployment. Compared to the industry average of more than 3 months, full system deployment of our solutions can be completed within one to three months, allowing businesses to quickly adapt to changing demands.

Our Technology Architecture

The following graphic demonstrates our advanced technology architecture, seamlessly integrating hardware, software, and algorithms to deliver cutting-edge solutions:



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Robot Matrix

We designed and developed the world’s first robotic general technology platform, Robot Matrix, to empower the development of high-quality and high-performance AMRs, according to CIC. As a modular and configurable platform, Robot Matrix provides a comprehensive suite of ready-to-use technologies, enabling us to efficiently innovate, design, and develop warehousing robotics. Empowered by Robot Matrix, we have launched a comprehensive matrix of AMRs with great breadth and versatility that conform to the latest technological developments with more advanced functions compared to peers.

Geek+ Software Suite

We have developed the most comprehensive software suite in the AMR market, according to CIC, comprising a collection of modular software solutions designed to support efficient, reliable, and flexible robot-based smart warehousing. The suite consists of three core systems essential for site deployment: RMS, WES and IOP.

Our Geek+ Software Suite enables efficient utilization of robot resources, thus preventing scheduling deadlock or congestion and further improving warehousing efficiency through automated tally and a combination of push/pull picking.

Our software suite is designed for superior flexibility and compatibility, integrating rapidly and seamlessly with end customers’ existing business systems, allowing for a smooth and efficient integration.

Hyper+ Core Algorithms

Through our focus on researching high-performance, high-speed optimization algorithms, we have developed one of the most advanced algorithms in the AMR market, namely our Hyper+ Core Algorithms that consist of traffic management and task allocation, warehouse management and supply chain algorithms. When compared to similar algorithms developed by our competitors, our Hyper+ Core Algorithms support one of the widest ranges of algorithm types and the largest cluster scheduling scales, according to CIC.

Our Presence

We strategically targeted the global market early on. This global mindset has enabled us to establish a strong international presence with over 70% of total revenue generated from non-domestic markets outside Chinese mainland in 2023.

According to CIC, we have the broadest global presence in the global AMR market, with operations, partnerships, and deployments spreading across over 40 countries and regions as of December 31, 2024. This extensive footprint is supported by local sales,

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solutions, project management, and service teams, as well as a network of local distribution and service partners. Our global presence is also evidenced by our over 48 service stations and service partner sites globally, 13 spare parts centers worldwide, and over 305 engineers as of December 31, 2024.

Our Go-To Market Strategy and Solid Customer Base

We adopt an effective customer-centric go-to market strategy. We strategically focus on establishing a strong presence and building long-term relationships with large and influential customers. By collaborating with those industry leaders, we design and deliver large-scale projects that set new industry standards, showcase our capabilities and solidify our reputation in the AMR market. As mid- and small-sized customers usually follow those industry opinion leaders by adopting similar solutions, our partnerships with established customers reinforce our market leadership and allow us to further expand our market share. These partnerships also generate valuable industry insights and deepen our understanding of industry needs, leading to premium-quality solutions and improved customer experience.

Our broad solution array creates significant upselling and cross-selling opportunities, which strengthen our relationships with existing customers and ensure their loyalty. Our customers may begin with one solution in a certain market, then adopt more of our solutions across their warehouses in different countries as their businesses scale. This land-and-expand strategy has led to some of our largest deployments and is a key driver of our growth. The repurchase rate for our end customers in 2024 reached 74.6%.

In the meantime, we plan to strengthen our partner network to leverage the local know-how and resources to adapt our solutions more effectively to local cultures and business environments.

Our Success

We have achieved remarkable growth in recent years. We generated RMB1,995.6 million, RMB2,694.1 million and RMB3,140.3 million of order intake in 2022, 2023 and 2024, respectively. Our total revenue increased from RMB1,452.2 million in 2022 to RMB2,142.9 million in 2023, and further to RMB2,409.0 million in 2024.

In 2022, 2023 and 2024, our EBITDA (non-IFRS measure) was RMB(1,429.4) million, RMB(1,041.0) million and RMB(764.7) million, respectively; our adjusted EBITDA (non-IFRS measure) was RMB(683.3) million, RMB(372.0) million and RMB(25.4) million, respectively; and our adjusted net loss (non-IFRS measure) was RMB820.9 million, RMB457.6 million and RMB92.2 million, respectively. For a reconciliation of these non-IFRS measures to their most directly comparable IFRS Accounting Standards financial measures, see “Financial Information — Non-IFRS Measures.”

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OUR COMPETITIVE STRENGTHS

Global AMR Leader and Pioneer Focused on Warehouse Fulfillment

We have firmly established ourselves as a leader within the global AMR market providing efficient, reliable, and flexible AMR solutions empowering warehouse fulfillment. According to CIC, we are the world’s largest AMR solution provider in the global warehouse fulfillment AMR market in terms of revenue in 2024, which is the sixth consecutive year we have maintained this leading position.

We are a market pioneer who launched technological innovation that redefined warehouse automation. We are the first to introduce the PopPick Solution and the Geek+ Tote-to-Person Picking Solution, according to CIC, which are now considered benchmark for the entire industry. These market-firsts, along with many other innovations we have introduced, bring new advancements in warehouse automation, encouraging industry growth and inspiring competitors to innovate, contributing to improvements in the quality and efficiency of global AMR solutions.

Widest Market Presence and Largest Customer Base with Strong Loyalty

We pride ourselves with the widest global presence among the world’s AMR solution providers with presence in over 40 countries and regions. As of December 31, 2024, we have the largest global customer base in the warehouse fulfillment AMR solution market, according to CIC, serving approximately 806 end customers across various geographic regions and industry verticals, including approximately 63 Fortune 500 customers.

When entering new regions or industries, we strategically partner with vertical leaders to execute large-scale projects that showcase our capabilities and enhance our reputation. By effectively addressing the complex needs of these leaders, we not only demonstrate the scalability of our AMR solutions but also attract new end customers seeking proven, impactful automation solutions.

Our strong customer loyalty is demonstrated by our customer repurchase rate which reached 74.6% in 2024. In 2024, the repurchase rate for our key account end customers reached approximately 84.3%, far surpassing the industry average, according to CIC. Our revenue generated from these key account end customers amounted to RMB778.1 million, RMB1,612.5 million and RMB1,847.1 million in 2022, 2023 and 2024, respectively. By strengthening collaboration and increasing wallet share, we foster high customer stickiness and loyalty.

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Flexible, Modular and Integrated AMR Solutions that Drive Superior Value

We revolutionized the warehouse automation by introducing AMRs that bring a level of flexibility that traditional systems — reliant on fixed, rigid equipment — simply cannot achieve. With advanced mobility and modular design, our diverse range of AMRs can meet specific operational needs and handle items of varying sizes. Our AMR solutions are highly effective across diverse industrial environments, achieving a 99.99% picking accuracy rate and supporting complex, mixed scheduling for various robot types and operations. This adaptability boosts throughput, reliability, and efficiency, significantly reducing labor costs and driving a higher return on investment and profitability for end customers.

Our AMR solutions are crafted with a modular approach, allowing the use of standardized components across various end markets and warehouse types. We provide a suite of components — ranging from robots and workstations to software systems — that can be mixed and matched to fit in diverse environments. Such modularity allows us to craft solutions that are fine tuned to the specific operational needs of each customer, while competitors mostly offer standardized, one-size-fits-all solutions. We or our channel partners can deliver tailored solutions based on customers’ needs while maintaining the reliability and efficiency.

We provide a fully integrated hardware and software solution, essential for effective warehouse automation. Achieving this demonstrates our expertise in both AMR hardware and software systems, including WES and RMS, and supporting algorithms to automate and optimize logistics operations. With our comprehensive capabilities, we enable customers to execute complex logistics tasks, empowering them to meet the demands of modern supply chains more efficiently.

Robust Technology Platform for Sustained Innovation

Our AMR solutions are built on a deep understanding of AMR hardware, software, and algorithms. We believe that a platform-based development framework is the most efficient way to drive innovation and create new solutions, enabling us to streamline the development process and facilitate the efficient design of advanced AMR technologies of quality. This platform-based approach consolidates our years of experience in the field of AMR, allowing us to expand functionality across various industries while enhancing the efficiency of our algorithms.

We have developed a full-stack technology architecture anchored by three proprietary technology platforms, including:

- **Robot Matrix.** It is the world’s first robotic general technology platform launched by us, according to CIC, which provides a comprehensive suite of ready-to-use technologies essential for the R&D of AMRs. Notably, we are one of the leaders in the global AMR solution market that introduces the advanced laser and vision fusion SLAM navigation technologies in our AMRs, according to CIC.

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- **Geek+ Software Suite.** It is our software platform comprised of modular software solutions designed to support efficient, reliable, and flexible robot-based smart warehousing. The suite consists of three core systems essential for site deployment, namely (i) RMS, a traffic management and task allocation system supporting large-scale robot scheduling and smart cluster operation strategy, (ii) WES, an open and user-friendly business system supporting various picking solutions, and (iii) IOP, a data-driven intelligent operations platform designed to provide comprehensive operational insights and real-time monitoring for warehouse management.
- **Hyper+ Core Algorithms.** It is a suite of high-performance optimization algorithms designed for intelligent logistics and manufacturing applications, engineered for rapid execution and efficiency. Our algorithm can effectively coordinate more than 5,000 AMRs in warehouse scenario, significantly enhancing large-scale robotic fleet operations.

We are committed to further enhancing our industry leadership by rationally investing in research and development expenses. We maintain a stable investment of our annual revenue in R&D, ensuring continuous refinement of existing solutions while powering future advancement.

Customer-Centric Service and Efficient Supply Chain

We embrace a customer-centric approach that integrates a commitment to quickly responding to customer needs and enhancing satisfaction into our company culture. For instance, “customer first” is a deeply ingrained principle that guides every aspect of our after-sales process. We provide exceptional support through a 24/7 English call center and local hotlines, enabling us to respond to customer inquiries in less than 10 minutes. For hardware issues, we deliver quality services with online support to resolve problems within 24 hours. Where necessary, we dispatch technicians to be on-site within 48 hours, regardless of the customer’s location. Additionally, our network includes 13 spare parts centers worldwide, along with over 48 service stations and partner sites, allowing us to expedite the delivery of replacement parts, often within just one day. This commitment to swift and effective after-sales support positions Geek+ at the forefront of customer service in the industry.

Our highly efficient supply chain features a mixed-line production approach and a high level of automation in production and testing. By implementing this mixed-line production strategy, we can manufacture different models of AMRs on the same production line, significantly increasing capacity utilization and reducing costs. We have also achieved high levels of automation in key production processes, such as automatic screwing and gluing, which significantly enhance product quality. Additionally, our automated testing process minimizes the potential for human error. By leveraging the mature supply chain in China, we continue to substitute core components with domestically produced alternatives that offer equal or superior functionality at a lower cost, further enhancing the competitiveness of our solutions in the global market.

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Forward-thinking Management Team Shaping Our Corporate Values

We are a team of engineers and entrepreneurs with a vision to lead the automation and intelligent transformation of traditional warehouse industry through disruptive technology. Our company name, Geek+, embodies our core philosophy. “Geek” represents a group of highly intelligent and passionate individuals dedicated to technology development and innovation. “+” signifies the integration of intelligent robotics into traditional industries. It symbolizes improvement and excellence, reflecting our long-standing commitment to transforming the warehousing industry and also indicates our diverse and open culture where new ideas are embraced to foster continuous growth and innovation.

We are led by a forward-thinking management team with diverse background combining solid business experience and technological capability. Our four founders are the masterminds behind our AMR solutions, and their bonding and the cooperation goes way back for 10 years when they developed a shared vision regarding the prospects of AMR solutions. They have extensive experience in the technology and logistics industries and guide us in advancing our entrepreneurship and innovation. In addition, our four founders have the strong support by a dedicated team of executives who contribute a wide range of invaluable experience.

Under the leadership of our founders, we have established core values that are integral to our identity: (i) putting clients first by focusing on delivering value and supporting their success, (ii) striving for excellence through relentless innovation to build our differentiated competitive edge, and (iii) encouraging open collaboration by promoting information sharing and cooperation to achieve win-win outcomes, both within our organization and with our business partners. These guiding principles not only define who we are but also drive our mission to transform the warehouse automation through our solutions.

OUR GROWTH STRATEGIES

Increase R&D Efforts to Reinforce Market Leadership

We will continue to make substantial investments to increase our R&D capability, strengthening our technological leadership and competitiveness. This positions us to seize future market opportunities in warehouse fulfillment automation and transformation. Our R&D focus is on developing market-pioneering technology solutions in areas such as innovative AMRs, intelligent warehouse management, robot control and management software, robot design, robotic hardware and the development and design of warehouse facilities. We will integrate our R&D results into our technical architecture to deliver top-class solutions for end customers.

We will continuously develop and upgrade our hardware-software architecture to ensure seamless integration of hardware with software and algorithm. We intend to strengthen our market position by strategically offering user-friendly, technologically advanced and intelligent AMR solutions to end customers. We aim to lead the AMR market by setting industry standards and advancing AMR technology. Through joint R&D and marketing efforts with end customers and business partners, we will expand our market presence and empower our partners with new growth opportunities.

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In particular, we intend to advance our R&D through the below key initiatives:

- Improving operating efficiency and system stability of our solutions with reduced manual intervention. We will apply key technologies into our technological architecture such as optimization of storage slots, self-operation optimization and system diagnosis and self-regulation.
- Optimizing the R&D process to ensure efficient technology adoption and solution iteration. We aim to further improve research output with streamlined R&D workflows, enhanced collaboration mechanism, and advanced infrastructure.
- Strengthening AMRs’ capabilities, improving the functionality and efficiency of our AMR solutions in warehouse operations and building technology reserves to support future extensions of AMR applications.
- Improving AMRs’ operational management capabilities and efficiency to enrich existing product functions. We also aim to develop more product forms to support broader applications, such as robotic arms.

Solidify Market Presence, Customer Base and Brand Image Globally

We have distinguished ourselves by having a global focus from the very beginning. We have been operating and servicing overseas service project for years, making us one of the earliest Chinese AMR solution provider who achieves international commercialization, according to CIC. We are committed to enhancing our Geek+ brand as an international market leader with quality products and services, as well as established market reputations.

We intend to offer our services on a global reach to fully capture market opportunities from international and regional leading corporations. We plan to enhance our global presence from 2025 by further penetrating developed markets with opportunities for warehouse automation. We will strategically expand our sales team and regional partnerships to replicate success and drive overseas sales. We will further explore business opportunities to deepen our business relationship with key customers through product upgrades in current facilities and serving as their global strategic AMR partner.

We have served and maintained long term and mutually beneficial relationship with a large group of international conglomerates in industries including e-commerce, retail and third-party logistics. We have established and maintained a comprehensive network of customers and are well positioned to increase our reach to capture growing market opportunities in warehouse fulfillment AMR solutions. We will increase marketing efforts to identify key customers in industries with strong demand for warehouse automation (such as FMCG, groceries, food and beverages, cold chains and other industrial sectors), enriching our customer portfolio and service output. We will comprehensively evaluate our presence and expand into key sub-sectors of these industries to fully capture market opportunities and increase our market share. We will expand our channel partner network, especially with those

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with experience in warehouse automation and third-party logistics, to expand our reach and fuel business growth. We will also allocate resources to enhance our operational and service capabilities for international customers, as well as strengthen existing customer relationships while identifying opportunities for warehouse expansion, iteration and upgrades.

We will further leverage our large customer base and brand reputation to expand our business coverage into regional corporations which possess ample market opportunities on increasing market penetration of warehouse automation.

Broaden Solution Matrix to Pursue Untapped Market Potentials

We aim to enrich our solution offerings by enhancing existing product features and introducing upgrades to substantiate our leadership in AMR solution market. We will keep abreast of latest industry trends and our R&D results in our product development to deliver innovative and efficient AMR solutions. We will take into account feedback from our customers in product development to enhance our service capabilities, product functionality and customization ability across different use cases to improve retention and support business expansion.

While we provide standardized modules to ensure the consistency and scalability of our solutions, we will offer a range of technical tools and core capabilities to help customers customize and adopt our AMR solutions. For example, we will support the development and delivery of localized AMR solutions across various markets, ensuring that our customers can tailor the solutions to meet their specific needs.

Moving forward, we will explore monetization opportunities for AMR software to better serve and retain our customers, helping them optimize their AMR systems and improve operational efficiency. This strategy will allow us to capture the industry shift toward integrated AMR solutions featuring key software capabilities. With our robust software capabilities, we are well-positioned to capitalize on this trend.

Improve Supply Chain Capability and Operating Efficiency

We plan to leverage economies of scale on provision of AMR solutions to improve supply chain efficiency. We intend to optimize our cost structure by entering strategic agreements with our key suppliers to ensure price stability and competitiveness of our AMR products, and further expand our pool of supplier candidates to ensure production stability.

We plan to enhance operational efficiency and improve service quality by integrating the procurement system into our internal enterprise resource planning (“**ERP**”), thereby advancing the digital transformation of our supply chain. We will set up more regional spare parts centers in our key markets to build localized supply chain to shorten response time for service delivery, repair and maintenance. We will also expand local teams and provide comprehensive training to our local partners to enhance our ability to serve our customers, answering post sales enquiries and on-site support.

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Drive Green and Sustainable Development with High ESG Standards

We are committed to fulfilling our social responsibilities and promoting green and sustainable development with high ESG standards. We plan to lead ahead of our international peers to adhere to latest international ESG standards such as ISO9001, ISO14001, ISO45001, CE and UL.

By continuously integrating eco-friendly elements into our AMR solutions, we help customers transform their facilities from traditional, high-energy, and labor-intensive models to low-energy, environmentally friendly, and technology-driven operations.

We intend to maintain a green supply chain to minimize carbon emission. We will place emphasis on certain green initiatives such as proximity to our production facilities, use of eco-friendly protective materials, energy efficiency of machines, component reuse rate when we are selecting our suppliers to promote green and sustainable production.

We will be assessing carbon emission level from our offices and production facilities. We will devise plan to reduce carbon footprint in our production facilities and in the long run achieve carbon neutrality.

Attract and Cultivate Global Talents to Fuel Growth and Advance Strategic Goals

Talent is our core strategic asset. We look for talents who are eager to share, willing to contribute and dedicated to continuous improvement. We are devoted to creating a caring and learning working environment that supports individual development and respects diversity. We will continue attracting and retaining top global talents who understand our corporate culture on caring and share our values: responsibility, respect, and innovation.

We plan to build our talent base through external recruitment and internal development to maintain our position as a global leader in the AMR industry. We seek management professionals with proven experience from multinational corporations to support our strategic vision. For driving continuous innovation in AMR solutions, we prioritize R&D talent with deep expertise and a strong commitment to the field. Additionally, we value local engineering professionals with both technical experience in AMR products and a thorough understanding of local culture, which will enhance our service capabilities and improve customer satisfaction.

OUR AMR SOLUTIONS

We provide a comprehensive range of AMR solutions tailored to enhance efficiency across two key areas: (i) warehouse fulfillment, optimizing critical processes such as picking, sorting, and transporting goods within warehouses; and (ii) industrial material transport, streamlining the movement of materials, components, and finished products within manufacturing facilities. Both types of AMR solutions share the same fundamental technologies, although their product forms and functionalities differ to address the specific needs of each segment’s operational environment.

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Despite the continued loss-making position during the Track Record Period, we are making measurable progress in narrowing our losses. We recorded loss from operations of RMB804.6 million and RMB476.1 million, respectively, in 2022 and 2023. Our loss from operations also narrowed from RMB476.1 million in 2023 to RMB127.6 million in 2024. Adjusted net loss (non-IFRS measure) on a non-IFRS basis declined significantly from RMB820.9 million in 2022 to RMB92.2 million in 2024, representing a substantially reduced adjusted net loss (non-IFRS measure) as a percentage of revenue (RMB1,452.2 million, RMB2,142.9 million and RMB2,409.0 million in 2022, 2023 and 2024, respectively) from 56.5% to 3.8%. This trend demonstrates our increasing operational efficiency and improved scalability as we grow. Despite current losses, we believe our strong order intake and revenue growth affirm our trajectory toward profitability. The consistent narrowing of losses, coupled with substantial market demand for AMR solutions, positions us as a leading player with significant long-term growth potential. For a reconciliation of adjusted net loss (non-IFRS measure) to net loss, see “Financial Information — Non-IFRS Measures.” For more information about comparison between these two categories of AMR solutions, see “Industry Overview — Global Warehouse Fulfillment AMR Solution Industry — Two Main Categories of AMR Solutions: Warehouse Fulfillment AMR Solutions & Industrial Material Transport AMR Solutions.”

The following table sets forth a breakdown of our revenue from sales of AMR solutions between warehouse fulfillment and industrial material transport during the Track Record Period.

	For the year ended December 31,		
	2022	2023	2024
	(RMB in thousands)		
Revenue¹			
Warehouse Fulfillment	1,098,844	1,884,541	2,176,174
Industrial Material Transport	148,601	239,508	226,140

Note:

- During the Track Record Period, we also generated a relatively small amount of revenue from RaaS (Robot-as-a-Service) business. RaaS refers to standardized robot leasing services, combined with a suite of operational support and management tools designed to help end customers optimize their warehousing operations. Unlike our AMR solutions business, which involves the sale of both hardware and software, the RaaS model is service-based. We initially offered RaaS as a way to introduce customers to our AMR technologies and to test our solutions through real-world use cases. As our products matured and full-scale deployments became the norm, we have since scaled down this business to focus on more scalable, higher-margin AMR solution sales.

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The following table sets forth the breakdown of gross profit and gross profit margin by solution type during the Track Record Period.

	For the year ended December 31,					
	2022		2023		2024	
	Gross profit	Gross profit margin	Gross profit	Gross profit margin	Gross profit	Gross profit margin
	<i>(RMB in thousands, except percentages)</i>					
Sales of AMR	429,147	34.4	766,181	36.1	880,939	36.7
Warehouse fulfillment . . .	401,847	36.6	735,398	39.0	853,592	39.2
Industrial transport	27,300	18.4	30,783	12.9	27,347	12.1
Others⁽¹⁾	<u>(172,599)</u>	–	<u>(106,907)</u>	–	<u>(43,772)</u>	–
Total	<u>256,548</u>	17.7	<u>659,274</u>	30.8	<u>837,167</u>	34.8

Note:

(1) Represents RAAS and inventory write-downs that could not be allocated to the line items above.

The gross profit margin of sales of AMR solution for the industrial material transport decreased from 18.4% in 2022 to 12.9% in 2023, and further decreased to 12.1% in 2024, primarily due to intense competition in the industrial logistics sector and weaker pricing power with large enterprise customers, particularly in the lithium battery and new energy industries. We recorded gross profit from sales of industrial material transport of RMB27.3 million, RMB30.8 million and RMB27.3 million, respectively, in 2022, 2023 and 2024.

During the Track Record Period, six, 13 and three projects incurred losses as a result of our strategic decision to expand into the new energy sector, particularly in the lithium battery and photovoltaic segments in 2022, 2023 and 2024, respectively. These projects, involving a loss of RMB23.4 million, RMB78.6 million and RMB22.6 million in 2022, 2023 and 2024, respectively, were affected by strong customer bargaining power and stringent pricing as well as the engagement of new projects. To establish our foothold, we invested in refining and optimizing our solutions, which led to higher-thanexpected costs and contributed to the losses.

BUSINESS

The following table sets forth the breakdown of order intake between warehouse fulfillment and industrial material handling during the Track Record Period. In particular, our order intake for our AMR solutions increased from RMB2,694.1 million in 2023 to RMB3,140.3 million in 2024. This upward trajectory highlights our strengthened market position, expanding capabilities, and the enduring trust of our customers.

	For the year ended December 31,		
	2022	2023	2024
	(RMB in thousands)		
<i>Order Intake¹</i>			
Warehouse Fulfillment	1,677,780	2,544,359	3,004,332
Industrial Material Transport	317,808	149,764	135,922

Note:

1. Order intake refers to the total value of new contracts or orders secured within a specific period.

We offer a suite of flexible AMR solutions consisting of Geek+ Shelf-to-Person Picking Solution, Geek+ Tote-to-Person Picking Solution and Geek+ Pallet-to-Person Picking Solution, each designed to address shelf storage, tote storage, and pallet storage, the most common use cases in warehousing process. Additionally, we provide flexible sorting solutions, FleetSort Solution, to optimize overall warehouse operations. Meanwhile, we also provide smart moving solution including (i) material handling solution and (ii) forklift solution, which can be used in various warehousing and factory scenarios.

We provide a one-stop solution with an array of compatible AMRs and software systems ensures that businesses can seamlessly integrate multiple AMR types into their operations. Our AMR solutions empower various end customers in various industries, including logistics, apparel, retail, new energy, pharmaceuticals, automotive and electronics, by automating key processes such as goods handling, order picking, and inventory management. These solutions enhance operational efficiency, reduce labor costs, and improve accuracy across complex logistics environments. With flexible deployment and adaptability to dynamic requirements, our AMRs drive digital transformation and optimization in diverse sectors. For instance, the following diagram illustrates how our AMR solutions are applied to enhance the end customers’ business processes in the apparel industry vertical, one of the major industry verticals for the end customers.

BUSINESS

One-stop Shop for Mobile Robotics Solutions

Three Core Goods-to-Person Solutions

Shelf-to-Person

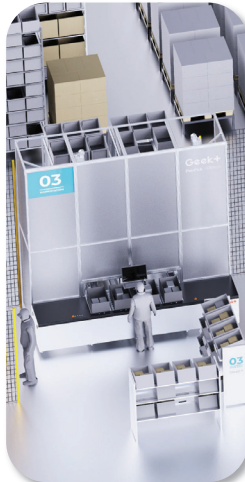
Standard



High Flexibility

- No infrastructure investment
- Flexible, modular Goods-to-Person solution

PopPick

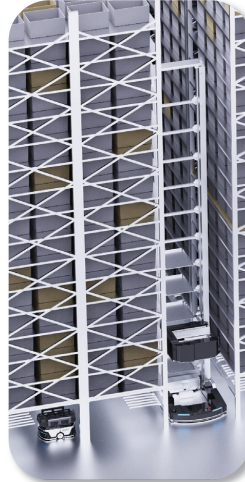


High Throughput

- Picking station optimized for totes, racks, pallets of all sizes
- Strong throughput

Tote-to-Person

RoboShuttle



Double-Deep Storage

- High-density storage for medium and small goods
- Maximizes vertical warehouse space

Pallet-to-Person

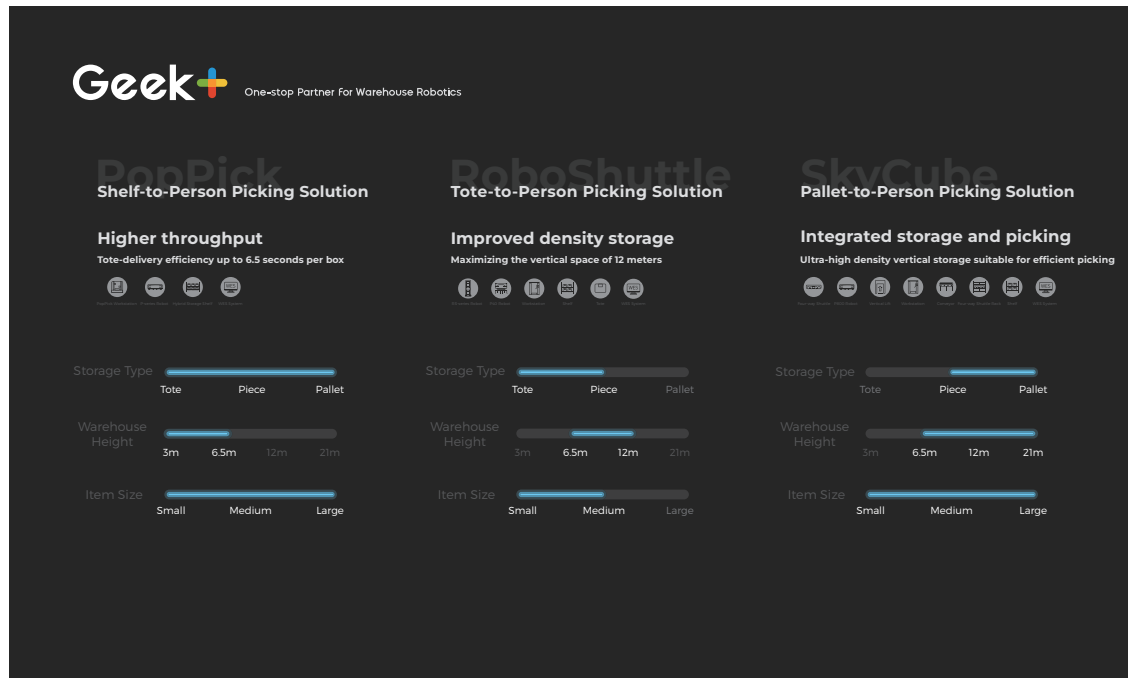


Storage Maximization

- Bulk pallet storage on the upper level
- Serve B2B and B2C
- Ground pick by case or by piece

BUSINESS

The following diagram illustrates how our AMR solutions differ from each other with respect to Geek+ Shelf-to-Person Picking Solution, Geek+ Tote-to-Person Picking Solution and Geek+ Pallet-to-Person Picking Solution in terms of key advantages.



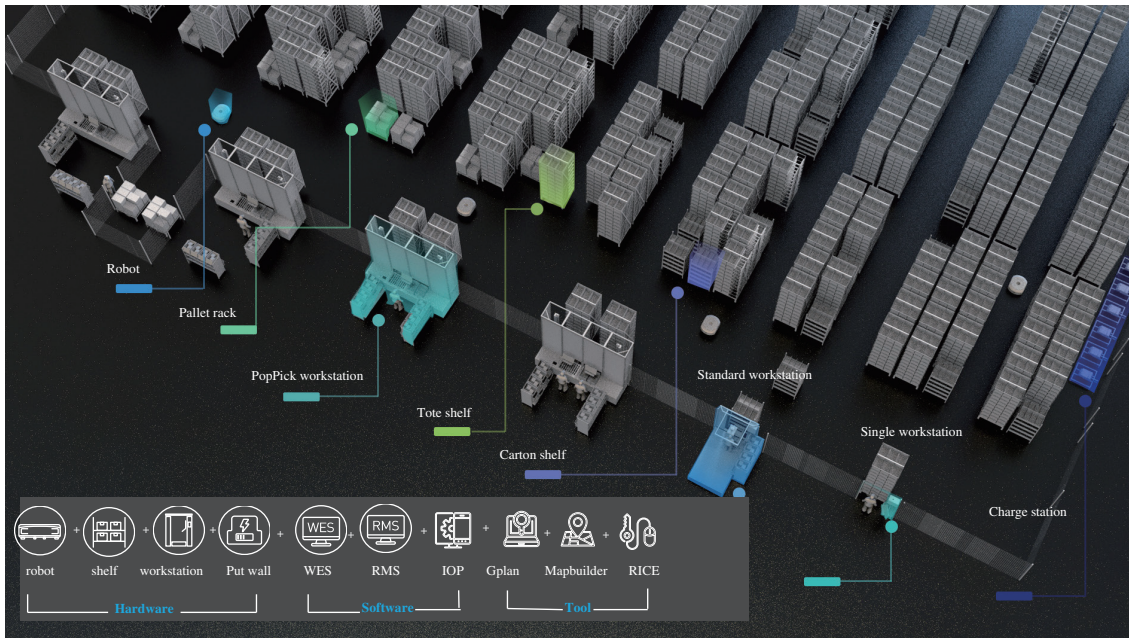
Geek+ Shelf-to-Person Picking Solution

Our Geek+ Shelf-to-Person Picking Solution comprises (i) standard solution featuring our P-series robots and (ii) our PopPick Solution empowered by P-series robots and PopPick workstations. Our PopPick Solution is an advanced system designed to streamline and optimize warehouse operations. According to CIC, we developed the world’s first all-in-one PopPick Solution using its P-series robots and PopPick workstations — named “PopPick” to emphasize the swift movement of goods to the human picker.

The PopPick Solution primarily consists of the PopPick workstation, P-series mobile robots, and a mixed storage system. Using P-series picking robots to transport shelves directly to designated PopPick workstations, it facilitates tasks like shelving, picking, sorting, and inventory management with high efficiency. With its modular shelf design, the PopPick Solution accommodates a wide range of items, from standard-sized bins to large and irregularly shaped products, allowing for seamless customization to meet diverse business requirements. This adaptability ensures that warehouses can respond quickly to operational changes or evolving market needs. Moreover, the PopPick Solution integrates bin, shelf, and pallet storage into a unified system, eliminating the need for order sorting at later stages and significantly improving overall workflow efficiency.

BUSINESS

The following diagram illustrates the key business processes enabled by Geek+ Shelf-to-Person Picking Solution in a typical warehouse setting.

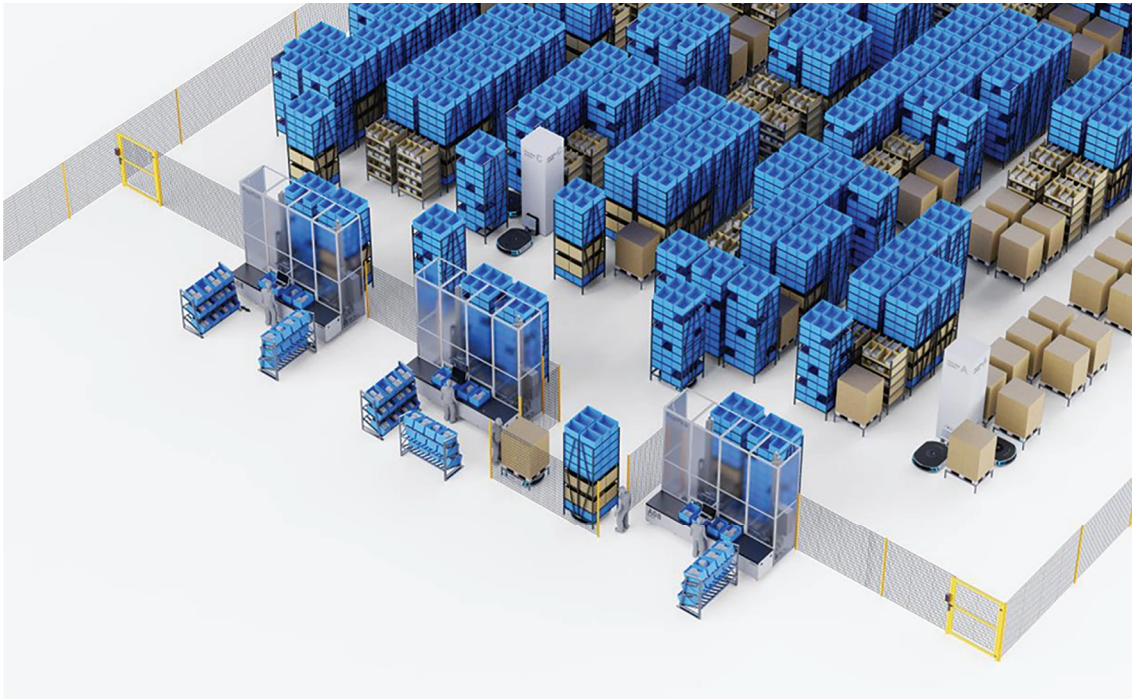


The Geek+ Shelf-to-Person Picking Solution effectively addresses end customers’ challenges by providing flexible scalability to accommodate seasonal and business fluctuations. It allows for quick deployment of new warehouses. The solution enhances throughput capacity and achieves picking efficiency of up to 580 cartons per hour per workstation (with two operators). Additionally, storage density is increased, thus minimizing box spacing to as little as 2 cm, optimizing warehouse space utilization.

BUSINESS

The following diagrams illustrate how the Geek+ Shelf-to-Person Picking Solution resolves the end customers’ issues in a typical warehouse setting.

(1) Goods Inbound and Shelving



BUSINESS

(2) One-stop Picking for Multi-Size SKUs



BUSINESS

According to CIC, our PopPick Solution is an industry-leading solution in terms of compatibility, throughput efficiency, storage capacity, and overall operational effectiveness. It outperforms competing solutions in the following key areas:

- **Compatibility:** PopPick Solution is designed for full compatibility with small, medium, and large inventories, and it can seamlessly work with bin, shelf, and pallet storage systems.
- **Throughput Efficiency:** With advanced AMR technology, PopPick Solution can increase warehouse picking efficiency to up to 580 totes per hour, doubling throughput capacity.
- **Storage Capacity:** PopPick Solution is engineered to minimize bin spacing to as little as 2 centimeters and achieves a delivery speed of approximately 6.2 seconds per bin.
- **Operational Effectiveness:** PopPick Solution supports all scenarios and product categories, offering a maximum throughput capacity that is more than three times the industry standard.

Leveraging our PopPick Solution, we became the world’s first AMR solution provider to launch a model that integrates cross-docking and goods collection, according to CIC. This innovative model enables direct transfer of goods from inbound to outbound transport, reducing the need for storage.

The following diagrams outline the specifications of the P-series robots used in the PopPick Solution.



	P500	P800	P1200
Payload	600kg	1000kg	1200kg
Shelf dimensions L*W	880*880 mm~ 1020*1020 mm	1020*1020 mm ~ 1250*1250 mm	1250*1250 mm ~ 1600*1600 mm
Dimensions L*W*H	950*702*275mm	1095*830*195mm	1325*1020*275mm
Weight	144kg	162kg	288kg
Maximum Speed	Unload2m/s, Full load1.6m/s	Unload2.3m/s, Full load2m/s	Unload2.6m/s, Full load2.0m/s
Certification	CE/ETL		

BUSINESS

Our P-series robots offer several distinct advantages over competing AMRs:

- **Slimmer Profile:** Our P-series robots are designed to be thinner, optimizing the use of vertical space in warehouses.
- **Smaller Turning Diameter:** These robots have a smaller turning diameter, reducing aisle space requirements and increasing overall warehouse utilization.
- **Higher Speed:** The robots operate at higher speeds, enhancing the efficiency of warehouse operations.
- **Faster Charging and Longer Endurance:** With quicker charging times and improved battery life, our P-series robots can operate longer and more efficiently, increasing overall utilization.

The Geek+ Shelf-to-Person Picking Solution is suitable for both B2B and B2C applications, and supports piece, tote, carton, and pallet picking. It is primarily used in the e-commerce sector, especially in high-traffic business environments where efficiency and high throughput are critical for order fulfillment during peak e-commerce events.

Case Study

In August 2024, we expanded our collaboration with a major U.S.-based third-party logistics provider, deploying Geek+ Shelf-to-Person Picking Solution in their highly efficient smart warehouses to address a surge in order volume, particularly during e-commerce peaks like Black Friday. Geek+ Shelf-to-Person Picking Solution enabled the customer’s warehouses to efficiently process goods and orders daily, maximizing storage space utilization. Our Shelf-to-Person Picking Solution significantly enhanced the customer’s operational efficiency by implementing a dynamic, data-driven fulfillment strategy. By integrating both B2B and B2C single-item flow pick processes into unified workstations, and leveraging pull-based picking through dynamic wave calculation, we enabled more responsive and accurate order processing. The Geek+ Shelf-to-Person Picking Solution further optimized inventory management by adjusting inventory and shelving locations based on order forecasts and dynamically slotting known orders to minimize travel time. Automated empty tote and inventory collection streamlined material flow. As a result, the customer achieved a 30% increase in storage capacity, tripled their picking efficiency, and now handles up to 350,000 items per day.

Geek+ Tote-to-Person Picking Solution

We introduced the world’s first Geek+ Tote-to-Person Picking Solution featuring RS-series and P-series robots with a high degree of personalization, according to CIC, which is designed to optimize the efficiency of box-based picking operations.

BUSINESS

The Geek+ Tote-to-Person Picking Solution is engineered for optimizing storage density, cost efficiency, and operational flexibility. This solution is designed to maximize vertical storage, enabling higher single-level storage density. It features a flexible design that allows it to integrate seamlessly into existing manual warehouses without requiring major modifications, making it compatible with existing lofts and shelving units. The multi-layer Geek+ Tote-to-Person Picking Solution takes full advantage of three-dimensional space, maximizing storage capacity by allowing dual-column retrieval from a single side of the shelf. This design reduces the overall aisle space required and lowers warehouse rental costs. Our Geek+ Tote-to-Person Picking Solution is widely recognized in the market. For instance, it is certified as “Best of Intralogistics 2020” by the world-renowned IFOY Award, one of the industry’s most prestigious honors.

The following diagram illustrates the key business processes enabled by Geek+ Tote-to-Person Picking Solution in a typical warehouse setting.

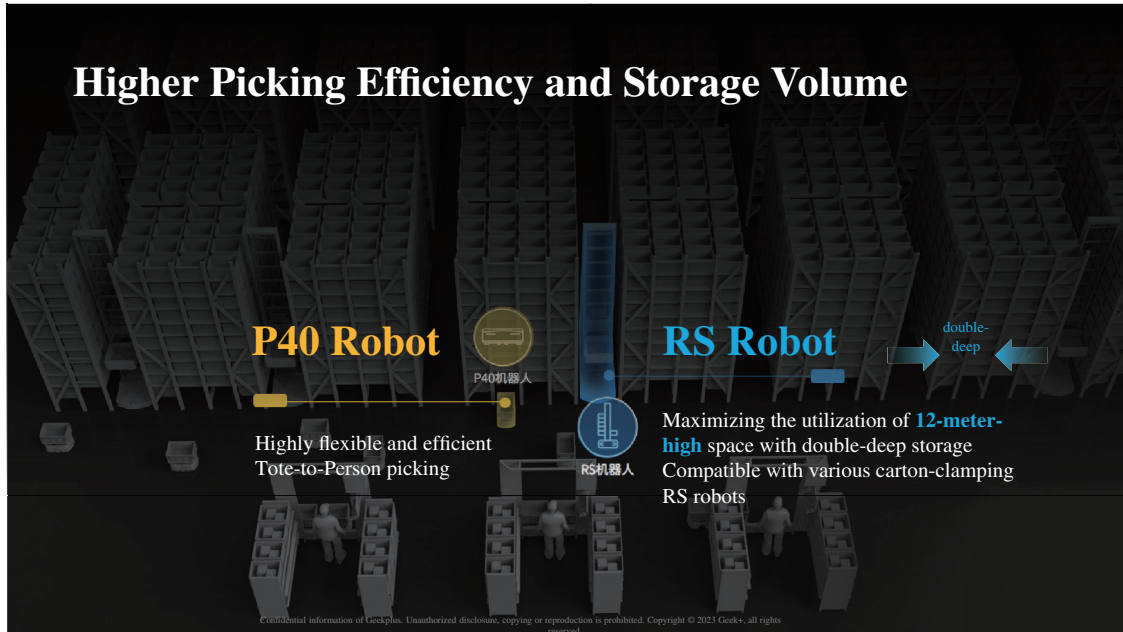


The Geek+ Tote-to-Person Picking Solution resolves end customers’ challenges by increasing storage capacity with RS robots reaching up to 11 meters, significantly boosting system storage. Additionally, the picking workstation can pick over 800 cartons per hour, enhancing overall picking efficiency.

BUSINESS

The following diagrams illustrate how the Geek+ Tote-to-Person Picking Solution resolves the end customers’ issues in a typical warehouse setting.

(1) Shelving at Designated Storage Locations



BUSINESS

(2) Robots in the Warehouse Perform Their Respective Tasks



BUSINESS

(3) Efficient Picking and Outbound Processing



The Geek+ Tote-to-Person Picking Solution offers the following advantages.

- **Storage Volume:** According to CIC, our Geek+ Tote-to-Person Picking Solution sets industry-leading standards in the utilization of storage volume. At the heart of the Geek+ Tote-to-Person Picking Solution is the RS-series robot, which is specifically developed to retrieve totes from storage racks and transport them to designated locations. The RS robots are capable of reaching heights of up to 11 meters, allowing the system to increase storage capacity by up to five times.
- **Picking Efficiency:** Additionally, our Geek+ Tote-to-Person Picking Solution achieves a new industry-leading picking efficiency of over 800 totes per hour per station, surpassing the performance of similar systems provided by our peers, according to CIC.
- **Adaptability:** The Geek+ Tote-to-Person Picking Solution also offers a one-stop solution for storing and picking items of various sizes, overcoming a common challenge faced by traditional tote-based robot systems when handling medium to large items. This adaptability ensures that the solution can meet the evolving needs of businesses and accommodate a wide range of operational requirements. This makes the Geek+ Tote-to-Person Picking Solution more versatile, enhancing its capability to handle different operational demands.

BUSINESS

As demonstrated by the following diagram, Geek+ Tote-to-Person Picking Solution uses two types of robots: (i) the RS robot, which retrieves responsible for retrieving totes from storage, and (ii) the P40 robot, which swiftly transports these totes to operators at picking stations.

	RS11	RS8	P40
Dimensions (L*W*H)	1800*1000*6400mm	1800*1000*4700mm	650*450*386mm
Maximum Storage Height	10765mm	7935mm	1100mm
Container Dimension (L*W*H)	(200-650)*(200-450)*(150-500)mm Based on the pick-up mechanism, it is compatible with multiple types of containers.		
Compatible Warehouse	12m	9m	Compatible
Maximum speed	1.5m/s no load,1.2m/s fully load	1.8m/s no load,1.5m/s fully load	4m/s no load,4m/s fully load
Run Time	Charging for 10 minutes, working for 2hours		Charging for 10 minutes, working for 1-1.5hours

This combination allows for a high degree of personalization, enabling end customers to adjust the RS storage robot to accommodate varying shelf heights and tote types, maximizing the vertical space within warehouses. The solution also maintains rapid throughput by efficiently staging and accessing lower-level totes, making it a suitable choice for scenarios requiring high storage capacity, efficiency, and flexibility. Moreover, according to CIC, the RS-series robots used in our Geek+ Tote-to-Person Picking Solution own several advantages when compared to the core robots used in similar solutions. First, the RS-series robots can operate with taller shelving units, maximizing vertical space in warehouses and improving storage efficiency. Additionally, these robots feature higher battery efficiency, enhancing overall operational productivity.

The Geek+ Tote-to-Person Picking Solution is well-suited for industries that demand high storage density with moderate throughput, such as retail, footwear, grocery, pharmaceutical, and certain manufacturing sectors. Compared with Geek’s solutions, the AMR solution of one of our competitors (Company B), which features only one type of robot, falls short of the comprehensive capabilities provided by our solutions.

Case Study

In 2023, we deployed our advanced Geek+ Tote-to-Person Picking Solution for a major European pharmaceutical chain in multiple central warehouses across Italy, the Czech Republic, and other locations, to support the rapid growth of their e-commerce business. The system was installed in the customer’s new smart warehouses, primarily handling pharmaceutical and cosmetic orders, and providing full-process support from production to shipping for both online platforms and offline B2B stores. To address challenges driven by rapid online sales growth and seasonal peaks, we implemented Geek+ Tote-to-Person Picking Solution featuring 22 RS8-DA robots and 50 P40 robots across nine inbound and outbound stations, supporting over 18,000 tote locations. It enabled faster and more accurate handling of products with strict shelf-life requirements, significantly improving fulfillment speed, inventory accuracy, and overall operational resilience during peak demand periods. This innovative approach not only significantly improved warehouse operational efficiency but also enhanced the customer’s ability to handle surges in e-commerce orders during peak periods.

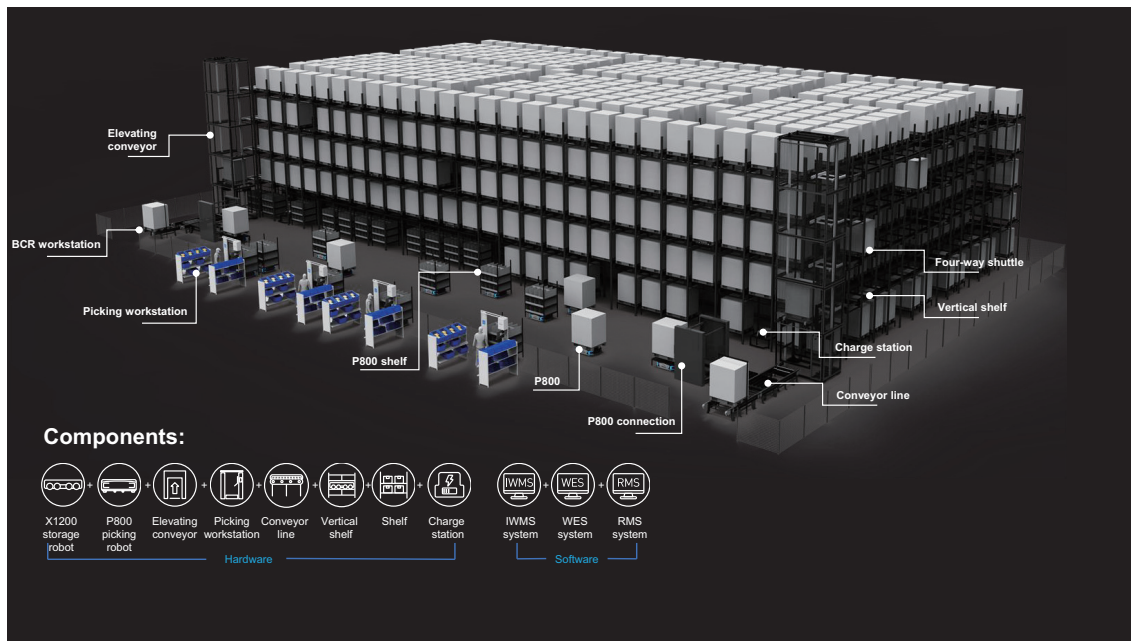
BUSINESS

Geek+ Pallet-to-Person Picking Solution

According to CIC, we are the first in the world to introduce the Geek+ Pallet-to-Person Picking Solution, a high-density, high-throughput integrated storage and picking system that features the combination of our X-series four-way shuttle and P800 robots. This innovative solution optimizes warehouse operations by fully utilizing vertical space for pallet storage while leveraging ground-level space for picking.

In the early days of pallet storage, warehouses relied on costly stacker cranes or low-density, labor-intensive forklifts working with beam racks. To address the increasing demand for high-density storage and flexible throughput, our Geek+ Pallet-to-Person Picking Solution optimizes floor-to-ceiling vertical space utilization, significantly enhancing warehouse capacity and making high-density storage more efficient. This system is particularly suitable for scenarios requiring frequent piece-picking and can accommodate a variety of goods in different sizes. With our advanced scheduling capabilities, this solution efficiently manages multiple devices, streamlining warehouse operations and reducing implementation complexity.

The following diagram illustrates the key business processes enabled by Geek+ Pallet-to-Person Picking Solution in a typical warehouse setting.



The Geek+ Pallet-to-Person Picking Solution addresses end customers’ challenges by offering storage capacity 5 to 8 times higher than ground storage and more efficient than traditional AS/RS systems. It also improves picking efficiency compared to manual warehouses. The integrated RMS system coordinates multiple devices and supports the concurrent operation of thousands of robots, enhancing overall system performance and scalability.

BUSINESS

The following diagrams illustrate how the Geek+ Pallet-to-Person Picking Solution resolves the end customers’ issues in a typical warehouse setting.



BUSINESS



According to CIC, the Geek+ Pallet-to-Person Picking Solution offers industry-leading storage capabilities, with storage heights reaching up to 28 meters. This flexible solution can be easily scaled to meet business needs by adjusting the number of robots and integrating various intelligent devices to enable full automation from storage to retrieval. We use intelligent algorithms that significantly boost operational efficiency and increase storage capacity through the effective use of vertical space, transforming warehouses into fully automated, multi-level storage environments.

The Geek+ Pallet-to-Person Picking Solution relies on a combination of (i) X-series four-way shuttles that operate on the upper levels for pallet storage, and (ii) P800 robots that handle ground-level picking. According to CIC, the X-series robots in the Geek+ Pallet-to-Person Picking Solution maximize vertical space utilization in warehouses, significantly improving storage efficiency. The X-series robots are also highly adaptable to various applications, further increasing their versatility and value in different operational environments.

BUSINESS

X1200

High density storage and flexible scheduling

X-series robots work within the racks, running on a track to complete inbound/outbound tasks. Their narrow body design saves up to 60% aisle space compared to a traditional forklift.

Robot Model	X1200	P800R
Dimensions (L*W*H)	1090*1030*160mm	1090*1030*275mm
Maximum Payload	1200kg	1000kg
Payload Size (L*W*H)	1200*1000*1800mm	1020*1020 mm~1250*1250 mm
Speed	Unload 1.5 m/s , Full-load1.2m/s	Unload 2m/s, Full-load 1.5m/s
Security	Laser obstacle detection, goods inspection, derailment prevention, etc.	Infrared Obstacle detection, LiDAR support
Working Temperature	32~113°F	14~122°F

The Geek+ Pallet-to-Person Picking Solution’s “storage on top, picking at the bottom” model has gained widespread acceptance worldwide, especially in North America, where there is strong demand for large-scale pallet storage. The Geek+ Pallet-to-Person Picking Solution is suitable for high-density storage and efficient picking across multiple industries, including manufacturing, retail, fashion, FMCG, third-party logistics, pharmaceutical distribution, and cold chain logistics.

Case Study

In August 2023, we implemented the Geek+ Pallet-to-Person Picking Solution at a manufacturing site of a well-known Chinese automobile manufacturer in China. This solution was specifically tailored for the complex operational environment of an automotive parts warehouse, aiming to enhance warehouse logistics efficiency through intelligent automation and manage the entire process from shelving to picking. The Pallet-to-Person solution not only ensures efficient picking and outbound processing but also maximizes the utilization of storage space within the logistics center.

The P800 robots perform picking tasks, greatly reducing unnecessary walking by personnel, enabling intelligent replenishment, and significantly improving operational efficiency. The solution supports the automated picking and outbound processing of full pallets, full boxes, broken cases, and repackaged items, catering to various automotive industry requirements such as large and small parts handling and sorting. Our WMS system seamlessly integrated with the customer’s logistics execution system, ensuring end-to-end information flow and making material information transparent, facilitating seamless coordination across the factory. Additionally, the digital dashboard provides real-time visibility of warehouse operations, allowing the customer to monitor operational dynamics efficiently. As a result, by streamlining operations through automation, we helped the customer reduce staffing requirements from 32 to 18, representing a 78% improvement in labor productivity.

BUSINESS

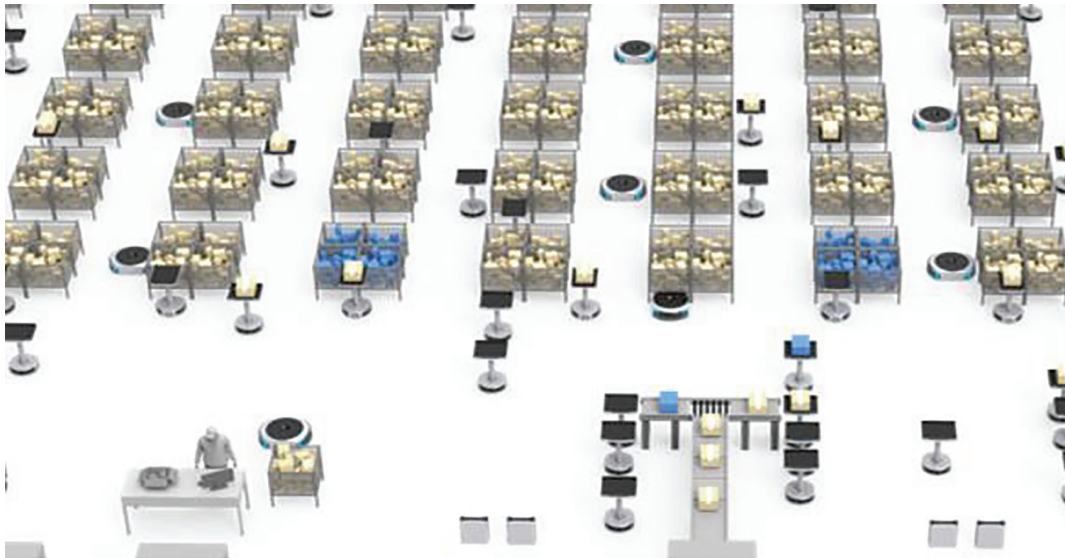
FleetSort Solution

We adopted one of the first robotic flexible sorting solution around the world, namely our FleetSort Solution, according to CIC. This innovative solution is powered by advanced S-series robots to efficiently sort small to medium-sized parcels directly at floor level, as well as sophisticated algorithms that monitor robot traffic and balance workloads among the robots, ensuring sorting efficiency. The solution’s flexibility is further enhanced by its multi-layer sorting design, which allows robots to operate on elevated platforms, maximizing warehouse space utilization and increasing sorting throughput. Additionally, the packing, sorting, and loading areas are highly integrated, streamlining the entire outbound logistics process and facilitating fully unmanned sorting operations.

We offer two main types of FleetSort Solution.

- **Floor-based Sorting:** Our Floor-based Sorting Solution uses S20 series robots to sort small or medium-sized parcels directly at the floor level.
- **Multi-layer Sorting:** The Multi-layer Sorting Solution allows robots to work on different platform levels, further improving operational efficiency and maximizing warehouse space utilization.

The following diagram illustrates the key business processes enabled by FleetSort Solution in a typical warehouse setting.



The Geek+ FleetSort Solution addresses end customers’ challenges by providing a fully automated process for sorting and handling, from sorting to the final container exchange and outbound dispatch. By combining intelligent sorting robots with goods-to-person picking robots, the solution eliminates the need for manual operations in the box collection and

BUSINESS

exchange stages, further improving overall efficiency and automation while reducing distribution costs. Supported by the Geek+ intelligent scheduling system, the solution is highly flexible and can be scaled according to business needs, offering high flexibility, efficiency, and accuracy.

We were also the first in the AMR market to introduce a flexible sorting solution that operates without the need for a steel platform, according to CIC. This innovation is significant because it reduces deployment costs, accelerates implementation, and provides greater scalability and adaptability, enabling businesses to optimize space and operations more effectively.

According to CIC, the sorting efficiency achieved by our robotic flexible sorting solution is 10 times more efficient than manual processing, with rapid deployment times enabling quick returns on investment. Additionally, our robotic flexible sorting solution leads the industry in terms of automation, efficiency, flexibility, and ROI.

The robotic flexible sorting solution is highly suitable for parcel sorting, merchandise sorting, and returns processing across warehouses and sorting centers in retail, pharmaceuticals, express delivery, and FMCG, offering high levels of efficiency, automation, and flexibility.

Case Study

We collaborated with a leading European e-commerce distribution solution provider to successfully deploy our fully flexible intelligent sorting solution at their distribution center in Spain. Supported by the Geek+ intelligent scheduling system, the sorting S-series robots work in tandem with the goods-to-person P-series robots, providing the customer with a fully automated robotic solution for the entire process from sorting to box switching. The sorting robots convey packages to transport cages on the first floor via chutes, where the picking robots then deliver the packages to the operators, further enhancing overall efficiency and automation and reducing distribution costs.

In our fully flexible intelligent sorting solution, the two types of robots each perform their respective tasks while interacting with each other. The system is centrally coordinated, allowing real-time prediction and interaction between the upper and lower levels. Global dynamic decision management supported by multiple algorithms optimizes sorting paths, destination box allocation, and box-switching routes, resulting in an overall increase in sorting efficiency.

Smart Moving Solution

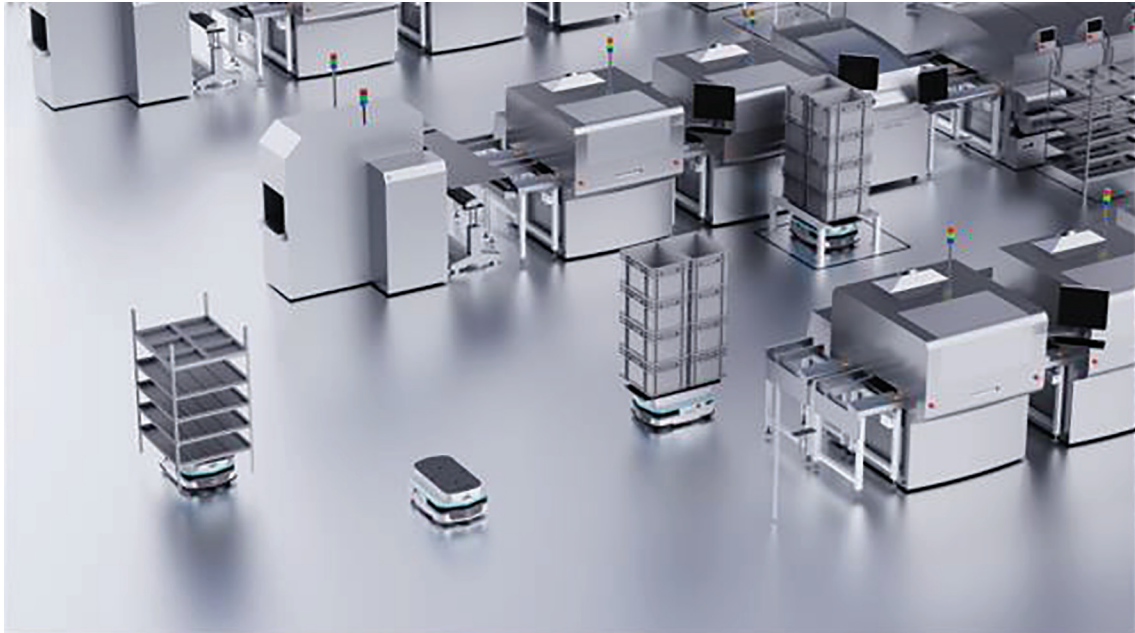
Our smart moving solution comprises (i) material handling solution and (ii) forklift solution. Our smart moving solution covers various processes in warehouses and factories, spanning across raw material storage and retrieval, material handling and transportation, and finished product warehousing. Our smart moving solution is designed for production lines that

BUSINESS

require raw material feeding, improving material flow and streamlining loading and unloading processes on conveyors or production lines. It replaces manual carts with automated systems. Our smart forklift solution automates pallet transportation, meeting the demands of inter-area transport scenarios. The solution supports a load range of zero to two tons and a lift height of zero to three meters. It also features 360-degree, three-dimensional obstacle avoidance to prevent safety incidents and ensure efficient operational performance.

Our smart moving solution provides a complete set of hardware and software capabilities. Among others, AMRs used in our smart moving solution are specifically designed for scenarios that require production line-side material handling.

The following diagram illustrates the key business processes enabled by material handling solution in a typical warehouse setting.



Material handling solution addresses end customers’ challenges by providing an end-to-end smart logistics solution within the factory, covering material handling from inbound and outbound storage of raw materials, production line feeding and unloading, inter-process transport, to finished goods handling. The solution includes various robot types, such as latent transport robots and mobile robots, capable of handling materials ranging from 200kg to 5,000kg. With laser SLAM navigation and real-time map updates, the robots adapt to dynamic environments, achieving a stability rate of 100% and setting an industry-leading standard. The combination of diverse robot forms and the Geek+ moving system helps businesses achieve the intelligent and digital upgrade of their logistics processes.

BUSINESS

The following diagrams illustrate how the material handling solution resolves the end customers’ issues in a typical warehouse setting.

(1) In-warehouse Material Handling



(2) Line-side Delivery



BUSINESS

(3) Production Line Transfer

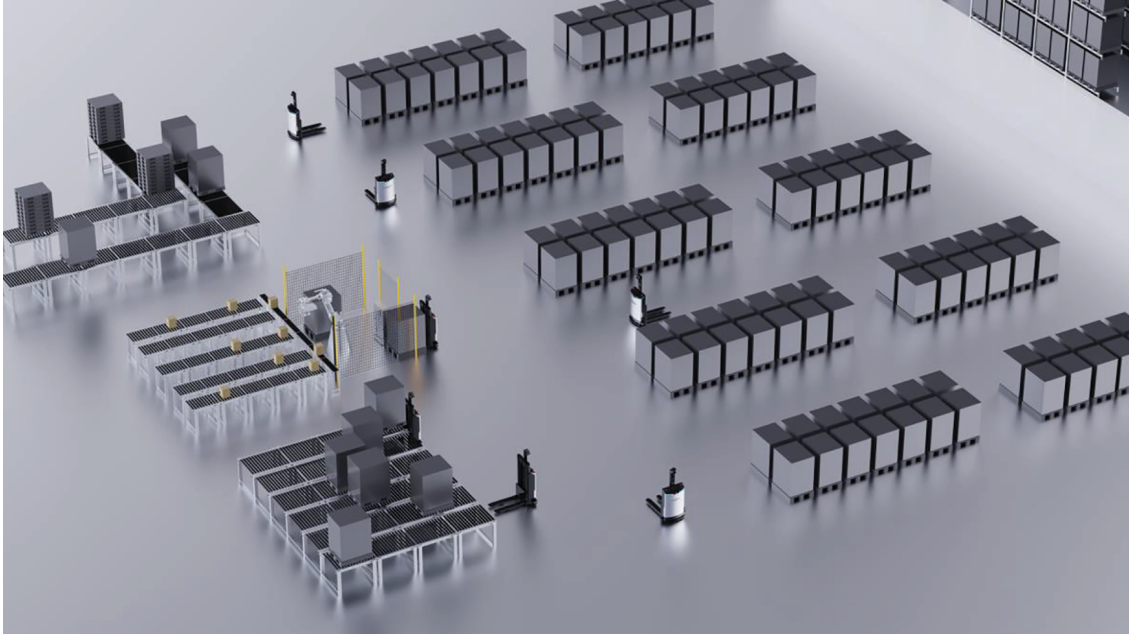


(4) Finished Goods Inbound



BUSINESS

The following diagram illustrates the key business processes enabled by forklift solution in a typical warehouse setting.



Forklift solution addresses end customers’ issues by automating pallet handling and storage across the entire industrial logistics process, from raw material inbound to finished goods outbound. It is suitable for various scenarios, including production line feeding and unloading, high-bay connections, low-level shelf access, and dense stacking. The intelligent forklifts use laser SLAM navigation, allowing deployment without modifying the existing environment and adapting flexibly to dynamic changes.

The following diagrams illustrate how the forklift resolves the end customers’ issues in a typical warehouse setting.

(1) Pallet Flat Transport and Storage



BUSINESS

(2) Flexible Production Line Integration



(3) Vertical Shelf Access and Retrieval



Our smart moving solution is equipped with proprietary laser-vision fusion SLAM technology. In addition, our smart moving solution incorporates QR code navigation and multi-sensor assisted navigation methods to achieve precise positioning. By placing QR codes around facilities, our AMRs can determine their location and access internal map information. These technologies make our robots highly adaptable to fast-paced and flexible industrial production processes. For instance, our smart moving solutions is able to serve the upstream and downstream segments of the new energy industries, such as automotive, lithium battery, and photovoltaic industries, along with their upstream material supply sectors.

BUSINESS

Case Study

In June 2022, we implemented a multi-robot smart moving solution for a global leader in energy technology at one of their factories, achieving full-process logistics automation from inbound receiving, inventory sorting, outbound order picking, to production line feeding. Our MP1000R robots, utilizing laser SLAM navigation, allowed the customer to quickly deploy and implement the system. The system calculates the most efficient and energy-saving production cycle, automatically calling robots to deliver production materials for circuit breakers and low-voltage cabinets based on single-machine production, ensuring precise delivery time and quantity matching, reducing the line-side space usage by half, with accuracy exceeding 99.98%.

Furthermore, to make better use of the factory space, we constructed a steel platform structure on the second floor of the warehouse, allowing the P800R robots to access multiple floors. By optimizing the layout and upgrading areas like receiving and storage for automation, we increased the warehouse storage area by more than 3,000 square meters. After the solution was implemented, the overall storage area and retrieval efficiency of the warehouse doubled, with production line delivery accuracy reaching 100% and material accuracy exceeding 99.98%.

Our Business Process

The following table summarizes the typical key steps of our business process, the main parties involved and the fund flows.

Business Process	Parties Involved	Fund Flows
<ul style="list-style-type: none"> Pitching Customer 	<ul style="list-style-type: none"> Internal Sales and Marketing Department Potential Customers (including direct customers and channel partners) 	<ul style="list-style-type: none"> No fund flow with external parties. See also “Sales and Marketing”
<ul style="list-style-type: none"> Order Origination and Receipt of Advance Payments 	<ul style="list-style-type: none"> Internal Sales and Marketing Department, Legal Department Customers (including direct customers and channel partners) 	<ul style="list-style-type: none"> Typically initial deposit upon order confirmation. See also “Sales and Marketing”

BUSINESS

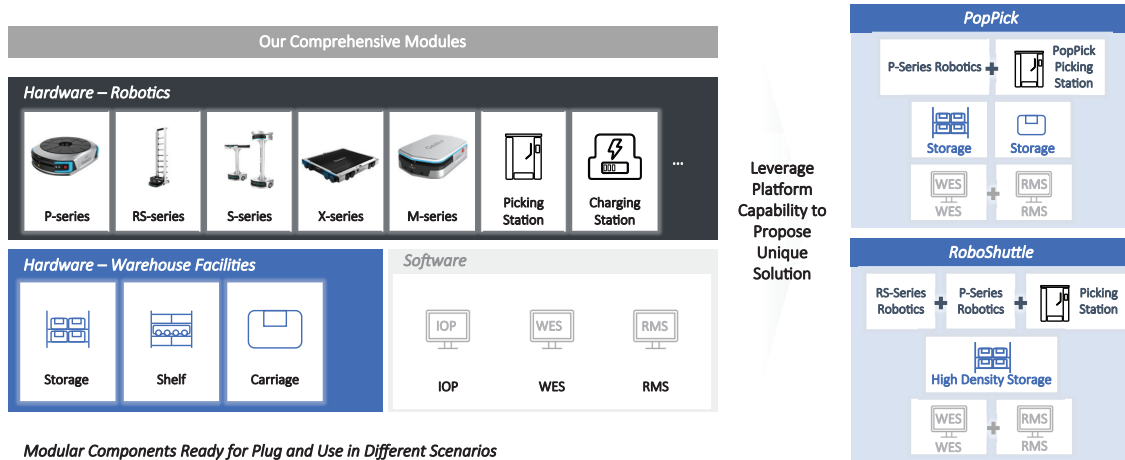
Business Process	Parties Involved	Fund Flows
<ul style="list-style-type: none"> Designing and Developing AMR Solutions 	<ul style="list-style-type: none"> Engineering Department, R&D Department 	<ul style="list-style-type: none"> No fund flow with external parties. See also “— Research and Development”
<ul style="list-style-type: none"> Procurement of Materials and Components 	<ul style="list-style-type: none"> Procurement Department Suppliers 	<ul style="list-style-type: none"> Payments made to suppliers for materials and components. See also “— Our Suppliers”
<ul style="list-style-type: none"> Manufacturing 	<ul style="list-style-type: none"> Manufacturing Department 	<ul style="list-style-type: none"> No fund flow with external parties. See also “— Production and Manufacturing”
<ul style="list-style-type: none"> Delivery of Goods 	<ul style="list-style-type: none"> Logistics Department Customers (including direct customers and channel partners) 	<ul style="list-style-type: none"> Payment typically received from customers for acceptance of goods. See also “— Sales and Marketing — Our Sales Channels”
<ul style="list-style-type: none"> Settlement of Payment 	<ul style="list-style-type: none"> Finance Department Customers (including direct customers and channel partners) 	<ul style="list-style-type: none"> Payment settlement by customers
<ul style="list-style-type: none"> After Service and Warranty 	<ul style="list-style-type: none"> Customer Service Department Customers (including direct customers and channel partners) 	<ul style="list-style-type: none"> No fund flow with external parties. See also “— Our Customers — Customer Support and After-Sales”

OUR MODULAR DESIGN

Our AMR solutions are consisted of a suite of modular components, such as advanced AMRs, powerful warehouse facilities and proprietary software designed for easy integration, customization, and deployment. This modularity enables us to offer a suite of components that can be tailored for various operational environments. By designing our solutions with modular components, end customers can easily integrate our technology into their existing systems

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without significant disruptions, ensuring a smooth transition and minimal downtime. This approach provides the flexibility to configure solutions specific to each end customer’s needs, offering greater adaptability compared to rigid, one-size-fits-all systems commonly found in the market.



Our modular AMR solutions allow businesses to scale or reconfigure their systems as their needs evolve, reducing the need for large upfront investments. End customers can start with a basic setup and incrementally expand or adjust their automation as their operations grow, making our solutions accessible to a wider range of end customers. This flexibility is particularly valuable for businesses that need to adapt quickly to market changes or operational challenges, as our AMRs can be reconfigured for new workflows or increased demand. By focusing on modularity and scalability, we ensure that our AMR solutions are not only effective but also future-proof, enabling end customers to grow and adapt with minimal friction.

AMR Solution Design and Delivery

Our AMR solution design and delivery process is structured to provide tailored, efficient, and high-performing solutions that meet the diverse needs of end customers. The process involves several stages, from initial concept and development to customization and final delivery, ensuring that the AMR solutions are aligned with the specific requirements.

Solution Design Process

Our solution design can be divided into the following steps.

- **Solution Prototyping:** We begin solution design by developing a solution prototype and conducting a thorough analysis. When we plan to launch a new AMR solution, our product team first determines the type of AMRs required, the business systems framework, basic solution metrics, and the expected return on investment for the customer.

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- **Project Distribution:** Once the prototype is complete, the product team disassembles it into different work packages, including AMR development and system development. These key steps, particularly AMR development and system development, are overseen and managed by our top management team.
- **Proof of Concept (“POC”):** Upon completion of the AMR solution, the product team handles the design, testing, and on-site POC for end customers. We conduct long-term in-house simulations based on real customer scenarios before collaborating with local teams to identify pilot end customers.
- **Project Promotion:** Following the successful pilot, the product team collaborates with the marketing department to prepare promotion strategies. The marketing department is responsible for global promotion strategies, which include defining promotion methods, selecting target end customers, and planning for rollout across different regions.
- **Implementation Design:** The product team works closely with the local teams to identify the industries where the AMR solution will first be implemented. Simultaneously, the product team partners with the services and supply chain departments to prepare for production and service packages. The product engineering team is tasked with developing standardized delivery procedures, including tools, processes, and documentation.
- **Final Delivery:** When the local teams begin sales, the product team participates in the first major project for each market to ensure successful delivery. These pilot projects typically take one to three months to deploy, thus ensuring the local teams acquire the necessary knowledge and capabilities to serve end customers.

AMR Solution Customization

When providing flexible and modular AMR solutions, we offer customization based on a deep understanding of our end customers’ needs and our advanced technology. Customization services can be divided into several categories:

- **Interface:** If a customer uses a non-standard warehouse management system, we need to customize the interface of our AMR solutions and connect them with our end customers’ systems.
- **Business Process:** We will conduct secondary solution development when some end customers, especially large-scale businesses, have additional business processes beyond standard picking and packing workflows, such as quality inspection, customized labeling, kitting, or repackaging, which often require coordination with non-standard workstations or manual operations.

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- **Other Requirements:** End customers may have specific management needs, such as custom monitoring tools for equipment efficiency or dashboards. We provide secondary development to meet these specific requirements.

Our solution customization is highly customer-oriented, ensuring that our AMR solutions are tailored to the specific needs of different markets. For non-domestic end customers, we focus extensively on software customization, such as adjusting features in our WES system, which serves as a middleware between the end customer’s warehouse management system and our RMS. In contrast, our domestic end customers, particularly those in the manufacturing sector, typically require more hardware configuration. They often have unique production workflows and production line specifications, necessitating customization in mechanical, electronic, and instructional aspects.

Delivery and Installation

The production cycle for standard AMR solutions typically takes six to eight weeks for manufacturing, six to eight weeks for shipping, one to three months for deployment, followed by additional time before final customer acceptance. The actual installation time varies depending on the specific AMR solution. For example, the PopPick Solution is a highly modular system, with the entire on-site installation process taking less than one month. Additionally, our delivery and installation timelines may be affected by factors such as the end customer’s shelving installation schedule and cross-border transportation. Throughout the Track Record Period, we have not experienced any significant delays in delivery or installation.

OUR REVENUE AND PRICING MODEL

Revenue Model

Our revenue is primarily derived from the sales of AMR solutions, the core of our offerings. Revenue from AMR solutions has shown consistent growth, both in absolute terms and as a proportion of our total revenue, throughout the Track Record Period. In addition to our AMR sales, we generate a smaller portion of revenue from RaaS (Robot-as-a-Service) services. RaaS refers to standardized robot leasing services, combined with a suite of operational support and management tools designed to help end customers optimize their warehousing operations. Unlike our AMR solutions business, which involves the sale of both hardware and software, the RaaS model is service-based. We initially offered RaaS as a way to introduce customers to our AMR technologies and to test our solutions through real-world use cases. As our products matured and full-scale deployments became the norm, we have since scaled down this business to focus on more scalable, higher-margin AMR solution sales, and revenue from RaaS has been decreasing in both absolute terms and as a percentage of our total revenue over the Track Record Period.

See also “Financial Information — Description of Major Components of Our Results of Operations — Revenue.”

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Product Pricing

During the Track Record Period, we successfully commercialized our AMR solutions, leveraging our deep industry expertise and robust R&D capabilities. Our global pricing strategy is responsive to various market conditions, such as regional competition, while taking into account product demand and cost structure. We strategically adjust prices based on market dynamics, considering factors like local competition intensity to ensure competitiveness and profitability in different regions.

OUR AMR TECHNOLOGY

Leveraging years of technological mastery and profound industry insights, we have developed a full-stack technology infrastructure that seamlessly unites hardware, software, and algorithms.

This infrastructure is anchored by three core technology platforms, driving the creation of AMRs, software management systems, and hardware solutions — each designed to empower warehousing fulfillment and industrial material handling.

- **Robot Matrix:** the world’s first robotic general technology platform launched by Geek+.
- **Geek+ Software Suite:** the most comprehensive software system in the AMR market.
- **Hyper+ Core Algorithms:** one of the most advanced algorithms in the AMR market.

Our Technology Advantages

Our AMR technology is featured with unified hardware, software, and algorithm platform, complemented by standardized tools. This platform-based approach allows us to customize the design and specifications of AMRs to meet specific customer requirements while maintaining consistency in core capabilities. This design accelerates development, enhances product quality, and optimizes costs. Additionally, we have created a comprehensive technology platform, Robot Matrix, that consolidates common development processes and features across industries, allowing it to accommodate diverse business processes and requirements.

Our AMR technology is designed to integrate high versatility and efficiency, offering solutions that adapt to various business needs while ensuring stable and efficient warehouse operations, even under high-pressure environments. We continuously train and upgrade our technology. By gathering real-world data from various industries and peak sales seasons, we relentlessly iterate and enhance our AMR solutions to ensure they remain efficient and responsive to customer needs across multiple sectors and regions.

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Key Components

Robot Matrix

Launched in 2019, Robot Matrix is our proprietary AMR robotic general technology platform, designed to empower the development of high-quality, high-performance AMRs. It integrates our core hardware, software, and algorithm components to create a unified system for AMR development. According to CIC, it is the world’s first proprietary AMR robotic general technology platform.

Robot Matrix is a modular and configurable platform that offers a comprehensive suite of ready-to-use technologies and toolkits essential for AMR research and development. By leveraging these pre-built components, we efficiently innovate, design, and develop next-generation robots and technology platforms. Additionally, we developed a set of systems and software that integrate closely with the hardware to perform critical functions. Through this standardized platform, we have created a unified chassis foundation, upon which our AMRs can be customized to perform different tasks.

Robot Matrix addresses every aspect of integrated robot design, from hardware technology and core algorithms to operating systems and safety protocols, effectively lowering barriers, reducing costs, and enhancing development efficiency throughout the AMR design and development. This platform empowers us to deliver AMR solutions tailored to specific business needs while maintaining a strong foundation of standardized technology.

AMR Development

Empowered by Robot Matrix, we have launched a wide spectrum of AMRs that conform to the latest technological advancements and the strictest safety standards. According to CIC, we have utilized Robot Matrix to efficiently develop specific AMR solutions tailored to different industries and scenarios. This approach allows us to agilely respond to customer demands, shorten delivery times, and reduce project costs for end customers.

Before releasing our robots, we conduct rigorous internal testing and use the testing results to assess the quality of our AMRs. We also implement fault detection systems to monitor potential issues, such as misaligned totes or large debris on the floor. The robots can detect these anomalies, report faults, and either prompt manual intervention or activate their self-recovery mechanism to resolve the issue. Additionally, we leverage our IOP platform to integrate with the robots’ fault diagnostic capabilities, allowing us to track and address anomalies efficiently.

We typically conduct major iterations for our AMR solutions every two years, with minor updates in between, primarily driven by market demands, customer needs, and competitive conditions. These iterations include key feature enhancements to continuously improve the robots’ performance.

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Key Functions

Our Robot Matrix is built on three core functions:

- *Positioning.* According to CIC, we are one of the leaders in the global AMR solution market that introduced laser-vision fusion SLAM technology that integrates LiDAR/RGBD cameras. According to CIC, with an average positioning accuracy of less than $\pm 10\text{mm}$ ($\pm 1^\circ$), our SLAM technology equips our AMRs with one of the most advanced positioning capabilities in the industry. In contrast, the industry average - without SLAM technology - typically exceeds $\pm 10\text{mm}$. SLAM enables a robot to start from a location within a given environment and determine its own position and orientation. SLAM technology is suitable for high-complexity, large-area applications in commercial areas, manufacturing plants, and logistics warehouses.
- *Motion Control.* Our AMRs autonomously execute predefined tasks, such as transporting goods or performing pick-and-place operations, using motion control functions. These robots can adapt to uneven floors by detecting variations in surface levels, adjusting their speed for smooth and efficient movement, and leveraging warehouse conditions for enhanced performance. Additionally, they monitor their own performance and fault data to support continuous functional and quality improvements, ensuring optimized and reliable warehouse logistics operations.
- *Vision Perception.* We have developed industry-leading vision perception technologies based on 2D/3D cameras, coupled with a robust vision algorithm platform, according to CIC. The platform’s adaptability and accuracy make it a leader in fields such as warehousing logistics, intelligent manufacturing, and commercial applications.

Geek+ Software Suite

Geek+ Software Suite comprises a collection of modular software solutions designed to support efficient, reliable, and flexible robot-based smart warehousing. According to CIC, Geek+ Software Suite is the most comprehensive software suite in the AMR market.

The suite consists of three core systems essential for site deployment:

- **RMS**, a traffic management and task allocation system supporting large-scale robot scheduling and cluster operation strategy. According to CIC, our RMS system can manage the simultaneous scheduling of over 5,000 robots in warehouse fulfillment scenario, the highest in the market. According to the same source, the industry average for the maximum number of AMRs that can be scheduled simultaneously is below 300.

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- **WES**, an open and user-friendly business system supporting various picking solutions.
- **IOP**, a data-driven intelligent operations platform designed to provide comprehensive operational insights and real-time monitoring for warehouse management.

These systems are also complemented by G-Studio, a one-stop comprehensive toolbox for project planning, deployment and on-site service.

According to CIC, Geek+ Software Suite stands out from similar software systems in the market. Geek+ Software Suite supports a wide range of industry-standard protocols both domestically and internationally, allowing third parties the flexibility to access and develop secondary applications. Additionally, unlike competing systems, the Geek+ Software Suite is designed for superior flexibility and compatibility, integrating rapidly and seamlessly with end customers’ existing business systems. This robust compatibility allows for a smooth and efficient integration into end customers’ operational platforms, enabling them to optimize supply chain and logistics operations without the need for extensive adjustments. Our simulation platform on Geek+ Software Suite supports the design and simulation of various picking scenarios, with a simulation error of less than 5%, placing it at an industry-leading level, according to CIC.

Geek+ Software Suite offers the following key benefits:

- **Intelligence and Efficiency.** According to CIC, Geek+ Software Suite improves warehouse operation efficiency by three times compared to manual picking. Geek+ Software Suite enables full utilization of robot resources, thus preventing scheduling deadlock or congestion. It further improves warehousing efficiency through automated tally and a combination of push/pull picking.
- **Security and Reliability.** Geek+ Software Suite is built with robust information security mechanisms, ensuring high reliability with a 99.99% uptime, much more advanced than the software system developed by our peers, according to CIC. This minimizes concerns about fulfillment interruptions due to equipment failures. The rapid recovery tool enables system restarts and task recovery within 10 minutes.
- **Openness.** Geek+ Software Suite gains popularity among many of end customers who use it to support their business. It integrates rapidly and seamlessly with their existing business systems, thus helping us gain collaboration experiences from leading enterprises across a diverse range of industries.
- **User-Friendliness.** Geek+ Software Suite is designed for ease of use, with a single portal access, simplifying navigation and reducing complexity for users.

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- **Integration Flexibility.** Geek+ Software Suite is designed to meet the diverse and often complex requirements of warehouse automation, one of the most difficult challenges in warehouse automation, according to CIC. For instance, end customers can use a standard protocol with specific project requirements implemented through customization scripts empowered by WES. The flexibility offered by us ensures that regardless of the complexity of the project, the integration process can be tailored to meet specific needs, ensuring a seamless and efficient operation.

We regularly update and iterate our Geek+ Software Suite to ensure it meets evolving customer needs and technology advancements. We follow a regular update schedule to maintain efficiency, aiming to promptly integrate customer requests and turn them into standardized features. Our systems are designed to be flexible, with expansion points for accommodating new layouts, fields, interfaces, and workflows.

RMS

RMS is a comprehensive scheduling and task management platform that supports both cloud and local deployment. This system is designed to handle critical tasks in warehouse automation, such as path planning, traffic management, task allocation, capacity optimization, and safety emergency stops for large-scale mobile robot clusters, ensuring real-time operations with high concurrency and reliability. As an all-in-one system, RMS supports various solutions developed by us within a unified framework. According to CIC, our RMS can schedule over 5,000 robots simultaneously in warehouse fulfillment, the highest among the peers. It can efficiently manage large-scale logistics in a 100,000-square-meter warehouse.

WES

WES is an open and user-friendly business system supporting various picking solutions. It is designed to enhance efficiency and adaptability across various industries such as third-party logistics, apparel, and retail. It supports both B2B and B2C operations and is compatible with our picking solutions. The system offers extensive strategy configuration capabilities, allowing it to manage diverse scenarios, including dynamic wave picking and full case picking strategies, which significantly boost picking efficiency. The system’s high-availability architecture ensures reliability, with automatic failover capabilities to minimize downtime.

IOP

IOP is a data-driven platform designed to provide comprehensive operational insights and real-time monitoring for warehouse management. With real-time monitoring capabilities, IOP can quickly detect exceptions across the entire warehousing system and trigger automatic alerts to prevent potential disruptions, making it a key tool for improving operational efficiency. For example, if inefficient robot paths are identified, IOP system can optimize the route settings.

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According to CIC, IOP leads the industry in several key areas. IOP features real-time monitoring and alert capabilities that quickly address issues, minimizing downtime and enhancing operational efficiency. The system excels in data integration and analysis, providing comprehensive insights that help optimize operations. Additionally, IOP offers low-code customization, enabling rapid and flexible adaptation to specific business needs in warehouse fulfillment. The platform tracks daily performance across core business processes, facility monitoring, and analysis, delivering valuable reports and dashboards to support ongoing improvements.

G-Studio

G-Studio is a one-stop comprehensive toolbox for project planning, deployment and on-site service, consisting of:

- **G-Plan:** It is a solution design tool that enhances efficiency and accuracy by offering scenario modeling, precise simulation, and data-driven evaluations.
- **G-Service:** It is a tool designed to streamline system diagnosis, upgrades, and operations, ensuring a higher upgrade success rate and seamless service delivery. It features standardized workflows, automation to reduce manual errors, and proactive system health management.
- **G-Deploy:** It is an digital tool to streamline system implementation with features like one-click installation and data migration. It ensures accelerated deployment speed, enhanced configuration accuracy, and reduced human error rates for a seamless and reliable rollout.

In addition, G-Studio is also equipped with Mapbuilder, a component used to generate and adjust warehouse maps compatible with both our RMS and G-Plan systems, enabling seamless integration and usage for AMRs.

Hyper+ Core Algorithms

Our Hyper+ Core Algorithm comprises a selection of algorithms with high-performance, high-execution speed optimization. Hyper+ Core Algorithm is one of the most advanced algorithms in the AMR market, according to CIC. According to CIC, Hyper+ Core Algorithms support one of the widest ranges of algorithm types and the largest cluster scheduling scales when compared to similar algorithms in the market.

Our Hyper+ Core Algorithms offer several key advantages that enhance warehouse efficiency and operations. They feature a streamlined system with 25 specialized algorithms designed for warehouse tasks, enabling picking efficiencies of up to 400 units per workstation per hour in Geek+ Shelf-to-Person Picking Solution and 300 units per hour in Geek+ Tote-to-Person Picking Solution. The scheduling algorithms can effectively coordinate over 5,000 AMRs in large-scale warehouse environments, significantly optimizing fleet

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management. Additionally, the algorithms support both homogeneous and heterogeneous robot systems, allowing different types of robots to operate under a unified platform. This seamless coordination ensures optimal task allocation and communication, even in high-density, complex environments.

Hyper+ Core Algorithms include (i) traffic management and task allocation, (ii) warehouse management, and (iii) supply chain algorithms.

- **Traffic Management and Task Allocation:** We have developed traffic management and task allocation to solve key issues in dynamic task matching, collaborative path planning, and distributed online management and planning in intelligent warehouses and factories. Driven by historical operational data, we have realized a dynamic task-matching algorithm that combines online and offline methods. Through real-time feedback on matching effectiveness, the system dynamically adjusts task-matching parameters online, while offline bulk learning from data can initialize and iteratively refine matching strategies, speeding up optimization effects. We achieve traffic management and task allocation, effectively avoiding deadlocks and traffic congestion between multiple robot paths by fully utilizing historical data. Additionally, we have built a traffic management and task allocation framework that supports distributed online management and planning strategy learning among various types of robots, significantly reducing computational resource usage by decentralizing the computational load from a single central server to the individual robots.
- **Warehouse Management:** We have accumulated extensive practical experience for business processes such as large-scale order processing, inventory management, put-away policy, and shelf adjustment, ensuring high-efficiency warehouse operations. We provide optimal inventory storage solutions, sorting methods, and order grouping strategies. By solving for the optimal matching relationships between workstations, shelves, and robots using operational research algorithms, we maximize warehouse throughput with minimal shelf movement.
- **Supply Chain Algorithms:** We offer intelligent replenishment, transportation scheduling, product selection and location recommendations, product pricing, and production planning. We enable each AMR to navigate, perceive, and execute tasks independently and efficiently. We efficiently assign tasks to the most suitable robots based on proximity and workload and optimize business operations, such as warehouse layout and task batching, to streamline processes and reduce operational workload.

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RESEARCH AND DEVELOPMENT

R&D is at the heart of our innovation. Our strong R&D capabilities have allowed us to develop numerous market-pioneering AMR solutions and technology platforms. By maintaining a solid focus on research and technological advancement, we continue to lead the AMR sector, pushing the boundaries of automation with solutions that meet a wide range of warehouse and logistics needs.

Our R&D Talents

We boast a highly experienced R&D team, led by technical experts with extensive knowledge in their fields. Mr. Li Hongbo, our co-founder and CTO, has over 15 years of expertise in robotics, specializing in navigation and algorithms. Mr. Liu Kai, our co-founder and Vice President, brings over 10 years of experience in mobile robotics and traffic management and task allocation systems. Mr. Chen Xi, our co-founder and Vice President, has over a decade of experience in industrial automation and intelligent manufacturing, contributing to key national robotics projects. Together, their leadership ensures us to remain at the forefront of AMR innovation.

Many of our R&D team members come from leading technology firms and possess deep expertise in both technology architecture and algorithm development, ensuring seamless integration of hardware and software in our AMR solutions. The team consists of PhD and master’s degree holders from prestigious institutions with extensive R&D experience in robotics, embedded systems, as well as participation in national and international robotics competitions.

We have divided our R&D into two main departments:

- **Systems Department:** Led by Mr. Liu Kai, this department includes over 220 members, specializing in software development, technical architecture, and algorithm research.
- **Robotics Department:** Led by Mr. Chen Xi, this department includes approximately 80 members, this department covers hardware, algorithms, software, and tool development.

Our core team has remained highly stable, which has been critical to our rapid growth over the past years. We also implement strong risk management measures and ensure that core technology rests with key personnel. This approach enhances our resilience and enables us to identify and resolve issues efficiently.

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R&D Philosophy and Process

We take distinct approaches to software and hardware development, both of which involve deep platform-based development and iterative improvements to enhance intelligence and adaptability.

- **Hardware Development:** Our preliminary design review process is crucial to hardware development, including design, development, and refinement in small-scale production. With the standardized Robot Matrix platform, we focus on mechanical structure design, allowing new AMR models to be launched quickly.
- **Software Development:** We follow an agile development process for software. Each version update follows a designed lifecycle to ensure high efficiency and quality in software development.

R&D Investment

During the Track Record Period, we made substantial investments in R&D, with the majority of expenses attributed to compensation for our R&D staff, material costs, testing costs, depreciation and amortization, and professional service fees. As of December 31, 2024, we employed 408 full-time R&D staff, accounting for 41.0% of our total workforce. Our research and development expenses for 2022, 2023 and 2024 were RMB436.8 million, RMB379.9 million and RMB282.0 million, respectively. This ongoing investment in R&D reflects our commitment to innovation and maintaining a competitive edge in product development and intellectual property protection.

SALES AND MARKETING

Our Presence

Over the years, we have built a geographically diverse and extensive customer base. According to CIC, we have the widest global presence among the world’s AMR solution providers. As of December 31, 2024, we have shipped approximately 56,000 AMRs across over 40 countries and regions worldwide. According to the same source, we have the broadest global service network among the world’s AMR solution providers. We are not just exporting products, but rather have built the infrastructure and expertise necessary to deploy our solutions globally with consistently high quality.

During the Track Record Period, the majority of our revenue was generated from non-domestic markets outside Chinese mainland. Unlike many of our China-based peers that initially concentrate on local or regional markets, we strategically targeted the global market early on — this global mindset has enabled us to establish a strong international presence, with operations, partnerships, and deployments in key markets around the world. Our first-mover advantage in non-domestic markets has allowed us to secure a strong market position and build deep relationships with customers. While we derive over 70% of our total revenue from

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non-domestic markets in 2024, according to CIC, our Chinese competitors typically generate only an average of approximately 20% of their revenue from non-domestic markets, with some drawing less than 10% from non-domestic markets, primarily through Chinese customers’ overseas operations.

Supported by local teams in each market, we have adopted a differentiated sales strategy across various regions, tailoring our market expansion and marketing strategies to suit different markets. See “— Branding and Marketing” below for further information.

The following table sets forth the breakdown of our revenue from sales of AMR solutions in an absolute amount and as a percentage of total revenue by geographic location of customers for the periods indicated.

	For the year ended December 31,					
	2022		2023		2024	
	<i>RMB</i>	<i>% of total revenue</i>	<i>RMB</i>	<i>% of total revenue</i>	<i>RMB</i>	<i>% of total revenue</i>
	<i>(in thousands, except percentages)</i>					
Domestic market⁽¹⁾	226,776	15.6	477,531	22.3	664,825	27.6
Non-domestic markets⁽²⁾						
AP ⁽³⁾	462,239	31.8	805,901	37.6	676,280	28.1
US ⁽⁴⁾	326,897	22.5	605,364	28.2	629,120	26.1
EMEA ⁽⁵⁾	231,533	15.9	235,253	11.0	432,089	17.9
Subtotal	1,020,669	70.3	1,646,518	76.8	1,737,489	72.1
Total	1,247,445	85.9	2,124,049	99.1	2,402,314	99.7

Notes:

- (1) Refer to the Chinese mainland market.
- (2) Refer to the markets outside Chinese mainland.
- (3) Refer to the Asia-Pacific market, excluding Chinese mainland.
- (4) Refer to the U.S. market.
- (5) Refer to the combined markets of Europe, the Middle East and Africa. The significant year-over-year increase in revenue from the EMEA market in 2024 was primarily driven by both new end customer acquisitions and increased orders from existing customers and due to a relatively low revenue base in 2023.

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Our Sales Channels

In both non-domestic and domestic markets, we have established two main sales channels: (i) direct sales, and (ii) channel partner sales.

The following table sets forth the breakdown of our revenue from sales of AMR solutions in an absolute amount and as a percentage of total revenue by sales channel for the periods indicated.

	For the year ended December 31,					
	2022		2023		2024	
	<i>RMB</i>	<i>%</i>	<i>RMB</i>	<i>%</i>	<i>RMB</i>	<i>%</i>
<i>(in thousands, except percentages)</i>						
Direct sales	747,220	51.5	1,565,971	73.1	1,610,030	66.8
Channel partner sales . . .	500,225	34.4	558,078	26.0	792,285	32.9
Total	1,247,445	85.9	2,124,049	99.1	2,402,314	99.7

The following table sets forth the number of our end customers of the sales of AMR solutions by sales channel as of the indicated dates.

	As of December 31,		
	2022	2023	2024
Direct sales	126	158	174
Channel partner sales	128	138	150
Total	254	296	324

Direct Sales

Direct sales are essential for engaging customers, showcasing product capabilities, and building our brand. In particular, we utilize our direct sales network to manage our key customers, which plays a crucial role in introducing and demonstrating our advanced and complex products that require more specialized knowledge. With a direct communication line to key customers, our team can offer personalized support, gather insights on product performance, and stay ahead of market trends. Our sales team, with expertise in the AMR area, works closely with customers to meet their needs, continuously improving our products based on their direct feedback.

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The following is a summary of the key contractual terms of our direct sales agreements with our customers:

- Product and Project Details: The contracts typically detail the types of robots, software, and custom developments that we provide.
- Product and Pricing Structure: The contracts with customers either stipulate a lump-sum price for the entire order or include a detailed quotation covering products such as robots, charging stations, software systems, and other required tools.
- Pricing: Pricing is subject to the terms of the agreements, with provisions for additional charges if any changes are made to the scope of work or project assumptions.
- Maintenance and Service: We typically provide maintenance and post-sale services to customers within a 12-month period.
- Implementation and Delivery: We are generally responsible for the transport and customs clearance, if any. We provide implementation services to customers under our direct sales model to meet the prescribed requirements in relation to solution performance and specification.

Channel Partner Sales

We have developed an extensive channel partner network, allowing us to constantly expand our customer outreach. In 2022, 2023 and 2024, channel partner sales accounted for 34.3%, 26.0% and 33.0%, respectively, of our total revenue from sales of AMR solutions. As of December 31, 2024, we had 301 channel partners serving the domestic market and 64 channel partners serving non-domestic markets, respectively.

The following table sets forth the movements in the number of our channel partners during the Track Record Period.

	For the year ended December 31,		
	2022	2023	2024
As the beginning of the period	181	248	299
Additions of channel partners ⁽¹⁾	71	58	79
Exit of channel partners ⁽²⁾	4	7	13
As of the end of the period	<u>248</u>	<u>299</u>	<u>365</u>

Notes:

- (1) Represents the number of channel partners who entered into collaboration agreements with us for the given period.
- (2) Represents the number of channel partners who had not placed at least one order with us for a consecutive three years prior to the beginning of the given period.

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We engaged 71, 58 and 79 new channel partners in 2022, 2023 and 2024, respectively. We engaged new channel partners to help us expand business scope with reduced investment of internal resources, maintain robust business growth rate and increase market share. The steady expansion of our channel partner network is generally consistent with our business growth during the Track Record Period.

We discontinued our partnership with four, seven and 13 new channel partners in 2022, 2023 and 2024, respectively. As our business and channel partner network have evolved, these channel partners ceased placing orders with us primarily due to shifts in their local market dynamics and the lack of business opportunities. During the Track Record Period and up to the Latest Practicable Date, we did not have any material unresolved disputes or lawsuits with these departing channel partners.

Many of our channel partners — particularly those acting as system integrators (“integrators”) — incorporate our AMR solutions as core components within broader, customized warehousing automation systems tailored to the needs of end customers. These integrators typically consolidate our AMR products with their own software platforms (such as ERP or WMS), as well as third-party automation components including conveyor belts, sorters, and automated storage and retrieval systems (ASRS). While these additional components are not supplied by us, they are integrated alongside our AMRs to form complete, end-to-end solutions optimized for specific industry verticals and operational workflows.

Customization by integrators is common and often essential to meet end customers’ specific requirements. A channel partner may adapt our AMR systems to interface with existing infrastructure, such as inspection stations, sortation zones, or outbound shipping lines. Customization may also involve modifications to communication protocols, integration of additional sensors, refinement of workflow logic, or incorporation of customer-specific safety or localization features.

For example, in a project in the United States involving a leading distributor in the apparel sector, we provided AMR systems for storage and picking tasks, while a global automation integrator supplied and integrated complementary components such as conveyor lines and sorters. Our AMR solution was customized to meet the needs of the apparel industry. The full solution was managed via the warehouse management system developed by the integrator, enabling real-time process coordination across the site.

In addition to integrators, we also work with channel partners that directly resell our AMR solutions to end customers. These partners promote our systems based on their understanding of our products and typically provide value-added services such as system design, deployment, and after-sales support.

During the Track Record Period, the vast majority of revenue generated from channel partner sales came from integrators.

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In highly specialized sectors such as automotive, electronics, and pharmaceuticals, end customers often require more complex, customized solutions and have stringent operational or compliance standards. These industries typically involve long sales cycles, high regulatory expectations, and strong reliance on trusted relationships. In these cases, we frequently partner with channel partners that have deep industry experience and established customer bases. These partners are better positioned to navigate industry-specific requirements, provide localized support, and maintain long-term trust with end customers. Consequently, purchasing preferences may differ across sectors — while some end customers engage with us directly, those operating in complex or highly regulated industries may prefer to work through specialized channel partners with domain expertise or existing contractual relationships.

While channel partners — particularly integrators — play an important role in solution deployment and customer relationship management, end customers themselves are often the key drivers of solution selection. Many end customers choose Geek+ based on our technological advantages, scalability, and proven use cases, especially in high-demand sectors such as third-party logistics, retail, and manufacturing. In numerous cases, end customers directly specify the use of Geek+ solutions, either due to prior familiarity with our brand or based on unique product requirements that only our AMRs can fulfill. Even in channel partner — led engagements, end customers are actively involved in product evaluation and decision-making, and often request our participation in solution design, demonstrations, and technical discussions. As a result, channel-driven sales are frequently demand-driven in nature, reflecting the strong market preference for our solutions. From 2022 to 2024, approximately 80% of our orders involving Fortune 500 end customers were sourced through direct sales channels, particularly in mature markets such as the United States, China, Germany, and Japan, where we have established local teams and service capabilities.

The relationships between the channel partners and we are categorized as seller-buyer relationships. Historical sales generated by channel partners are generally recurring in nature except in cases where we discontinued our business relationships with certain channel partners as discussed above. Our channel partners typically did not engage sub-distributors in practice, nor did we work with any sub-distributors during the Track Record Period. Hence, we believe the risk of sub-distributors operating outside our direct oversight is minimal. We are committed to maintaining close relationships with our channel partners to ensure they deliver high-quality service and uphold our reputation in all markets. The end customers served by our channel partners, like those in our direct sales model, are primarily concentrated in the e-commerce, FMCG, and third-party logistics sectors, where fulfillment efficiency and rapid deployment are key priorities. See “Risk Factors — Risks Relating to Our Business and Industry — Our business growth might be affected by our channel partner network.”

We work with a diverse network of channel partners in both domestic and non-domestic markets, each playing a distinct role in extending our market reach and delivering value to end customers:

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- Our channel partners in non-domestic markets typically consist of mid-sized to large market players with robust capabilities in local logistics, supply chain management, and warehousing, as well as deep knowledge of their respective markets. Based on respective collaboration models, we enter into specific types of agreements with channel partners in non-domestic markets. For instance, some channel partners place individual purchase orders under a general framework agreement, enabling flexible and ongoing collaboration with us. Alternatively, we may also enter into detailed project-based purchase agreements tailored to specific projects or initiatives.
- Our domestic channel partners primarily consist of businesses with local networks, customer bases, and service infrastructures that enable the expansion of our business. Additionally, we collaborate with channel partners who leverage our products to create comprehensive, project-based solutions. For domestic channel partners, we typically enter into project-specific purchase agreements that outline detailed terms and conditions.

In markets where we lack a direct sales presence, our channel partners extend our reach and facilitate customer onboarding. They also provide essential local support, such as language expertise, after-sales service, and regulatory knowledge, to ensure our solutions are tailored to regional requirements. Beyond these practical contributions, our channel partners act as strategic collaborators, leveraging their local networks to access industry-specific or market-specific customers. This collaboration allows us to scale efficiently, localize services, and deliver customized offerings that would be challenging to achieve through direct sales alone.

To our best knowledge, as of the Latest Practicable Date, our channel partners were all Independent Third Parties and did not have any other relationship with us, except (i) Geekplus JP, a Japanese company in which we own approximately 39.6% equity shares, (ii) Qingdao Ruide Zhijia Technology Co., Ltd., a PRC limited liability company in which one of our PRC subsidiaries, Shanghai Geekplus Robotics Co., Ltd. held 4.5% equity interests, and (iii) Xiamen Haiyi Zhijia Technology Co., Ltd., a PRC limited liability company in which Shanghai Geekplus Robotics Co., Ltd. held 4.5% equity interests. See also “History, Development and Corporate Structure — Our Corporate Structure” for details. The foregoing channel partners (together, the “**Related Channel Partners**”) are established to help us expand the Japanese market and PRC regional markets, respectively. The remaining 60.4% equity interest in Geekplus JP is held by (i) a seasoned individual investor with nearly 20 years of experience in the warehousing and logistics services industry as to 59.4% and (ii) an established company in Japan that is a distributor of mobile devices and related solutions as to 1%. The individual investor partnered with us to establish Geekplus JP to expand business operations in the region following the successful implementation of our first AMR solution project in Japan in 2017. In 2022, the distributor company joined the joint venture, further increasing our efforts to expand in the Japanese market. In 2022, 2023 and 2024, the revenue generated from these Related Channel Partners accounted for 3.7%, 5.0% and 7.3%, respectively, of the total

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revenue from the sales of AMR solutions. Our contract terms with the Related Channel Partners are substantially the same as those with other independent channel partners. Our credit terms granted to these channel partners were in line with the credit term granted to the independent channel partners.

The following is a summary of the key contractual terms of our agreements with our channel partners. To the extent that any terms differ as between integrators and non-integrators, such distinctions are specifically noted.

- Scope of Agreement
 - *Non-Exclusivity*: We typically enter into non-exclusive agreements with channel partners, allowing both parties the flexibility to engage with other businesses.
 - *Products and Services*: Channel partners may purchase various Geek+ products, including robots, chargers, software, and related services. We typically do not establish minimum purchase amount or a minimum sales target for channel partners.
- Pricing and Payment
 - *Pricing Flexibility*: The prices offered to channel partners for our products are generally provided in our price lists, which may be updated periodically. The channel partners have the flexibility to determine the product prices they offer to end customers.
 - *Payment Structure*: Payment terms typically include an initial deposit upon order confirmation, followed by milestone payments tied to the receipt and acceptance of the products. Same as the direct sales, the revenue with respect to the channel partner sales is generally recognized upon project acceptance.
 - *Deposit*: In the agreements with integrators, they sometimes require us to pay a fixed deposit as a performance security. The amount of such deposit may vary from case to case based on negotiation. Should a breach of the agreement occur on our part, an amount commensurate with the breach will be deducted from the deposit. Upon the expiration of the warranty period, the deposit, less any deductions, will be refunded without the accrual of interest. As of December 31, 2022, 2023 and 2024, the amounts of the foregoing deposit in relation to the performance security paid by us to channel partners were RMB2.0 million, RMB2.6 million and RMB0.6 million, respectively.

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- Responsibilities of Channel Partners
 - *Allocation of Work:* Our collaboration with channel partners varies depending on the complexity of end customers’ projects and specific contract terms: (i) in standard projects, channel partners handle promotion, implementation, delivery, and ongoing maintenance, while we supply the necessary products and solutions; (ii) for projects of high complexity and customization, we take on a broader role by providing not only products and solutions but also implementation, delivery, and post-sale maintenance. Channel partners in such cases primarily focus on facilitating end customer communication and assisting with the overall project execution. In such cases, our prices charged to channel partners will also cover installation and implementation services.
 - *Training and Support:* Channel partners are expected to undergo training provided by us and may need to pass through any applicable warranties and indemnities to end customers.
 - *Order Accuracy:* Channel partners are responsible for ensuring the accuracy of orders, including specifications and necessary information for proper execution.
 - *Acceptance and Installation:* Channel partners conduct acceptance checks on the products we deliver to ensure they meet the required specifications. In the agreements with integrators, we are typically responsible for the installation and commissioning of the equipment.
- Quality
 - *Quality Standard:* We provide products and services that meet the requirements of channel partners as stipulated in the relevant agreements. In instances where the agreements lack explicit provisions, our products and services adhere to the quality benchmarks established by applicable laws and regulations.
 - *Technical Support:* We typically offer 24/7 technical support services to our channel partners, addressing any product-related issues or concerns during the validity of the contract. In the agreements with integrators, we establish specialized project teams as needed, based on the specifics of the project and mutual agreement. These teams are dedicated to supporting the integrators throughout the project lifecycle, ensuring seamless implementation and troubleshooting any challenges that may arise.
 - *Engagement of Third Parties:* In the agreements with integrators, we may, with the prior consent of the integrator, engage qualified third-party providers. These third parties are entrusted to complete specific components or tasks within the scope of our contract with the integrator. This approach helps us to leverage specialized expertise and optimize project execution.

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- Logistics and After-Sales
 - *Product Delivery:* We are usually tasked with delivering the products to end customers. The product risk is generally transferred to the channel partner either after acceptance or confirmation of delivery.
 - *Warranties:* We typically offer warranty on products guaranteeing they meet industry standards and are free from defects in design or workmanship. The warranty covers repairs or replacement for defects, with certain exclusions for misuse or damage caused by external factors.
- Product Return and Inventory
 - *Return Policy:* We generally do not accept product returns after the sale except in the cases where the product is damaged or defective upon receipt. After delivery, any issues within the warranty period will be addressed with repair services.
 - *Inventory and Channel Stuffing:* Our risk of channel stuffing is effectively mitigated due to our product return policy and our collaboration model with channel partners. For details, see “— Inventory Management — Channel Stuffing.”
- Project-based Agreements
 - The agreements with integrators are structured on a project basis, ensuring streamlined collaboration. In most cases, we do not directly engage in business with end customers sourced by channel partners, unless there is a specific request from the end customer for our direct involvement.
- Intellectual Property and Confidentiality
 - *IP Rights:* We retain ownership of all intellectual property rights related to our products. Channel partners may use our trademarks for advertising and sales but must respect all proprietary notices.
 - *Confidentiality:* Both parties are bound by strict confidentiality terms, particularly with respect to sensitive information related to product details, pricing, and end customer information. Additionally, for the technologies, processes, and know-how we utilize during the execution of contracts, we usually explicitly require channel partners to maintain strict confidentiality through provisions outlined in the contract.

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- Termination and Renewal
 - *Term Length:* The term length is subject to the negotiation between channel partners and us. After the initial contract terms expires, renewal is subject to mutual agreement, with both parties reviewing the terms and conditions to ensure they remain suitable for continued collaboration.
 - *Termination:* The agreements may be terminated by mutual agreement or by other means as specified in the agreement.
- Indemnification and Liability
 - *Indemnification:* We generally agree to indemnify the channel partner against any claims related to intellectual property infringement in connection with the use of our products.
 - *Liability Limitations:* Both parties agree to limit their liability for indirect, incidental, or consequential damages, with certain exceptions for cases like willful misconduct or breach of intellectual property rights.

Throughout the Track Record Period, we have maintained strong relationships with our channel partners and experienced no significant disputes or conflicts. These solid channel partner relationships have been a key factor in the stability and success of our channel partner network.

We manage our channel partners in the following ways:

- *Tiered Management:* We carefully select our channel partners by evaluating their capabilities in sales, solution development, project implementation, after-sales service, and customization. When onboarding channel partners, we assess their qualifications based on several criteria, such as their legal status under applicable laws and their financial resources. Additionally, potential channel partners must have active projects or business activities to demonstrate their ability to contribute effectively to the partnership. We adopt a tiered management system for our channel partners based on their performance and respective capabilities. Our tiered system ensures that our channel partners have incentives to improve their performance and that resources are allocated effectively. These efforts aim to strengthen our relationship with key channel partners and enable them to perform at their best.
- *Anti-cannibalism and Business Allocation:* We have implemented a comprehensive and structured system for opportunity allocation and approval to prevent market cannibalization among our channel partners. When potential business opportunities arise in a specific market, channel partners are required to report these leads through our internal system, ensuring visibility and proper tracking. Opportunities are allocated on a “first-come, first-served” basis, meaning the channel partner who first

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identifies and reports the opportunity will be granted the lead. This ensures that no channel partner competes with another for the same end customer, thereby maintaining a streamlined and efficient process. Additionally, this system ensures that channel partner opportunities are allocated fairly. By clearly defining lead ownership and ensuring the absence of overlap, we not only protect the interests of our channel partners but also create an environment that fosters healthy competition and mutual growth across regions.

- *Channel Partner Enablement:* To strengthen our channel partners’ capabilities and improve their service quality for end customers, we offer extensive training and certification programs covering sales, planning, and project implementation. Additionally, we assess and certify channel partners based on their proficiency in distribution and marketing across our product lines. To earn certification, channel partners must successfully complete our theoretical and practical assessments, ensuring they are fully equipped to represent our solutions effectively and deliver exceptional service.
- *Satisfaction Survey:* To continuously improve our support for our channel business and monitor the performance of our channel partners, our global operations team has implemented a comprehensive channel satisfaction survey process, conducted biannually across all regions. This process includes gathering feedback from channel managers, analyzing channel performance data, formulating improvement plans, and tracking their progress. The results, action plans, and updates on improvements are shared and reviewed during quarterly channel business reviews to ensure ongoing alignment and optimization.

Branding and Marketing

We primarily manage our marketing efforts internally, ensuring that we maintain full control over our brand identity and marketing execution globally. This in-house approach allows us to integrate all aspects of our marketing operations, providing consistency and alignment with our overall business strategies.

Our brand and marketing initiatives are organized into several core areas:

- *Brand Design:* Our focus is on preserving a cohesive and consistent brand presence across all of our products and markets. This involves not only traditional branding elements but also extends to creative content development and the design language of our AMRs. Our industrial design team ensures that every aspect of our AMRs, from their visual appearance to their functionality, reflects our brand values and strategic vision. By aligning the visual identity and product design with our goals, we create a strong, recognizable brand presence that resonates across different regions and customer segments.

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- *Marketing Team Structure:* We have divided our marketing team into two main groups — one focusing on the domestic market, and another handling non-domestic markets. As of December 31, 2024, our sales and marketing team consisted of a total of 464 employees.
 - The domestic team is responsible for overseeing our overall brand management as well as marketing efforts in the domestic market. This team ensures that our Geek+ brand remains strong and consistent within the domestic market, while also handling any corporate marketing needs from its headquarters.
 - The non-domestic team is responsible for management of marketing efforts across overseas regions, ensuring that we are well-represented internationally. The overseas team works closely with the headquarters to ensure global brand alignment while tailoring messaging and strategies to the unique needs of each market.

Through this structured branding and marketing approach, we have built a flexible and efficient system that allows us to maintain a consistent brand image across diverse markets, while also catering to regional differences. This in-house-driven marketing model also enables us to maintain control over our brand while ensuring responsiveness and agility in an ever-changing global landscape.

Over the years, we have devoted a significant portion of our marketing budget to key non-domestic markets. At the same time, the Chinese mainland remains a crucial market for us, as it provides a solid foundation for our continued growth.

We have also strategically aimed to build relationships with large customers that have strong potential for repeat business. By focusing on large, high-value customers, we have successfully built a solid global customer base, which has driven our expansion into new regions. This targeted approach not only strengthens our global reach but also supports long-term growth in diverse markets.

We also rely on a quantitative approach to guide our branding and marketing strategies. From the initial stages of campaign development, we test different approaches using third-party tools to predict the effectiveness of our outreach efforts. Key performance indicators, such as market qualified lead conversion rates, help our marketing team set clear targets and refine their strategies based on results. We also continue to track the performance of various marketing channels, such as social media, search engine optimization, pay-per-click advertising, and content marketing. By identifying which channels generate the best leads, we can focus our efforts on the most productive avenues. Additionally, we produce valuable content — such as white papers, case studies, and webinars — to engage potential customers and move them through the sales funnel. We also pay close attention to return on investment and the efficiency of our marketing spend. By analyzing these metrics, we ensure that our strategies are not only effective but also cost-efficient, enabling us to make informed decisions about where to allocate resources for maximum impact.

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OUR CUSTOMERS

We have a diverse and fast-growing global customer base across multiple industries, with a strong focus on the e-commerce, FMCG, and third-party logistics sectors. According to CIC, we have one of the widest industry coverages in the global AMR market, as well as the world’s largest AMR solution provider in the e-commerce, FMCG and third-party logistics sectors in terms of revenue in 2024.

Our customers mainly include corporations and businesses seeking innovative and reliable warehouse automation solutions. These companies are adopting leading technologies to address rising costs and labor shortages, driving strong, long-term demand for automation. Additionally, our customers include (i) channel partners who integrate our AMR solutions as key components into their broader, customized warehousing solutions that they offer to end customers. We refer to these channel partners as integrators, and, during the Track Record Period, the substantial majority of our revenue generated from channel partner sales came from such integrators; and (ii) channel partners who directly promote and resell our AMR solutions to end customers based on their understanding and knowledge of our AMR solutions. In this process, they also provide a suite of supporting services to end customers, such as design, implementation and maintenance. For each year during the Track Record Period, revenue generated from our five largest customers accounted for 30.8%, 45.3% and 42.1%, respectively, of our total revenue during each period. For each period during the Track Record Period, revenue generated from our single largest customer accounted for 9.3%, 15.4% and 15.5%, respectively, of our total revenue. Geekplus JP, one of our five largest customers in 2024, is a Japanese company in which we own approximately 39.6% equity shares. Geekplus JP operates as a channel partner in Japanese market who contributed to 2.8%, 4.9% and 7.3% of our total revenue in each year of the Track Record Period, respectively.

The following tables set forth the details of our top five customers for each year during the Track Record Period:

Rank	Customer	Type of products sold	Background	Year of commencement of business relationship	Revenue	Percentage of total revenue	Category
(RMB'000)							

For the year ended December 31, 2022

1	Customer A	AMR solution	A fashion conglomerate whose main business includes activities related to the design, production, and sales of textiles registered in Spain.	Since 2020	135,451	9.3%	Direct sales customer & Fortune 500 company
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Rank	Customer	Type of products sold	Background	Year of commencement of business relationship	Revenue	Percentage of total revenue	Category
					(RMB'000)		
2 . . .	Customer B	AMR solution	A company specializing in industrial automation and control system integration registered in the U.S.	Since 2021	91,100	6.3%	Channel partner
3 . . .	Customer C	AMR solution	An international technology group whose main business covers multiple fields, including digitization, pharmaceuticals, supply chain, paper and tobacco registered in Germany.	Since 2020	84,376	5.8%	Channel partner
4 . . .	Customer D	AMR solution	A company dedicated to software development or technological innovation, committed to providing customers with advanced technology solutions registered in the U.S.	Since 2021	71,125	4.9%	Channel partner
5 . . .	Customer E	AMR solution	A globally renowned courier and logistics service provider registered in the U.S.	Since 2021	65,055	4.5%	Direct sales customer & Fortune 500 company
<i>For the year ended December 31, 2023</i>							
1 . . .	Customer A	AMR solution	A fashion conglomerate whose main business includes activities related to the design, production, and sales of textiles registered in Spain.	Since 2020	329,582	15.4%	Direct sales customer & Fortune 500 company
2 . . .	Customer E	AMR solution	A globally renowned courier and logistics service provider registered in the U.S.	Since 2021	280,818	13.1%	Direct sales customer & Fortune 500 company

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Rank	Customer	Type of products sold	Background	Year of commencement of business relationship	Revenue	Percentage of total revenue	Category
					(RMB'000)		
3 . . .	Customer F	AMR solution	A company primarily engaged in the contracting of domestic and overseas projects involving, among others, electrical equipment and environmental protection engineering registered in Shenzhen, China.	Since 2019	125,195	5.8%	Channel partner
4 . . .	Customer G	AMR solution	A large e-commerce retailer offering a variety of product categories registered in South Korea.	Since 2021	119,202	5.6%	Direct sales customer
5 . . .	Customer C	AMR solution	An international technology group whose main business covers multiple fields, including digitization, pharmaceuticals, supply chain, paper and tobacco registered in Germany.	Since 2020	116,682	5.4%	Channel partner
<i>For the year ended December 31, 2024</i>							
1 . . .	Customer C	AMR solution	An international technology group whose main business covers multiple fields, including digitization, pharmaceuticals, supply chain, paper and tobacco registered in Germany.	Since 2020	374,362	15.5%	Channel partner
2 . . .	Customer G	AMR solution	A large e-commerce retailer offering a variety of product categories registered in South Korea.	Since 2021	214,498	8.9%	Direct sales customer

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Rank	Customer	Type of products sold	Background	Year of commencement of business relationship	Revenue	Percentage of total revenue	Category
					(RMB'000)		
3 . . .	Geekplus JP	AMR solution	A company dedicated to robotics technology and intelligent logistics solutions registered in Japan.	Since 2017	175,664	7.3%	Channel partner
4 . . .	Customer H	AMR solution	A Chinese fast-fashion e-commerce brand founded in 2008 and registered in Spain.	Since 2023	164,037	6.8%	Direct sales customer
5 . . .	Customer A	AMR solutions	A fashion conglomerate whose main business includes activities related to the design, production, and sales of textiles registered in Spain.	Since 2020	86,771	3.6%	Direct sales customer & Fortune 500 company

To the best of our knowledge, during the Track Record Period and up to the Latest Practicable Date, except for Geekplus JP, none of our Directors, their associates or any of our shareholders (who or which to the knowledge of the Directors owned more than 5% of our issued share capital) had any interest in any of our five largest customers.

Customer Operations and Management

We focus on understanding our customers’ evolving needs and using that knowledge to enhance upselling and cross-selling efforts. Drawing from our extensive industry experience, we can anticipate market trends and offer solutions that address needs customers may not yet have realized. This proactive approach enables us to capitalize on new business opportunities. For example, after successfully deploying our Geek+ Shelf-to-Person Picking Solution at the logistics centers of a leading e-commerce company in South Korea, we introduced our FleetSort Solution to further enhance their operational efficiency. This approach enables us to expand our solutions across different areas of the client’s business, adapting to their evolving needs and driving sustained growth.

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We assess each customer’s unique needs and potential contribution to our overall growth, ensuring that we provide the right level of support to all our customers. While we allocate additional resources to strengthen relationships with customers that play a significant role in our long-term strategy, we remain committed to delivering high-quality service to all customers. For key international customers, we assign dedicated sales teams to provide focused market coverage and ensure these customers receive the highest level of services. These teams undergo specialized training to effectively support our key accounts. In the domestic market, we generally maintain a direct sales approach with key customers but also engage channel partners when necessary to enhance product and service delivery. Even when working with channel partners, we stay directly involved with major customers to maintain consistent communication and prevent disruptions, particularly in highly competitive sectors.

Our customer management strategy is supported by key operational metrics, in particular our order intake. Additionally, we place significant importance on repeat business, as the frequency and scale of repeat purchases are strong indicators of customer loyalty and product success. These metrics are critical to ensuring we maintain a high standard of service and continue to meet customer expectations.

Customer Support and After-Sales

At Geek+, we focus on ensuring our solutions operate smoothly and efficiently for our customers by providing comprehensive support and a robust after-sales program.

Over the years, we have built the broadest global service network among the world’s AMR solution providers, according to CIC. As of December 31, 2024, we employed 994 staff, including engineers and sales teams, and maintained offices across key global markets. Additionally, as of December 31, 2024, we had over 305 engineers, providing customers with comprehensive service and technical expertise. Our global reach is further demonstrated by our more than 48 service stations and service partner sites, along with 13 spare parts centers worldwide as of December 31, 2024.

We also provide structured training that is designed to equip our internal teams, channel partners and customers with essential knowledge and skills. The training is organized into three key categories:

- *Internal Team Training:* Focused on the ongoing professional development of our in-house teams, ensuring they maintain a high level of expertise and continue to provide top-quality service;
- *Channel Partner Training:* Tailored for our channel partners, this training ensures they are well-equipped to support customers with product setup, maintenance, and troubleshooting; and

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- *Customer Training*: Designed for medium to large customers, particularly those with their own IT and operations teams. We provide in-depth technical training on system fundamentals and critical maintenance tasks to ensure long-term operational stability.

For larger projects, we follow up promptly after final project acceptance with a comprehensive training program. This program prepares the customer’s operational and maintenance teams to handle routine issues and unexpected events independently. It includes detailed training documentation, manuals, and courses, empowering customers with the tools for self-sufficiency. By enhancing the customer’s ability to self-manage, we reduce service costs and ensure systems remain efficiently maintained.

We provide after-sales support through a 24/7 English-speaking call center, local hotlines, and a strategically positioned network of global spare parts centers. We manage customer complaints through a tiered system, allowing us to classify and prioritize issues based on their severity. Most customer complaints tend to involve mechanical issues, and our team works to resolve them quickly and efficiently to minimize downtime. Additionally, to maintain optimal long-term performance, we implement a preventative maintenance program with regular inspections, upkeep, and repairs to reduce system failures and extend the operational lifespan of our AMR solutions. For basic after-sales needs, typically our channel partners will manage on-site support, while for more complex issues, we directly intervene to provide fast and effective resolutions. While we follow standard after-sales protocols, we recognize that each customer may have specific requirements. To that end, we adapt our service standards to meet these needs, whether it involves strict response times or tailored solutions for critical issues. This flexibility ensures that we consistently deliver the best possible service for every project. Furthermore, we have partnered with insurance companies to cover any potential liabilities related to product sales, providing additional security and peace of mind for our customers.

During the Track Record Period, we have not experienced incidents involving material product recalls, defect tracking, or significant complaint handling.

OUR SUPPLIERS

Our key material mainly includes robot structure parts, motors, drive wheels, controllers and power batteries. We develop critical components in-house for better performance and cost efficiency over standard market options. For example, we have developed in-house proprietary safety controllers that integrate software to streamline hardware functions, lowering both size and costs. Additionally, we also contract specialized vendors to manufacture certain semi-finished products, such as circuit boards and chassis components.

We use a centralized procurement model, where all direct and pre-ordered purchases are managed by our supply chain. Our supply chain oversee procurement, quality control, and coordination with sales. By combining planning, procurement, quality control, and production, our supply chain ensure cost-efficiency, product quality, and a balanced link between production and sales. We conduct negotiations with suppliers at headquarter level or through

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our local teams. Our procurement team collaborate with our R&D and production team to reduce costs and ensure production continuity, with quality as a key priority. This end-to-end approach promotes high standards of quality and cost-efficiency across R&D, production, and delivery.

We implement a lifecycle evaluation and management strategy for suppliers. During supplier onboarding, our production, R&D, procurement, supplier development, and quality teams work together to select the best suppliers. We have also created a preferred supplier pool, with a strict selection process for inclusion. This rigorous process minimizes trial-and-error costs and helps us avoid costly mistakes, particularly in non-domestic markets. We maintain supplier quality through onboarding and inspections, and we conduct annual evaluations to guide performance management and make necessary adjustments. When issues arise or improvements are identified, we engage in detailed discussions with suppliers to address quality enhancements, optimize processes, and strengthen relationships.

To manage costs and secure delivery, we have backup suppliers at every supply chain stage. This approach reduces costs and strengthens delivery assurance, with long-term relationships with secondary suppliers further enhancing cost efficiency. As a result, we are not overly reliant on any single supplier, avoiding risks related to supplier concentration and ensuring consistent cost control.

Over the years, we have continuously improved procurement efficiency and reduced costs, particularly in prototype design. Recently, we have replaced certain core components with locally sourced alternatives and adopted cost-effective, stable technological solutions to meet functional requirements.

We believe that the global chip and semiconductor shortage in recent years had a limited impact on our business operations and supply chain during the Track Record Period and up to the Latest Practicable Date. This was primarily due to two factors: first, we primarily use standard, commercially available chips that are not subject to U.S. ECCN (Export Control Classification Number) restrictions. Second, in response to lengthening lead times across the semiconductor market in 2022 and 2023, we have implemented a proactive procurement strategy, including entering into framework agreements with suppliers to secure prices and volumes, monitoring closely delivery schedules, and using demand-based allocation to support ongoing production. These measures ensured operational continuity and minimized cost volatility.

Top Suppliers

During the Track Record Period, our top five suppliers collectively represented 14.7%, 15.1% and 17.5% of our total procurement, respectively, in each year of the Track Record Period. For each period during the Track Record Period, our single largest supplier accounted for 3.6%, 3.8% and 4.4%, respectively, of our total procurement. For each year during the

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Track Record Period, we did not have any single supplier who accounted for more than 5% of our total procurement for each of the period. We do not believe we are exposed to concentration risk or reliant on any single supplier.

Our Directors confirmed that, during the Track Record Period, we have not experienced any significant material fluctuation in prices set by our suppliers, material breach of contract on the part of our suppliers or material delay in delivery of our orders from our suppliers. To the best of our knowledge, during the Track Record Period and up to the Latest Practicable Date, none of our Directors, their associates or any of our shareholders (who or which to the knowledge of the Directors owned more than 5% of our issued share capital) had any interest in any of our five largest suppliers.

The following tables set forth the details of our top five suppliers for each year during the Track Record Period.

		Type of products/ services purchased		Year of commencement of business relationship		Percentage of total purchase
Rank	Supplier		Background		Purchase	
					(RMB'000)	
For the year ended December 31, 2022						
1	Supplier A	Materials	A company primarily engaged in the metal products industry registered in Zhejiang, China.	Since 2020	63,362	3.6%
2	Supplier B	Materials	A company mainly engaged in the manufacturing of computers, communications, and other electronic devices registered in Jiangsu, China.	Since 2019	55,851	3.2%
3	Supplier C	Materials	A company primarily engaged in technology promotion and application services registered in Beijing, China.	Since 2018	48,009	2.7%

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Rank	Supplier	Type of products/ services purchased	Background	Year of commencement of business relationship	Purchase	Percentage of total purchase
					(RMB'000)	
4	Supplier D	Labor service provider who performed routine warehouse labor tasks for RAAS operations, such as workstation picking and packing services	A company primarily engaged in business services registered in Jiangsu, China.	Since 2022	46,445	2.6%
5	Supplier E	Materials	A company mainly engages in the manufacturing of electrical machinery and equipment registered in Jiangsu, China.	Since 2018	46,169	2.6%

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Rank	Supplier	Type of products/ services purchased	Background	Year of commencement of business relationship	Purchase	Percentage of total purchase
						(RMB'000)
<i>For the year ended December 31, 2023</i>						
1	Supplier A	Materials	A company primarily engaged in the metal products industry registered in Zhejiang, China.	Since 2020	70,047	3.8%
2	Supplier F	Transport service	A company primarily engaged in the multimodal transport and transportation agency industry registered in Beijing, China.	Since 2020	66,320	3.6%
3	Supplier G	Materials	An enterprise engaged in the manufacturing of computers, communications, and other electronic devices registered in Fujian, China.	Since 2018	50,431	2.7%
4	Supplier C	Materials	A company primarily engaged in technology promotion and application services registered in Beijing, China.	Since 2018	48,995	2.7%
5	Supplier E	Materials	A company mainly engages in the manufacturing of electrical machinery and equipment registered in Jiangsu, China.	Since 2018	42,301	2.3%

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Rank	Supplier	Type of products/ services purchased	Background	Year of commencement of business relationship	Purchase	Percentage of total purchase
						(RMB'000)
<i>For the year ended December 31, 2024</i>						
1	Supplier F	Transport service	A company primarily engaged in the multimodal transport and transportation agency industry registered in Beijing, China.	Since 2020	80,340	4.4%
2	Supplier A	Materials	A company primarily engaged in the metal products industry registered in Zhejiang, China.	Since 2020	63,803	3.5%
3	Supplier H	Materials	A enterprise mainly engaged in the rubber and plastic products industry registered in China.	Since 2020	62,486	3.4%
4	Supplier I	Materials	A limited liability company mainly engaged in loading and unloading, handling, and warehousing registered in Jiangsu, China.	Since 2020	60,551	3.3%
5	Supplier B	Materials	A company mainly engaged in the manufacturing of computers, communications, and other electronic devices registered in Jiangsu, China.	Since 2019	49,391	2.7%

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The following is a summary of the key contractual terms of our contracts with our suppliers:

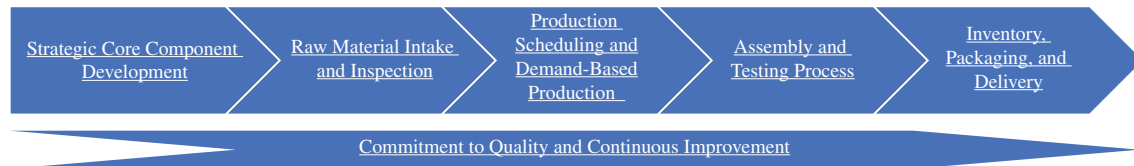
- Product/Service Details
 - *Product and Services:* The contract specifies the product and service types, configurations, and necessary documentation, including operation manuals, quality certificates, and import/export certifications, if applicable.
- Quotation and Pricing
 - *Product and Pricing Structure:* Our procurement agreements include detailed descriptions, quantities, and prices of products.
 - *Payment Terms:* Payments are due after successful product inspection within a specified period.
- Delivery and Acceptance
 - *Delivery Terms:* Our contracts with suppliers typically adopt specified terms that require suppliers to cover transport and insurance until we take possession.
 - *Acceptance of Goods:* Goods are inspected upon delivery for compliance with contract specifications. Supplier must replace or repair defective products at their expense within a specified warranty period.
- Warranty and Maintenance
 - *Warranty Period:* Suppliers provide warranties aligned with industry standards, covering defects and failures, with maintenance support during warranty duration.
 - *Maintenance Obligations:* Supplier is responsible for addressing quality issues and providing on-site support within agreed response times.
- Compliance and Ethics
 - Suppliers must comply with applicable legal standards and adhere to our business ethics requirements, including prohibiting bribes or undue incentives.
- Termination and Remedies
 - Contracts can be terminated for reasons including breach of contract or delivery delays beyond agreed timeframes, with liquidated damages applied for delays.

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PRODUCTION AND MANUFACTURING

Production and Manufacturing Processes

We have built a highly structured production and manufacturing system that combines strict quality control with advanced industry practices to produce innovative AMRs for supply chain and logistics applications, as illustrated in the following flowchart.



Below are detailed descriptions of the key aspects of our production and manufacturing processes:

- *Strategic Core Component Development:* To optimize costs and enhance efficiency, we outsource component manufacturing while maintaining control over essential parts. For example, core components are developed in-house and manufactured externally based on our designs, to ensure that critical parts meet our standards without incurring high in-house production costs.
- *Raw Material Intake and Inspection:* The production process begins with the arrival and inspection of raw materials. Upon delivery, each batch of materials undergoes a quality check to meet predefined standards before being accepted and stored in the inventory.
- *Production Scheduling and Demand-Based Production:* We operate on a “make-to-order” production model. Production plans are developed based on sales forecasts, market demand feedback, and current inventory levels, allowing flexibility to adjust production volume based on real-time market needs. This approach enables us to reduce unnecessary stockpiling while maintaining responsiveness to customer demands. The production schedule is regularly updated based on supply conditions, production speed, and feedback from the market.
- *Assembly and Testing Process.* Our production process involves five primary stages:
 - *Electronic Assembly:* This initial stage focuses on combining electronic components like circuit boards, structural parts, wiring, and connectors to create functioning units with independent electronic capabilities. We use industry-standard electronic assembly techniques, with some steps outsourced to leverage reliable third-party processing systems such as the production of circuit boards, the manufacturing and testing of robot wiring harnesses, and the assembly and testing of motors and reducers.

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- Sub-Assembly: In this step, primary components are assembled based on product complexity and part commonality. Semi-finished products from this stage will be used across various robot models in the main assembly stage, enhancing efficiency and adaptability across product lines.
- Final Assembly: This stage involves assembling all sub-assemblies and individual components into fully assembled robots, based on standard operating procedure.
- Calibration and Adjustment: After assembly, each robot undergoes calibration of key components, such as sensors, to ensure consistent functionality and user experience across all units. This step ensures the product meets rigorous accuracy and performance standards, providing a uniform experience for end customers.
- End-to-End Testing: Completed robots are subjected to rigorous testing aligned with our quality control policies and specific customer requirements. Tests include charging/discharging cycles, load-bearing capacity checks, and other performance evaluations. Results from these tests are stored in a centralized database that meets ISO9000 traceability requirements, allowing for data retrieval and compliance checks as needed.
- *Inventory, Packaging, and Delivery:* Upon successful testing, the finished AMRs are stored, packaged, and prepared for transport. Our supply chain team works closely with project managers and customers to coordinate delivery schedules, ensuring products arrive safely and efficiently.
- *Commitment to Quality and Continuous Improvement:* Throughout each phase of production, we focus on quality and prioritize assembly techniques, rigorous testing, and continuous improvement to maintain high standards and customer satisfaction. We have also implemented a strict reporting system for any accidents or equipment malfunctions, ensuring all relevant records are maintained.

Our Production Facilities

We manufacture most of our AMRs in-house at our production facilities in China.

Our main facility in Nanjing handles the production of all our AMR models, utilizing both shared and mixed production lines for efficiency. As of the date of this Document, we have completed the construction of a new facility in Hefei, Anhui Province. Currently in the trial operation phase, Hefei facility has included production lines for our AMRs.

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The following table provides detailed information on our production facilities in Nanjing and Hefei:

Production facility	Production capacity ⁽¹⁾		Production volume of finished products		Utilization rate ⁽²⁾	
	For the year ended December 31,		For the year ended December 31,		For the year ended December 31,	
	2022	2023	2022	2023	2022	2023
	(units)		(units)		(%)	
Nanjing	11,750	12,000	10,063	10,883	85.6	90.7
Hefei	N/A ⁽³⁾	N/A ⁽³⁾	N/A ⁽³⁾	N/A ⁽³⁾	N/A ⁽³⁾	N/A ⁽³⁾

Notes:

- (1) Production capacity is calculated based on the actual operating days of each production line in each year during the Track Record Period, operating at ten hours per day. The variations in production capacity for each year was due to our mixed model and modular manufacturing, which allows us to adjust the capacity catering to the production of different AMR models based on customers’ demands. See “— Production and Manufacturing Innovations” for details.
- (2) Utilization rate is calculated by dividing the production volume of a given year by the production capacity of the same year.
- (3) Not applicable to periods before June 30, 2024, as our Hefei production facility commenced production in the second half of 2024.
- (4) The data is calculated based on figures from the second half of 2024.

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Our production and operational policies are comprehensive and fully compliant with national and international standards. Regular inspections ensure that our facilities remain in optimal condition, with necessary repairs and maintenance carried out promptly. A strict reporting system is in place to record any accidents or equipment malfunctions, ensuring thorough documentation and quick resolution.

Production and Manufacturing Innovations

We have built an innovative, advanced production system that combines flexibility, automation, and strict quality control, setting us apart in the AMR industry by consistently delivering high-performance, efficient solutions for supply chain and logistics.

A key strength in our production process is our mixed-model and modular manufacturing, allowing us to produce different AMR models — such as P800, P1200 and P500 — on a single production line, enhancing flexibility and maximizing output. This flexible production strategy enables significant cost savings across the entire production process.

In addition, our standardized assembly and modular testing processes use automation for critical steps like screwdriving and adhesive application, which minimizes variability and ensures consistent quality. After assembly, each AMR goes through a fully automated, standardized testing procedure, reducing human error and enhancing reliability. Once testing is complete, each AMR autonomously moves to the packaging area for dispatch, demonstrating our advancements in automation and smart production.

We have adopted digital management to streamline operations and eliminate paper-based processes, such as electronic order dispatch and paperless workflows, which have improved efficiency and lowered costs. To ensure transparency and traceability, we have implemented an internal tracking system throughout our production line. This system monitors each stage of production, tracking data on materials, production steps, and personnel involved. This enables us to trace the production history of each AMR, strengthening quality control and allowing for rapid identification of any issues.

Through these production and manufacturing innovations, we have not only achieved higher efficiency and reduced costs but also solidified our role as a forward-thinking leader in the AMR industry, committed to delivering advanced solutions for complex supply chain and logistics challenges.

INVENTORY MANAGEMENT

Our inventories primarily consist of (i) finished goods, such as AMRs and related systems that are fully manufactured, tested, packaged, and ready for sale; (ii) work in progress, which includes items still in production, such as partially assembled robots, unfinished systems, or components undergoing testing; and (iii) materials for our AMR solutions, mainly including robot structure parts, motors, drive wheels, controllers, and power batteries. As of December 31, 2022, 2023 and 2024, the balance of our

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inventories was RMB1,185.3 million, RMB1,190.6 million and RMB1,029.5 million, respectively. The turnover days of our inventories were 297.6 days, 292.3 days and 257.8 days, respectively, in 2022, 2023 and 2024, according to CIC. AMR channel partners generally purchase products based on sales demand, and our inventory turnover for unsold products through channel partners is generally consistent with industry standards.

We implement a range of inventory management strategies as follows to improve our net operating cash outflows and net current liabilities position:

- **Optimized demand forecasting and inventory planning.** We leverage historical sales data and demand forecasts to set minimum safety stock levels, preventing overstocking while ensuring sufficient inventory to meet fluctuating demand. Our business teams, project operation teams, and supply chain management personnel collaborate to forecast future demand, optimizing production schedules and inventory levels to balance stock. Additionally, we adjust inventory strategies based on historical trends in seasonality and market fluctuations, ensuring efficient stock management throughout the year.
- **Real-time monitoring and proactive inventory management.** To ensure accurate and transparent inventory records, we employ state-of-the-art ERP systems that track every item’s storage, movement, and status in real time. These systems are complemented by quarterly physical inventory counts to verify data accuracy and reduce discrepancies. We regularly review inventory turnover rates to identify slow-moving or obsolete stock, taking timely actions such as discounting or liquidation to minimize obsolescence risks.
- **Supplier collaboration and dedicated inventory teams.** Close collaboration with suppliers enables us to optimize procurement schedules and ensure timely material supplies, reducing the risk of excess inventory accumulation. By providing timely forecasts, suppliers can prepare materials in advance, shortening lead times and better aligning with market demand. Furthermore, our dedicated inventory management team monitors and analyzes stock levels daily, tracks turnover, and takes corrective actions as necessary. The team also holds weekly meetings and prepares regular inventory analysis reports — including metrics such as turnover rates and slow-moving items — to support informed decision-making by management.

Channel Stuffing

We believe the risk of channel stuffing is effectively mitigated due to factors inherent in our business model and channel partner relationships. Our product return policy is designed to mitigate any incentive for channel partners to accumulate inventory. Except for cases involving quality issues, such as defective or damaged products within the warranty period, we generally do not accept returns. This ensures that channel partners only receive products in acceptable condition, preventing them from holding on to products they do not want or cannot sell. In

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addition, channel partners place orders with us only after receiving end customers’ orders, and most of our channel partners arrange for direct delivery of products from us to the end customers, rather than receiving products themselves. This practice reduces the opportunity for excess inventory to accumulate with channel partners, as products are delivered directly to where they are needed. For system integrators, we typically deliver products to the integrator rather than directly to the end customer, in line with standard industry practice. Even in such cases, integrators generally only procure products from us based on specific project orders from their customers, which helps control order volumes and limits the risk of inventory accumulation. For other distributors, we arrange for direct delivery of products to the end customers, thereby minimizing inventory buildup at the channel level.

LOGISTICS AND WAREHOUSING

We adopt a comprehensive approach to logistics and warehousing that ensures efficient storage and seamless distribution of our AMRs and related components. Our logistics practices incorporate both self-managed and outsourced services, optimizing operations across multiple geographic markets.

We utilize our own warehouses for storing finished products, semi-finished products, and raw materials. These internal storage facilities are key to maintaining control over inventory and ensuring product quality. Products that have passed quality inspections are either shipped directly from our production facilities to our customers or delivered to designated warehouses for further distribution. We collaborate with third-party logistics providers to handle the transportation and final delivery of our AMRs to customer-specified locations. This hybrid model allows us to maintain flexibility in its logistics operations while ensuring timely and reliable deliveries. Our global logistics infrastructure enables us to provide high-quality service and maintain short delivery times, ensuring customer satisfaction across various regions.

QUALITY CONTROL AND ASSURANCE

We have implemented rigorous quality control systems that oversee all aspects of our production processes. Our quality management strategy operates at every phase of operations, including design, development, sourcing, production, packaging, delivery, and after-sales service. We adhere to international standards such as ISO 9000. During the design phase, we focus on identifying and addressing potential quality issues early on, ensuring that quality is embedded into the product from the very beginning. In the production phase, we maintain strict oversight by continuously monitoring and testing our products to ensure they meet required standards before leaving the factory. This thorough management of each stage guarantees consistently high product quality, which is widely recognized by our customers.

Our products are distributed worldwide and must comply with different safety and quality standards depending on the region. To ensure compliance with these standards, we have customized quality control systems and work with independent testing and certification

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agencies to ensure our products comply with local regulations. If a product fails within the warranty period that typically lasts for approximately 12 months, we will arrange for repair or replacement at no additional cost.

We have not experienced any significant product returns, liability claims, or legal issues related to product safety or quality control during the Track Record Period, nor have we had any product or service recalls up to the Latest Practicable Date.

DATA PRIVACY AND SECURITY

We are headquartered in the PRC and sell our AMR solutions in over 40 countries and regions worldwide. In delivering these solutions, we engage in certain data-related activities to support the functionality, efficiency, and security of our products, ensure transparency with customers and obtain their prior consent before proceeding. Specifically, we may collect the business contact information from customers, channel partners, or suppliers, or process other business information that does not contain personal information. For instance, we may access data relating to the development, production, delivery, and functionality of our AMRs, including warehouse facilities’ conditions, technical specifications, and product-related information for operational and fault analysis purposes. We may collect personal information from contact persons at our customers, channel partners, suppliers, and other business partners. This information typically includes names, email addresses, phone numbers, company names, departments, and job titles, and we collect and use this information to facilitate business communications, fulfill contractual obligations, and manage ongoing business relationships.

We do not collect or access sensitive personal information from customers. During the customer acquisition stages, we collect basic customer contact information through our website, customer service calls, or market events. In the service and after-sales phase, we communicate with customers to understand their service needs and provide support. Similarly, we collect contact information from channel partners and suppliers, which includes basic contact details.

We have established a comprehensive data security and information management system. We have implemented several security measures, including firewalls, intrusion prevention systems, regular penetration tests, vulnerability scans, and disaster recovery plans. In accordance with international information security standards, we also encrypt data and utilize next-generation firewalls (NGFW), endpoint detection and response (EDR), and email security protection systems. We classify our data based on its sensitivity, with stringent access controls according to the zero-trust principle and single sign-on authentication. Furthermore, we have a detailed emergency response plan for handling security incidents. Our commitment to data security is validated through ISO27001 certification, issued by DNV and recognized by UKAS and CNAS, which assures that our practices meet international information security management standards.

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We have established a robust data privacy and security framework to ensure compliance with both local and international standards, protecting the integrity of our systems and the privacy of our customers’ data. We employ rigorous data protection protocols that govern the collection, storage, and transmission of data.

To reinforce system resilience, we have deployed advanced vulnerability management and continuous monitoring systems. We conduct annual security penetration tests to continuously enhance our information security measures. Our data security measures include strict encryption protocols for all robot communications, ensuring secure interactions within our AMR networks. Additionally, classification levels applied to customer data to ensure security at every stage of data handling.

Internally, we have established a dedicated data security and compliance committee responsible for regular audits and continuous improvement of our data practices. This committee reviews compliance with data protection laws and security standards, adapting our protocols to meet evolving industry requirements.

We had not been subject to any litigation, arbitrations or material administrative penalties in relation to data and privacy protection during the Track Record Period and up to the Latest Practicable Date. In addition, as advised by local legal advisers in the major jurisdictions in which we operate, namely Mainland China, Hong Kong, the United States, the United Kingdom, Germany and South Korea, we have not been made aware of any instances where the current or potential laws and regulations in relation to privacy and personal data have materially and adversely affected our business or financial performance. We believe that, as a result of our strict internal control and compliance efforts, our business operations are in compliance with current data security laws and regulations in markets where we operate in all material aspects.

Looking forward, we remain dedicated to strengthening our data security framework, prioritizing innovation and adaptability in our practices to meet the growing expectations of data protection in global markets. We aim to lead the industry by fostering a culture of security and trust, continuously enhancing the safety and reliability of our AMR solutions for supply chain and logistics.

INTELLECTUAL PROPERTY

We believe our patents, know-how, proprietary technologies, trademarks, copyrights, domain names, and similar intellectual property as critical to its success. To protect these rights, we have implemented several key measures, including: (i) developing comprehensive internal policies to ensure effective IP management; (ii) establishing an intellectual property taskforce to guide, supervise, and monitor daily IP-related activities; (iii) regularly registering, filing, and applying for ownership of our intellectual properties; (iv) actively tracking registration and authorization statuses and promptly addressing potential conflicts; and (v) clearly outlining IP ownership and protection rights in our employment agreements.

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Our comprehensive patent portfolio supports key aspects of warehouse automation, facilitating the ongoing enhancement of our advanced AMR technology and solutions. The patents encompass innovations in AMR solution development, intelligent warehouse management, robot control software, robot design, robotic hardware and the development and design of warehouse facilities. This extensive intellectual property ensures that we continue to lead in the development, optimization, and iteration of AMR innovation.

As of December 31, 2024, we held 1,867 patents (including 1,059 registered patents and 808 pending applications) and other intellectual property, one of the highest in the market, according to CIC. Among these, 284 patents relate to AMR solution development, 57 to intelligent warehouse management, 18 to robot control software, seven to robot design, 69 to robotic hardware, 50 to RMS, seven to the development of warehouse facilities, and two to the design of warehouse facilities.

We are committed to vigorously protecting our technology and proprietary rights, though there is no guarantee of success. During the Track Record Period and as of the Latest Practicable Date, we had not been involved in any material intellectual property infringement claims, nor had we experienced significant infringement of our intellectual property rights by third parties. During the Track Record Period and as of the Latest Practicable Date, we have not been involved in any major intellectual property disputes with third parties. However, there remains the possibility that third parties may initiate litigation or claims against us, alleging infringement of their proprietary rights or seeking declarations of non-infringement regarding our intellectual property. For more details, see “Risk Factors — Risks Relating to Our Business and Industry — We may not be able to adequately protect or enforce our intellectual property rights throughout the world, and our efforts to do so may be costly” and “Risk Factors — Risks Relating to Our Business and Industry — Claims by third parties for alleged infringement of their intellectual property rights and other litigations could adversely affect our business.”

COMPETITION

As a leader in the AMR industry, we operate in a competitive environment driven by rapid technological advancements, an increasing demand for warehouse automation, and a growing global market for efficient supply chain and logistics solutions. Since our inception, we have established ourselves as an early mover in the AMR space, gaining recognition and success not only within China but across non-domestic markets. This global presence underscores our commitment to delivering high-quality, innovative AMR solutions that empower companies worldwide to optimize their logistics operations.

However, as global interest in automation rises, competition has intensified, drawing both long-established international corporations and dynamic domestic players into the field. We currently face competition from companies with strong brand reputations, advanced technologies, and well-rounded product offerings.

The accelerating pace of technological innovation in the global AMR market presents significant opportunities for us, alongside unique challenges. Staying aligned with evolving industry trends and customer expectations is crucial. Our strategy must remain adaptable, as

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any delay in product development or misalignment in business focus with market needs could potentially slow growth or reduce our market share, particularly as competitors continue to expand their technological capabilities.

By proactively focusing on research, development, and customer-centric innovations, we believe we are well-positioned to strengthen its market leadership and continue offering leading AMR solutions that redefine the future of automated logistics.

SEASONALITY

We are subject to seasonality that impacts our financial performance, driven by our customers’ purchasing practices, the extended project implementation times, and the timing of revenue recognition. Many end customers, particularly in e-commerce, retail, and logistics, tend to concentrate their order placements toward the end of the calendar year. As a result, we often experience a substantial increase in order intake in the fourth quarter, while recognizing the actual revenue in the second half of the following year after project completion and customer acceptance. Moreover, collaboration with customers often leads us to achieve timely project acceptance and completion toward year-end, which further contributes to the seasonal revenue pattern.

OUR PEOPLE

As of December 31, 2024, we had a total of 994 employees globally. The following tables show our employees categorized by functions and geographical locations as of December 31, 2024.

Function	Number of Employees	% of Full-time Employees
Sales and marketing	464	46.7
Research and development	408	41.0
General and administrative	68	6.8
Supply chain and manufacturing	54	5.4
Total	994	100.0

Location	Number of Employees	% of Full-time Employees
China	733	73.7
Asia-Pacific	101	10.2
U.S.	99	10.0
Europe	61	6.1
Total	994	100.0

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Our success relies on our ability to attract, motivate, train, and retain skilled personnel. We believe we offer competitive compensation packages and a collaborative, creative work environment, which has allowed us to attract and retain qualified talent and maintain a stable core management team.

We prioritize training to ensure our workforce maintains high quality, knowledge, and skill levels. We offer training programs at all levels, tailored to employees’ functions, positions, and responsibilities, covering both soft and technical skills. Additional training is provided to meet the unique requirements of our non-domestic markets.

In line with PRC laws, we participate in government-mandated employee benefit plans, including social insurance for pensions, medical care, unemployment, work-related injury, maternity, and housing funds. We are required by PRC law to contribute to employee benefit plans at specific rates based on employee salaries, bonuses, and certain allowances, up to limits set by local regulations. During the Track Record Period, we met these requirements in all material respects without incurring any significant administrative fines or penalties.

We believe we have a positive working relationship with our employees. Throughout the Track Record Period, we experienced no strikes, work stoppages, or labor disputes that materially affected our business operations.

The following table sets forth certain of our key operating metrics for the periods indicated.

	For the year ended December 31,		
	2022	2023	2024
Total AMR solution end customers . . .	254	296	324
Repeat end customers	162	214	263
New end customers	92	82	61
Key account end customers	42	58	71
Non-key account end customers	212	238	253
Repurchase rate	58.3%	70.9%	74.6%

(In millions of RMB)

Total AMR solution revenue	1,247.44	2,124.05	2,402.31
Repeat end customers revenue	726.83	1,506.66	1,792.43
Average revenue per AMR solution end customer	4.91	7.18	7.41
Average revenue per repeat end customer	4.49	7.04	6.82

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The decline in the number of new end customers during the Track Record Period was primarily due to an increasing proportion of repeat customers as our business matured and customer stickiness improved.

As used in the tables above,

- “Repeat end customers” for a given period refers to end customers who meet both of the following criteria: (i) we recognized revenue during the given period from a purchase made by such customers (regardless of whether the purchase was made in that period or a prior period); and (ii) they had made at least one prior purchase before the purchase referenced in (i);
- “New end customers” for a given period refer to end customers who generated revenue during that period and had not previously purchased our solutions in any prior period;
- “Key account end customers” for a given period refer to those end customers whose cumulative orders exceeded RMB20 million during that period; accordingly, “non-key account end customers” refer to end customers whose cumulative orders did exceed RMB20 million during that period;
- The number of customer counts (e.g. repeat end customers, new end customers, key account end customers, and non-key account end customers); repurchase rate; and metrics calculated on a per-customer basis (i.e. average revenue per AMR solution customer), are based on the number of “end customers.” Please refer to the section entitled “Glossary of Technical Terms” for definition of “end customers.”

BUSINESS SUSTAINABILITY

Our commitment to business sustainability underpins every aspect of our operations, focusing on long-term value creation and resilience. In a rapidly evolving and competitive market, we prioritize strategic investments, operational efficiency, and innovation to establish and strengthen our position as a market leader. This section highlights our approach to leveraging growth opportunities, bolstering market leadership, and implementing key strategies that pave the way for sustained profitability.

Strategic Investments to Drive Growth and Build a Strong Foundation

We are in an early and transformative growth phase, investing strategically to establish a solid foundation for future success. Despite temporary losses, our remarkable growth in revenue, market share, and operational metrics highlights the strength of our business model and positions us as a leader in the dynamic AMR market.

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We are in a rapid growth phase, achieving strong revenue and order intake driven by high customer demand and expanding opportunities. Our revenue grew by 47.6% from RMB1,452.2 million in 2022 to RMB2,142.9 million in 2023, and further by 12.4% to RMB2,409.0 million in 2024, representing a CAGR of 28.7%. Our gross profit grew from RMB256.5 million in 2022 to RMB837.2 million in 2024, representing a CAGR of 80.6%. Revenue from the sales of AMRs, our core business, surged by 70.3% from RMB1,247.4 million in 2022 to RMB2,124.0 million in 2023 and by 13.1% to RMB2,402.3 million in 2024, achieving a CAGR of 38.8%. Similarly, our order intake, a key measure used to assess our performance, has shown consistent growth, increasing by 35.0% from RMB1,995.6 million in 2022 to RMB2,694.1 million in 2023, and further by 16.6% to RMB3,140.3 million in 2024.

Investments Necessary to Strengthen Market Leadership

Our historical losses are, to a large extent, attributable to the unique characteristics and early-stage development of the global AMR solutions market, coupled with our strategic focus on business expansion and innovation. During the nascent stage of the AMR industry, substantial R&D investments are required to advance technology, intensive efforts are needed to educate potential customers on the benefits of AMR adoption, and the highly competitive landscape demands significant upfront expenditures in sales, marketing, and global expansion. As a result, incurring losses is a natural and expected part of scaling a business in this sector. These factors provide a clear context for why we — and many of our peers — have not yet achieved profitability, even as we continue to expand our business and improve market penetration. This reflects the typical trajectory of companies in emerging, high-growth industries, where early investments lay the groundwork for long-term success.

The global AMR solutions market is highly competitive. This competitive environment places pressure on AMR providers to innovate, invest in marketing, and maintain competitive pricing, delaying the break-even point. Like many emerging tech industries, our early development phase was focused on market building — acquiring customers and building long-term value rather than achieving immediate profitability. For a more detailed discussion of the markets in which we operate and the competition we face, see “Industry Overview.”

We view these short-term losses as essential, strategic investments that will yield substantial long-term rewards, while building a robust foundation for future profitability.

More specifically,

- **Selling and marketing expenses:** As a relatively new warehouse automation solution, AMR providers must invest heavily in sales and marketing to educate the market and acquire customers. These resources are allocated not only for customer acquisition but also to promote awareness and acceptance of AMR technologies among potential customers and system integrators. In industries where robotics has not yet been widely adopted, significant customer education is required. These upfront investments in market education and development often exceed early-stage revenues, contributing to short-term losses and delaying profitability. We have also

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invested heavily in educating potential customers, including funding a dedicated salesforce and pilot projects to gain traction. These efforts, while critical for long-term success, have contributed to short-term losses. We incurred sales and marketing expenses of RMB455.7 million, RMB509.2 million and RMB445.6 million, respectively, in 2022, 2023 and 2024. These expenses primarily comprised employee benefits for sales personnel and costs related to advertising and promotional activities. These expenses were directed toward growing our customer base, enhancing brand visibility, and driving adoption of our AMR solutions in competitive global markets.

- **Research and development expenses:** According to CIC, AMR solutions are highly R&D-intensive, requiring substantial upfront investments in hardware and software development to create competitive products and services. These include innovations in areas such as computer vision, sensor fusion, path planning, mechanical design, and battery technology. These investments are necessary to optimize and integrate technologies that meet market demands, requiring significant financial and time commitments. In the AMR industry, the product development cycle is long — typically spanning years from prototyping to production, particularly for companies in their startup and early development stages. Substantial upfront investments in R&D and product enhancement are required. While revenues may grow, much of it is reinvested into further product development, such as creating robots for more complex environments. Continuous product updates and iterations to meet evolving customer needs also extend the R&D cycle. Since our inception, we have achieved several key breakthroughs in platform development that have significantly improved the efficiency, scalability and adaptability of our AMR solutions. A core example is Robot Matrix, our proprietary general-purpose robotics technology platform, which has been under continuous development since its initial launch in 2019. We have made substantial long-term investments in Robot Matrix to support the design and deployment of high-performance, high-reliability AMRs across a wide range of use cases. These investments are beginning to yield strong returns. Robot Matrix has enabled us to accelerate the rollout of diverse AMR models that incorporate the latest technological advancements and meet rigorous safety and operational standards. Robot Matrix has also allowed us to efficiently develop AMR solutions tailored to the needs of different industries and complex warehouse environments. According to CIC, we are among the leading global AMR solution providers to implement laser-vision fusion SLAM technology, integrating LiDAR and RGBD camera sensors, enabled in part by the positioning and environmental awareness capabilities built into Robot Matrix. For more information about Robot Matrix, see “— Our AMR Technology — Key Components — Robot Matrix.” Additionally, early-stage AMR companies often incur substantial upfront costs to scale manufacturing and optimize supply chains. This prolonged development process means revenues from AMR solutions often lag behind significant initial investments, resulting in early-stage losses. We incurred research and development expenses of RMB436.8 million, RMB379.9 million and RMB282.0 million, respectively, in 2022, 2023 and 2024, mainly for employee salaries and investments

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in R&D materials. These investments were critical to maintaining our technological edge and leadership in the global AMR market. Our focus on continuous innovation ensures that we meet evolving customer needs and differentiate ourselves from competitors.

- **Administrative expenses:** Our administrative expenses totaled RMB220.8 million, RMB263.6 million and RMB220.3 million, respectively, in 2022, 2023 and 2024, primarily attributed to employee benefits for administrative staff, depreciation of right-of-use assets and property, plant and equipment, and amortization of intangible assets. These costs reflect necessary investments in personnel, infrastructure, and systems to support our rapid expansion and operational scalability.

Our Economies of Scale and Key Strategies for Achieving Profitability

Despite temporary losses, following years of substantial upfront investments in R&D, market education, and sales and marketing during our early development stage, we believe we have reached an inflection point, achieving significant economies of scale that position us to break even in the near term. Our progress toward economies of scale is evident in the improvements in our gross profit margins and the increasing efficiency of our operational expenses. More specifically:

- **Revenue growth and gross profit margin expansion:** During the Track Record Period, we achieved substantial revenue growth and significant improvements in our overall gross profit margin, which increased from 17.7% in 2022 to 30.8% in 2023, and further to 34.8% in 2024. This improvement reflects the benefits of economies of scale as we expanded our business operations and optimized our production and product offerings.
- **Research and development expenses:** Our R&D expenses have steadily declined, both in absolute terms (since 2022) and as a percentage of total revenue over the Track Record Period. This reduction reflects cost efficiencies achieved through the use of a well-established suite of AMR technologies, including Robot Matrix, Geek+ Software Suite, and Hyper+ Core Algorithms. These technologies act as foundational platforms that can be reused and adapted across multiple AMR products and solutions, reducing duplication of R&D efforts and spreading development costs over a growing number of products. This approach has driven down the per-unit R&D cost as production volume increases. Additionally, our strategic focus on warehousing fulfillment solutions, rather than the full spectrum of AMR products, and the growing standardization and modularization of our solutions, has significantly enhanced R&D efficiency.

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- **Sales and marketing expenses:** Our ability to scale is further demonstrated by the significant decline in sales and marketing expenses as a percentage of revenue, which decreased from 31.4% in 2022 to 18.5% in 2024. This reflects improved efficiency in customer acquisition, stronger customer retention, and the success of repeat purchases, upselling, and cross-selling, which are only feasible for a business that has reached meaningful scale.
- **Administrative expenses:** Similarly, administrative expenses as a percentage of revenue decreased from 15.2% in 2022 to 9.1% in 2024, demonstrating our operational efficiency as we continue to grow in scale.

To achieve profitability and drive long-term sustainable growth, we have implemented and will continue to implement the following strategies in the near future, focusing on solidifying our economies of scale and enhancing operational efficiency:

- *Expanding in a Growing Market.* We are dedicated to delivering AMR solutions with advanced flexibility, enabling us to continuously grow our market share and business scale within the rapidly expanding AMR industry. The global AMR solution market is at an inflection point, offering unprecedented opportunities for growth. According to CIC, the global AMR solution market is projected to reach RMB162.1 billion by 2029, with a CAGR of 33.1% from 2024 to 2029. The penetration rate of AMR solutions within warehouse automation solutions increased from 4.4% in 2020 to 8.2% in 2024 and is expected to rise to 20.2% by 2029, establishing AMRs as a pivotal force in warehouse automation. As the global market leader, our advanced and flexible AMR solutions uniquely position us to capitalize on this growth and achieve profitability.
- *Expanding Existing Customer Relationships and Acquiring New End Customers.* Our growth strategy focuses on both strengthening relationships and driving repeat sales with existing customers, as well as acquiring new end customers, especially through distributors. We have built strong partnerships with major customers, and many of them choose to purchase from us again following successful project deliveries. These repeat purchases are not driven by short product life cycles (our AMR solutions typically have a lifecycle of approximately five years), but rather by customers’ business needs and their recognition of our solutions’ competitiveness. Repeat orders are often the result of customers deploying AMRs in newly built warehouses after positive initial experiences, or expanding and upgrading existing facilities. In some cases, customers replace traditional systems or AMRs from other vendors with our solutions.

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In 2022, 2023 and 2024, our repurchase rates increased from 58.3% to 70.9% and 74.6%, respectively. Over the same periods, the number of repeat end customers grew from 162 to 214 and then to 263. In addition, our average revenue per AMR solution end customer increased from RMB4.91 million in 2022 to RMB7.18 million in 2023 and RMB7.41 million in 2024. These increases not only reflect growing customer trust in our solutions and their willingness to expand their purchases over time, but also demonstrate the success of our upselling and cross-selling strategies.

At the same time, expanding our reach to new end customers remains equally important to our long-term growth. We actively invest in acquiring new strategic customers, including through our global distributor network. Many of these new end customers begin with a single project and gradually scale up as our solutions demonstrate their value. Distributors play a key role in this process by helping us access new regions and customer segments, and by recommending our solutions to new end customers based on proven functionality, performance and reliability.

- *Expanding Coverage and Penetration.* Growth in untapped markets is a priority as we aim to broaden our reach and diversify our customer base. We see significant growth potential in our coverage and penetration. We have and will continue to focus on industry sectors where the demand for automation and AMRs is projected to grow rapidly, particularly in areas where operational efficiency and scalability are critical, such as logistics, e-commerce, retail, FMCG, new energy and manufacturing. In particular, we are targeting both geographic and sectoral white space with high automation potential but relatively low current penetration. Geographically, we are extending our presence into underpenetrated regions, including Latin America (such as Brazil, Argentina and Chile), Central and North America (such as Mexico, Puerto Rico, Costa Rica and Dominican Republic), South Africa, and developing economies in Europe (such as Georgia, Azerbaijan, Slovenia, Bosnia and Herzegovina). The funding for such expansion plan is expected to be supported by a combination of our operating cash flow, the [REDACTED] from the [REDACTED], and our existing cash reserves. Sector-wise, we are expanding into emerging verticals such as cross-border e-commerce fulfillment. Additionally, leveraging our strong brand reputation and extensive customer base, we aim to broaden our business coverage to serve enterprises in regional markets and among small-to-medium sizes. We have strategically prioritized the development of our channel partner network and intend to continue this focus in the foreseeable future. By leveraging trusted partners with strong local expertise and established market presence, particularly those specializing in warehouse automation and third-party logistics, we will be able to penetrate new markets more effectively, build stronger local connections, and scale our business with greater efficiency. Coupled with targeted market analysis, these efforts will enable us to identify and expand into key industry verticals and regions, driving sustained business growth with increased market share.

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- *Strengthening Global Market Presence.* We are committed to expanding our footprint in the global warehouse automation solution market. Our business has long been focused on non-domestic markets, which offer higher profit margins and currently contribute the vast majority of our total revenue. To enhance our presence in the global warehouse automation solution market, we will strategically grow our sales teams and regional partnerships. We plan to leverage our proven success experience and expertise to increase international sales while pursuing opportunities with global customers focused on facility upgrades and warehouse expansions.
- *Enhancing AMR Solution Offerings.* By actively incorporating customer feedback into the development process, we improve the functionality and customization of our solutions to ensure that they meet diverse application scenarios. This approach not only improves customer satisfaction and loyalty but also drives demand for our solutions and long-term growth. Additionally, we are exploring further monetization opportunities in AMR software, enabling us to offer integrated hardware-software solutions that provide higher margins and recurring revenue potential. See also “Business — Our Growth Strategies — Broaden Solution Matrix to Pursue Untapped Market Potentials.” For example, we are actively developing a recurring revenue model through our Intelligent Operations Platform (IOP), offered as a cloud-based SaaS solution. IOP enables customers to monitor key warehouse performance indicators, such as robot utilization, order cycle times, and operational bottlenecks, in real time.

Consistent with our competitive strategies, we are committed to fortifying our market position by delivering technologically advanced and intelligent AMR solutions. Through collaborative R&D and marketing initiatives with customers and business partners, we aim to deepen our market presence and empower our stakeholders. These partnerships will create new growth opportunities while ensuring solutions are tailored to evolving industry needs. While offering standardized modules to maintain consistency and scalability, we intend to provide a variety of technical tools and core capabilities, including our G-Plan and Geek+ Software Suite such as RMS, WES and IOP, that allow customers to customize AMR solutions to their specific operational requirements. For more information about G-Plan and Geek+ Software Suite, see “— Our AMR Technology — Key Components — Geek+ Software Suite.” For example, in April 2024, we signed a contract with a leading multinational consumer goods company to deploy an AMR solution at its Hefei facility. We leveraged our integrated technical tools and core capabilities, including our G-Plan, Geek+ Software Suite (featuring RMS, WES, and IOP), and our flagship Skycube and RoboShuttle products to deliver a comprehensive Pallet-to-Person Picking and Tote-to-Person Picking solution. By integrating these technologies, we implemented a combined total of 113 AMRs across our four robot models, RS8, P800R, P40A, and X1200, to meet the customer’s requirements for high-density storage and high-throughput operations. Based on this successful deployment, we replicated the solution at three additional facilities of the customer within the same year, having delivered a total 304 AMRs

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across these projects. The development and delivery of localized AMR solutions across diverse markets will enable customers to better adapt the technology to unique regional demands, ensuring operational efficiency and market relevance. To align with the industry’s shift toward integrated AMR solutions, we also plan to capitalize on our robust software capabilities by exploring monetization opportunities for AMR software.

We aim to maintain a balance between volume and profitability, prioritizing high-margin, high-value solutions rather than simply increasing unit sales. Our strategy does not rely on lower pricing or engaging in price wars. Instead, we pursue a differentiation strategy, emphasizing the value and quality of our solutions over sheer volume. According to CIC, our AMR solutions are typically high-tech, customized, and optimized for specific business needs, enabling us to command premium prices compared to mass-market, low-cost alternatives. While we expect steady growth in product volume as global demand for AMR solutions rises, our strategy is not centered on competing for market share through volume alone. Instead, we focus on delivering advanced, higher-margin solutions, which allows us to achieve higher price points and drive profitability. For example, beginning in 2023, we partnered with a leading global technology group based in Germany to deliver the Poppick solution to an end customer, a prominent wholesale distributor of apparel and accessories. This integrated solution seamlessly combines advanced automation with hardware and software, enhancing efficiency and performance. Compared to standard AMR solutions, the Poppick solution offers greater flexibility and supports more complex and variable workflows, which is particularly valuable in fast-moving industries. It also incorporates differentiated design features that address customer-specific operational challenges, allowing us to deliver a more tailored and competitive offering. We achieved gross margins of up to 60% on these projects. This demonstrates that focusing on high-value solutions for strategically targeted customers and countries leads to higher profit margins. We will also focus on solutions that command premium pricing and higher margins compared to basic AMR products with pricing advantage driven by both the technical sophistication of the solutions and their measurable impact on customer operations. For example, we are developing tote-to-person systems featuring a narrow-aisle design that maximizes vertical and horizontal storage capacity, making them particularly well-suited for dense urban warehouses where space is at a premium. In addition, we are developing a fully integrated software-hardware-algorithm stack that combines our core software platforms (such as RMS and WES), proprietary hardware, and Hyper+ algorithm engine into a unified system. This end-to-end integration will enable optimized performance across the entire fulfillment process and differentiates us from competitors offering modular or standalone components. We are dedicated to creating a favorable price-volume mix, where revenue growth is fueled by value-added services and premium-priced products, rather than simply increasing the number of units sold.

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- *Iteration and Operational Excellence.* We are dedicated to achieving profitability by integrating product innovation, operational efficiency, and cost management. Through continuous product iteration and scaling, we enhance quality and realize economies of scale. As we scale our operations, we will continue to focus on improving production efficiency by leveraging automation and advanced manufacturing technologies. These efforts will streamline the assembly process, reduce labor costs, and increase output. Continuous product iteration and innovation will also drive improvements in production processes, ensuring that we maintain competitive quality and cost advantages. We believe the expansion of our production capacity, such as through the new Hefei facility, will further drive our operational excellence and economies of scale. Strengthening inventory management minimizes provisions and impairment losses while optimizing stock levels, ensuring better resource allocation. Additionally, efforts to improve production efficiency, reduce losses, and boost product yield rates enable us to maximize output, minimize waste, and deliver greater value.
- *Optimizing Supplier Management.* We intend to continue to focus on both longer-term supplier contracts and greater diversification. To ensure stable access to critical components, we may negotiate long-term agreements with key suppliers, offering price stability and supply security while fostering collaboration on customized components. As we expand globally, supplier diversification will become essential. By broadening our supplier base and forming local partnerships in key markets, we expect to reduce reliance on single suppliers, minimize supply chain risks, and support our global growth objectives.
- *Strengthening Operating Leverage.* We are translating investments into scalable efficiencies, enabling us to improve margins and operational performance. During the Track Record Period, our resource allocation to R&D and innovation has led to significant success. We plan to continue to leverage our existing technology platforms, modular designs and targeted technology investment to maintain our leadership in the AMR market. We have already reduced the prototype development cycle from nine months to six months by adopting a modular design approach, which includes both hardware and software configurability. We also plan to establish a preferred hardware component library, enabling a substantial portion of future robot hardware parts to be sourced from this library, further streamlining development. In addition, we will continue to invest in our large-scale dispatching system RMS, including ongoing algorithm upgrades, to support scalable and adaptable AMR solutions and large-scale dispatching capabilities. By using AI-driven simulation testing, we have also significantly reduced development time for new features. Additionally, despite the increase in absolute amount, our sales and marketing expenses as a percentage of revenue declined significantly from 31.4% in 2022 to 18.5% in 2024, reflecting our growing efficiency in customer acquisition and retention. Our sales strategies include continuing to strengthen our sales and delivery service channels and collaborating with a broader range of system integrators to provide standardized products. On the marketing side, for large

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customers and key existing or target customers, we by developing tailored marketing strategies and content for specific high-value accounts, rather than broad-based campaigns, enabling deeper customer engagement and stronger alignment with each customer’s needs. drive repeat purchases and enhance word-of-mouth referrals. Additionally, we are working with global strategic partners to host online and offline seminars, salons, and joint public relations efforts to expand our brand and solution coverage, further strengthen brand awareness. By encouraging repeat purchases and upselling and cross-selling, we aim to continue to increase efficiency and cost-effectiveness in sales and marketing activities. Similarly, administrative expenses as a percentage of revenue fell from 15.2% in 2022 to 9.1% in 2024. We will further optimize operational costs and expenses through refined budgeting, technological upgrades, and process improvements to ensure a lean and scalable cost structure. Going forward, we expect our continued expansion to further drive economies of scale, reducing production costs over time, as increased production volumes will lower variable costs per unit, as bulk purchasing of raw materials (e.g., chips, sensors, and motors) will enable better supplier pricing through economies of scale. In the meantime, distribute fixed costs (e.g., equipment depreciation and R&D investments) over a larger production base, reducing the fixed cost burden per unit. By focusing on upselling and cross-selling to existing customers, we will also be increasing repeat sales, strengthening customer loyalty, and reducing customer acquisition costs — a significant component of sales and marketing expenses. As we expand into untapped geographic markets, initial investments in channel partnerships and market entry are increasing expenses. However, these costs are stabilizing as markets mature, with higher sales volumes reducing per-unit fixed costs and bulk production lowering variable costs through improved supplier terms and operational efficiencies. Globally, our increased production capacity and regional partnerships are supporting higher demand while enabling regional supply chain optimizations, further driving cost efficiency. Although short-term R&D costs may rise as we develop advanced AMR technologies and monetize software, the adoption of standardized modular designs is streamlining production processes, ensuring scalability and long-term cost reductions.

We believe that the benefits of these strategies can be demonstrated by our market share. Between 2019 and 2024, we held the top market share position among global warehouse fulfillment AMR providers for six consecutive years. In 2024, we have a market share of 6.2% in the global AMR solution market, according to CIC.

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ENVIRONMENTAL, SOCIAL AND GOVERNANCE

We are committed to being a responsible corporate citizen by abiding by applicable laws, regulations, and market practice principles, and by promoting societal well-being. We place great emphasis to environmental, social and governance (“ESG”) matters, including environmental sustainability, social responsibility and governance as a pioneer and leading enterprise in the AMR solution industry. We offer an ESG-conscious alternative to traditional manual and automated systems by integrating energy-efficient AMRs into supply chains. Traditional logistics operations often rely on energy-intensive machinery and expansive warehouses, which demand significant resource use. Our AMRs optimize spatial utilization and run on efficient power cycles, significantly reducing the carbon footprint and energy consumption across warehouses. Unlike legacy automation that often has limited flexibility and high maintenance costs, our AMRs adapt to dynamic requirements, enabling scalability without expanding physical infrastructure, thus minimizing environmental impacts.

Socially, we are dedicated to fostering safer, more ergonomic workplaces by automating tasks that traditionally expose workers to physical strain and injury risks. Unlike repetitive manual labor or rigid machinery, AMRs improve efficiency without compromising worker well-being, allowing staff to engage in roles that require problem-solving and oversight rather than heavy lifting and long periods of repetitive tasks. Furthermore, AMRs support job enrichment, as employees upskill to manage and work alongside intelligent technology, leading to a more motivated and satisfied workforce.

From a governance perspective, we offer advanced tracking and data collection, enhancing transparency and accountability in logistics operations. Real-time data from AMRs facilitates proactive compliance with environmental standards, providing visibility into operational efficiency and carbon emissions. This allows businesses to meet stringent ESG reporting standards, promote ethical supply chain practices, and demonstrate a commitment to sustainability. Overall, our AMRs represent a shift towards more responsible, efficient, and adaptable logistics solutions that align with businesses’ long-term ESG objectives.

Our ESG Governance Structure

Our Board assumes full responsibility for our ESG strategy and reporting, taking a comprehensive role in overseeing ESG matters, monitoring progress towards ESG objectives, and managing critical ESG-related issues. To bolster our sustainability efforts and governance structure while enhancing our overall ESG performance, the Board and management team are jointly tasked with formulating a clear vision, measurable objectives, and effective strategies for ESG and sustainability. This includes establishing robust management systems, engaging with key stakeholders, and identifying significant ESG issues relevant to our operations.

Furthermore, the Board and management actively evaluate emerging ESG trends, assess associated risks and opportunities, and ensure that ESG initiatives are not only effectively implemented but also aligned with prevailing regulations and international standards. By maintaining ongoing dialogue with stakeholders, they aim to foster collaboration on

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sustainability initiatives and make informed decisions to advance the Group’s sustainable development goals. This proactive approach ensures that our ESG practices reflect the evolving expectations of both the regulatory environment and the broader community, cementing our commitment to corporate responsibility. Exactly, our Board regularly reviews ESG management policies and strategies, receives quarterly ESG reports, and provides ongoing oversight of ESG matters and key ESG performance targets. ESG assessment incorporates fundamental criteria such as workplace safety, green operations, and regulatory compliance to ensure the structured achievement of ESG goals. Following the [REDACTED], we will publish an annual ESG report and enhance our ESG practices with reference to mainstream rating frameworks, including the S&P Corporate Sustainability Assessment.

Additionally, we are in the process of engaging a professional organization to optimize our ESG framework, aligning with the requirements of Chapter 4.3 of the Guide and Appendix 27 of the Listing Rules. This engagement is intended to help the Board further define its governance structure, working rules, and procedures in relation to ESG matters, ensuring a systematic approach to identifying, assessing, and managing ESG-related risks and opportunities.

The Board plans to take ultimate responsibility for overseeing the Group’s ESG strategy, policies, and risk management. As part of the planned enhancements to our ESG governance, we intend to establish a dedicated ESG working group that will assist the Board in monitoring and evaluating ESG performance. The working group is expected to provide regular reports to the Board, ensuring that ESG developments, regulatory changes, and performance metrics are reviewed and integrated into our corporate strategy.

To strengthen the Board’s ability to oversee ESG matters, we plan to implement regular ESG training sessions for Board members, enhancing their understanding of industry best practices, regulatory developments, and emerging ESG risks. Additionally, we aim to incorporate ESG considerations into our corporate decision-making processes, ensuring that sustainability remains a key focus in our long-term strategy.

Our past manufacturing processes have not involved pollutant emissions or significant natural resource consumption, nor have we been subject to regulatory inspections by the relevant authorities. Looking ahead, we plan to refine our ESG policies and establish specific goals to enhance sustainability across our operations. As part of these efforts, we aim to encourage sustainable practices through our products, support clients in reducing their environmental footprint, and improve the overall efficiency of our solutions.

As we develop and implement our ESG initiatives, we anticipate that aligning with best practices will require ongoing investments in technology, supply chain management, and internal processes. However, we believe that strengthening our ESG governance will enhance our operational resilience, improve regulatory preparedness, and contribute to long-term business value. Through these initiatives, we plan to integrate ESG principles into our corporate strategy, ensuring that we remain aligned with global sustainability trends and evolving regulatory expectations.

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Environmental Protection

Environmental Protection and Energy Management

We strictly comply with applicable environment-related laws and regulations in China including but not limited to the PRC Environmental Protection Law, the PRC Air Pollution Prevention and Control Law and the PRC Energy Conservation Law. In addition, we have put in place internal policies which set out the details of environmental impact evaluation and control, target, and program implementation for fire, noise emission, electric power consumption, hazardous waste transfer, and exhaust gas emission.

We are deeply committed to developing and maintaining an efficient energy management system that not only improves our energy utilization but also drives continuous advancements in energy conservation. Our efforts are aimed at maximizing both energy efficiency and environmental sustainability. By focusing on sustainable manufacturing practices, we optimize our own operations and empower end customers to achieve significant energy savings.

Our AMRs are at the core of this initiative, offering substantial energy savings for end customers. These robots are designed to function seamlessly 24/7, even in low-light conditions, which significantly reduces the need for warehouse lighting and lowers overall energy consumption. In comparison to traditional manual warehouse operations, our AMRs help reduce energy use, making them a more sustainable and cost-effective choice.

The advanced lithium battery technology powering our AMRs ensures long service life and improved efficiency. This technology minimizes the need for frequent recharging, further decreasing overall energy consumption and enhancing performance. In addition, our AMRs produce zero emissions and operate without pollution, reinforcing our commitment to sustainability.

By replacing traditional, energy-intensive logistics equipment, our AMRs significantly lower the consumption of both electricity and fuel. This transition is helping transform the warehousing industry, moving it from a model that is energy-heavy, polluting, and labor-intensive to one that is low-energy, eco-friendly, and driven by advanced technology. The positive environmental impact of our solutions is evident as they contribute to reducing carbon footprints, thus playing a key role in combating climate change while boosting operational efficiency across various industries.

Additionally, our rapid deployment approach minimizes the need for excessive implementation process, cutting down on setup resources and energy use. This streamlined integration process further reduces the environmental footprint of adopting new systems. By leveraging our advanced energy management capabilities, end customers are equipped with the tools they need to enhance their energy efficiency and reduce their environmental impact.

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We are committed to fulfilling our corporate environmental protection responsibilities and creating a sustainable society in which people and nature live in harmony by following these laws, regulations and internal policies. Our environmental management system has obtained ISO14001 certification.

Looking ahead, we remain dedicated to making a lasting, positive contribution to global climate efforts. We are focused on advancing our AMR solutions and continue to drive innovations that support sustainability in both our operations and those of end customers.

Waste Management

We are deeply aware of the environmental impact of waste generation and are committed to minimizing it through diligent waste management practices. While we do not produce hazardous waste, the general waste we generate primarily includes items such as cardboard boxes and food scraps, all of which are carefully handled by authorized personnel. To ensure proper disposal, we engage service providers with capabilities and expertise. Our waste management approach emphasizes categorization, with recyclable and non-recyclable materials handled differently. Recyclable waste is either taken away or processed for reuse through outsourcing, while non-recyclable waste is responsibly disposed of according to environmental standards. To further reduce our environmental footprint, we promote waste reduction, recycling, and responsible disposal throughout our operations.

Additionally, we foster environmentally friendly practices in the workplace by encouraging the separation of recyclable materials, which is supported by educational campaigns, guidelines, and the use of banners, posters, and notices prominently displayed in office spaces. To reduce paper consumption, we advocate for the reuse of office paper, implement digital office solutions, and promote paperless processes. Regular monitoring and evaluation of waste generation and resource usage enable us to identify areas for improvement and implement targeted measures to further reduce waste. Through these efforts, we aim to integrate sustainable practices into every aspect of our operations.

Resources Consumption Management

We are always mindful of the need to save energy effectively. Electricity is a major source of energy consumption in our operations, and reducing electricity consumption is a key focus of energy management. We manage our resource usage by implementing internal operational control procedures and are committed to energy efficiency and conservation in our daily operations. We actively introduce power saving devices and strive to promote energy conservation in our daily operations to reduce domestic electricity consumption and turn off unused electrical devices. We provide regular training to our staff on energy saving. We regularly check electricity usage as a basis for resource saving.

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Water is a precious resource on earth and we are aware of the need to cherish water resources, therefore, we will try to reduce our water consumption and improve our water efficiency to avoid wasting potable water during our operation. We always keep in mind the effective practice of water management and water conservation. We will educate our staff on water conservation. To ensure that our water supply facilities are in the best working condition, we will strengthen the repair of our water supply facilities to reduce leakage. The relevant departments of our group will collect statistics on water usage calculations, analyze and regulate water conservation.

Product Production Sustainability

We are committed to achieving sustainable management throughout our product production process, strictly following the principles of sustainable development at every stage from product design, batteries, manufacturing, and transportation.

- *Product Design.* Our AMR solutions are developed with sustainability in mind, incorporating environmentally friendly materials and processes that minimize ecological impact. We use reusable components in our solutions, ensuring a long product lifespan and reducing the demand for new resources. By prioritizing durability and modularity, we extend the usability of our products and significantly reduce waste over time.
- *Manufacturing Processes.* We implement rigorous material tracking and adhere to ISO Environmental Management Systems standards throughout our production stages to ensure transparency and efficiency. By utilizing recycled totes and adopting green manufacturing practices, we reduce material waste and emissions. Clean production technologies and careful resource management enable us to produce high-quality products with minimal environmental impact.
- *Transportation.* Our approach to packaging and transportation prioritizes sustainability and efficiency. We source our production materials locally, reducing transportation distances and minimizing associated emissions. We use fully recyclable packaging materials and optimize packaging designs to reduce bulk, lowering transportation emissions. Through efficient route planning and careful selection of sustainable shipping partners, we reduce the carbon footprint of our logistics operations, making our products not only efficient but also environmentally responsible.

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Social Responsibility

Diversity and Inclusion

We are fully aware of the value of a diverse and skilled work team. We are therefore committed to building and maintaining an inclusive workplace culture so that all employees can thrive. We are also dedicated to providing equal opportunities in all aspects of employment, maintaining a workplace that is free from discrimination, physical or verbal harassment against any employee on the basis of external factors including race, religion, color, gender, physical or mental disability, age, place of origin, marital status, and sexual orientation. In addition, we strictly prohibit any form of sexual harassment or abuse in the workplace. Our teams are multicultural and multinational, representing over 20 spoken languages, which fosters a rich, global perspective. This includes women in C-Suite and senior management roles, reflecting our commitment to gender diversity at all levels of leadership. Notably, two of our female employees were honored in the *2022 Supply & Demand Chain Executive Women in Supply Chain Award*, further emphasizing our dedication to empowering women in our industry.

We adopt diversified recruitment methods and channels to attract outstanding talents. While providing fair and attractive salary and benefits, we seek to build and retain a large talent pool empowering our rapid development.

Employee Rights and Welfare

In terms of employment, we have entered into employment contracts with our employees in strict compliance with applicable PRC laws and regulations and have established several internal systems to provide for hiring, firing, compensation, leave benefits, promotions, hours of work, transfers, and work allowances to fully protect the rights and interests of our employees. In general, we determine compensation based on each employee’s qualifications, experience, position and seniority.

We are committed to providing competitive remuneration packages to our employees, attracting and retaining talented people, and protecting the rights and interests of our employees. We also provide various employee benefits to increase their sense of belonging.

We provide various training programs for our employees to develop them into talents in various areas. We also provide induction training for new employees, such as employee code of conduct, code of business conduct, office etiquette, compliance basics, laws and regulations to be followed, robotics knowledge, and introduce our corporate culture and values to new employees to enhance their knowledge of our company, industry trends, business and compliance. We also organize a number of staff events and team building activities to enhance cooperation and communication among employees.

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Workplace Safety

At Geek+, safety is a core focus in warehouse operations. We understand the complexities and potential hazards involved in automating warehousing and industrial environments, and as such, we are committed to delivering comprehensive safety solutions that prioritize the well-being of personnel and the smooth functioning of operations. Our safety-first approach begins at the design stage and is embedded in every aspect of our AMR systems. We deploy advanced safety mechanisms that safeguard warehouse workers from potential risks, ensuring a secure environment while maintaining high levels of productivity.

Our safety solutions are modular and adaptable, making them ideal for a variety of operational environments, from simple warehousing setups to complex industrial applications. They are designed to minimize risks by addressing key safety areas, such as electrical, mechanical, and functional safety, as well as information security. Each component of our AMR systems undergoes meticulous testing and validation to ensure that they meet the highest regulatory standards. Our solutions significantly reduce operational risks, contributing to a safer and more efficient work environment.

To guarantee the effectiveness of our safety measures, we have a dedicated team of experts who specialize in safety design, research and development, implementation, and verification. This team works continuously to enhance the safety performance of our solutions, ensuring that our AMRs not only meet but exceed industry standards. For example, we have incorporated multi-layered obstacle detection, collision avoidance systems, and emergency stop mechanisms in all our robots to prevent accidents and ensure worker safety in dynamic warehouse settings.

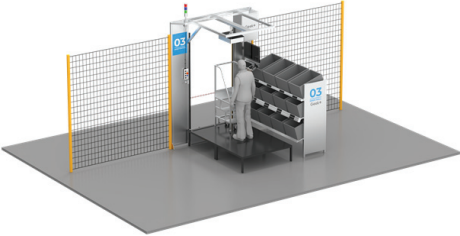
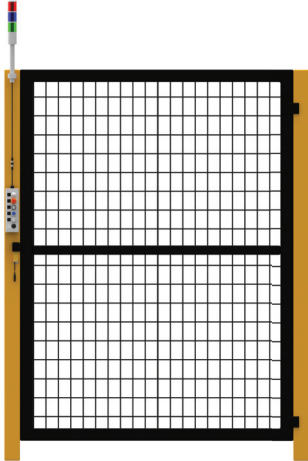
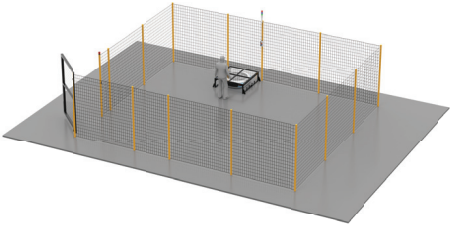
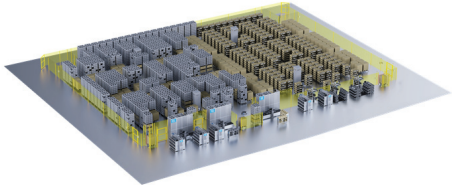
Our commitment to safety is further validated by our adherence to international standards and certifications. We follow a rigorous product development process, and all our systems comply with ISO 9001 quality standards. Our AMRs have achieved certification from leading global organizations, such as CE, FCC, ETL, and UKCA, attesting to the reliability and safety of our products. Furthermore, our system safety solutions have received TÜV Rheinland certification, a prestigious recognition in functional safety, reinforcing our leadership in delivering secure and dependable AMR solutions.

In addition, we place great emphasis on data protection and cybersecurity, critical components in modern warehouse operations. Our information security systems are certified under ISO/IEC 27001:2013, ensuring robust protection of sensitive operational data. We continue to invest in security innovations to safeguard data integrity, operational performance, and the safety of our clients’ warehouse operations.

By continuously refining our safety protocols and systems, we ensure that end customers can operate their warehouses with confidence, knowing that their operations are supported by some of the most advanced and reliable safety solutions in the industry. During the Track Record Period and up to the Latest Practicable Date, we have complied in all material respects with the PRC laws and regulations relating to workplace safety and have not identified any incidents that have had a material adverse effect on our operations.

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The following table demonstrates our main safety solutions.

Solution	Description	Illustration
Picking/Putaway Workstation . . .	During picking/putaway operations, protective measures such as safety light curtains are employed to provide intrusion detection, ensuring the safety of the human-robot interaction.	
Safety Door	During cleaning or anomaly handling operations, an interlocking guard with guard locking controlled by a safety PLC is utilized to ensure the safe entry and exit of personnel in the robotic area.	
Maintenance Area	During maintenance operations, a dedicated robot entrance with a specially designed structure is used to segregate pedestrian and vehicle traffic, creating a safe maintenance space.	
Safety Fence System	A safety fence is used as a guard to construct an unmanned scenario for safety protection.	

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PROPERTIES

As of the Latest Practicable Date, we occupied one parcel of land in the PRC used as production facilities and construction in progress in Hefei, totaling approximately 55,501 square meters in site area. This property is utilized exclusively for non-property activities, as defined under Rule 5.01(2) of the Listing Rules. As of December 31, 2024, we did not own any other buildings or properties.

As of the Latest Practicable Date, we leased a total of 16 properties within the PRC, primarily for office use, warehouses, and factories, with a combined floor area of approximately 33,711 square meters. The lessors of most of our leased properties in the PRC provided ownership certificates and leasing consent documents, confirming that we hold the legal right to utilize these properties as outlined in the respective lease agreements. The lessors for 5 leased properties have not provided valid ownership certificates, covering approximately 21,249 square meters. As a result, we cannot assure you that we will not be subject to any challenges, lawsuits, or other actions taken against us with respect to the properties leased by us for which the relevant lessors do not hold valid title certificates. If such properties are successfully challenged, they may be subject to suspension of use, forcing us to relocate our operations on the affected properties. For the aforementioned leased properties without property ownership certificates, save for one property of less than 10 square meters, the lessors of the rest properties and/or relevant government authorities have provided written confirmation stating that such lessors are the lawful owners and users of the properties, and the properties are not classified as illegal buildings. Additionally, we believe these properties could be replaced if needed, and any relocation would minimally impact our operations. Meanwhile, we use certain leased properties as our office, which differs from the registered use stated in the relevant title certificate. According to the Administrative Measures for Commercial House Leasing (《商品房屋租賃管理辦法》), the relevant authorities may order to make rectifications within a prescribed period of time which may result in us being required to vacate such leased properties. Based on the lessor’s written confirmation, the planning and permission certificate for the leased property includes office use, and that leasing the property to us complies with relevant regulations and permitted planning for that permission. As advised by our PRC Legal Adviser, based on the written statement issued by the Administrative Committee of the Beijing Capital International Airport Free Trade Zone, where the relevant leased properties are located, the Company may continue using the relevant properties for research, development and office uses without being imposed administrative penalties by such Committee. Furthermore, as of the Latest Practicable Date, we have not registered our rental agreements for 16 leased properties in China with the competent authorities. As advised by our PRC Legal Adviser, failure to complete the registration and filing of lease agreements will not affect the validity of the lease agreements or result in us being required to vacate the leased properties. However, the relevant PRC authorities may impose a fine ranging from RMB1,000 to RMB10,000 for each of such lease agreements, therefore the aggregate amount of the maximum fine will be RMB170,000.

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During the Track Record Period and up to the Latest Practicable Date, we have had no material disputes, government investigations, or administrative penalties related to the absence of the ownership documents or the inconsistent usage of leased properties, nor are we subject to any material adverse impact due to these matters. In addition, we have not received any notices or administrative penalty decisions from the relevant authorities requiring us to complete lease registration filings for certain leased properties. Our PRC Legal Adviser has advised that the absence of lease registration filings does not affect the validity of the lease agreements and will not have a material adverse impact on the overall business of the Company. See “Risk Factors — Risks Relating to Our Business and Industry — We might be subject to certain requirements under PRC laws and regulations.”

As of December 31, 2024, we had no single property with a carrying amount of 15% or more of our total assets, and on this basis, we are not required by Rule 5.01A of the Listing Rules to include in this Document any valuation report. Pursuant to section 6(2) of the Companies (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Chapter 32L of the Laws of Hong Kong), this Document is exempted from compliance with the requirements of section 342(1)(b) of the Companies (Winding Up and Miscellaneous Provisions) Ordinance in relation to paragraph 34(2) of the Third Schedule to the Companies (Winding Up and Miscellaneous Provisions) Ordinance, which requires a valuation report with respect to all of our interests in land or buildings.

INSURANCE

We maintain standard property insurance, product liability insurance and employers’ insurance, though it may not cover all potential damage that we may suffer during our business operations. Consistent with customary industry practice in China, we do not maintain business interruption insurance, nor do we maintain key-man life insurance. Overall, we believe our insurance policies are consistent with general market practices and comply with applicable regulations in China. See “Risk Factors — Risks Relating to Our Business and Industry — We may not have sufficient insurance coverage to cover our business risks.”

RISK MANAGEMENT AND INTERNAL CONTROL

Our Board oversees the effectiveness of our risk management and internal control systems, which we have structured with policies and procedures designed to meet our operational needs. We are committed to continually improving these systems to ensure they remain effective and thorough. We have also implemented broad risk management policies across critical areas of our business, including financial reporting, IT, compliance, intellectual property, human resources, and investment management.

In preparation for the [REDACTED], we engaged an independent internal control consultant to evaluate the effectiveness of our internal control systems, identify deficiencies, and recommend enhancements. The consultant’s review covered multiple facets of our operations, including but not limited to corporate structure and responsibilities, legal compliance and risk control measures, communication measures, IT systems, internal audit procedures, supplier management, finance management, and confidentiality systems.

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The internal control consultant identified several deficiencies in our governance, organizational structure, operational processes, and resource management. These included the absence of policies and procedures for securities trading, anti-corruption, anti-money laundering, and overseas economic sanctions compliance, as well as shortcomings in our board governance, authorization, and license management. We also lacked mechanisms for ensuring compliance, effective communication, and evaluating the impact of key personnel departures. Operationally, we identified weaknesses in related party transaction policies, information disclosure, sales, distributor, procurement, inventory, and asset management systems. Financial controls had gaps in areas such as accounting, financial reporting, cash, expense, tax, and investment management. Additionally, we lacked robust internal audit mechanisms and sufficient systems for confidentiality, data protection, production, cost, and human resources management.

To address these issues, we implemented targeted internal control measures, including the establishment and enhancement of company-wide policies, systems, and procedures, as well as the refinement of internal control responsibilities. We adopted all recommendations made by the consultant, resulting in significant improvements to our internal control system, which is now aligned with the requirements of the Listing Rules. The internal control consultant subsequently conducted follow-up procedures to assess our remedial actions and confirmed that it had no further recommendations based on its follow-up review.

Based on these enhancements, our Directors believe that our internal controls are adequate and effective in meeting the Company’s obligations under the Listing Rules, as well as other applicable legal and regulatory standards.

Financial Reporting Risk Management

Our finance team manages our financial reporting risks through a set of accounting policies that include financial reporting, budgeting, and statement preparation. Regular staff training ensures that our finance team consistently applies these policies and follows established procedures in reviewing management accounts.

Data Privacy and Security Risk Management

Our business depends on secure data management, particularly as we handle certain types of customer information under relevant laws. We have implemented a suite of IT security policies and procedures to govern various aspects of data handling, including system maintenance, personal data security, and network and database management. Protecting customer data is essential to our operations, so we prioritize measures that safeguard against unauthorized access, data leakage, or loss.

During the Track Record Period and up to the Latest Practicable Date, we did not experience any material system failure in our IT infrastructure, or any material leakage or loss of customer data.

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Compliance and Intellectual Property Management

Our legal team oversees compliance across our operations, particularly in ensuring that our business practices, contracts, and intellectual property rights comply with all relevant laws and regulations. Before entering into any contract with customers or suppliers, our legal department works with our business team to review contract terms, verify supporting documents, and conduct necessary due diligence. This ensures that we and our partners meet the required standards and maintain strong, compliant relationships.

Additionally, our legal team collaborates with our business and internal control departments to obtain and maintain all necessary government approvals, licenses, and permits for our operations. Our intellectual property team handles applications, renewals, and filings for our trademarks, copyrights, and patents to protect our innovations and intellectual property assets.

Human Resource Risk Management

A key part of our risk management involves developing a skilled and knowledgeable workforce. Our HR department oversees recruitment, training, and performance evaluation programs to ensure our team’s skills remain current and aligned with our operational goals. We uphold high recruitment standards to secure quality hires and perform regular evaluations of our employees’ performance.

Our employee handbook, which has been approved by management and distributed to our employees, includes internal guidelines on best practices, confidentiality, ethics, fraud prevention, and anti-corruption standards. Our anti-corruption policy is particularly important in promoting integrity within our organization. It defines misconduct and outlines our zero-tolerance approach to corruption. An anonymous reporting system enables employees to report any concerns about potential misconduct or corruption, and our business, finance, legal, and internal control teams investigate and respond to these reports to uphold ethical standards.

LICENSES AND PERMITS

As of the Latest Practicable Date, we had obtained all requisite licenses, approvals and permits from relevant governmental authorities that are material to our business operations in markets in which we operate. We renew all such material permits and licenses from time to time to comply in all material aspects with the relevant laws and regulations and we do not expect any material difficulties in such renewals so long as we comply with the applicable requirements and conditions set by the relevant laws and regulations.

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The following table sets forth the details of the material licenses and permits necessary for our business operations.

Holder	Name of PRC Certificate	Expiry Date
Kunshan Geekplus Supply Chain Management Co., Ltd	Road Transport Operation License	September 1, 2032
Company	High-Tech Enterprise Certificate	December 20, 2026
Nanjing Geekplus Robotics Co., Ltd	High-Tech Enterprise Certificate	December 13, 2026
Nanjing Geekplus Robotics Co., Ltd	Receipt of Fixed Pollution Source Discharge Registration	March 24, 2030
Yancheng Geekplus Robotics Co., Ltd	Receipt of Fixed Pollution Source Discharge Registration	May 9, 2026
Hefei Geekplus Robotics Co., Ltd	Receipt of Fixed Pollution Source Discharge Registration	November 27, 2029

COMPLIANCE WITH LAWS AND REGULATIONS

Our Directors confirm that, during the Track Record Period and up to the Latest Practicable Date, we had not been involved in any material noncompliance incidents that resulted in fines, enforcement actions, or other penalties that could, individually or in the aggregate, have a material adverse effect on our business, financial condition, or results of operations.

Business Activities in relation to Entities and Countries subject to International Sanctions

During the Track Record Period, we had procured from three Relevant Entities, two of which have been designated on the Non-SDN Chinese Military-Industrial Complex Companies (“CMIC”) List by OFAC on August 2, 2021 and one of which have been designated on the Entity List maintained by the BIS on October 9, 2021. Our procurement of network services from the two suppliers designated on CMIC List amounted to approximately RMB2.56 million, during the Track Record Period. Our procurement from the supplier designated on the Entity List was a one-off procurement of modules entered in 2021, which amounted to approximately RMB8,000. EO 13959 prohibits United States persons beginning on the effective date for the designation of a CMIC, from the purchase or sale of any publicly traded securities, or any publicly traded securities that are derivative of such securities or are designed to provide investment exposure to such securities, of any person listed as a CMIC unless licensed or authorized by the relevant U.S. government authority. It is generally prohibited to export any items subject to the Export Administration Regulations (EAR) to an entity designated on the Entity List, unless licensed. Our transactions with the entity designated on the Entity List did

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not involve exports or transactions of any items. On the basis that our transactions with the Relevant Entities were limited to procurement (i.e. did not involve any export) and did not involve any purchase or sale of any publicly traded securities, or any publicly traded securities that are derivative of such securities or are designed to provide investment exposure to such securities of CMICs, it is advised by our International Sanctions Legal Adviser that, our activities with the Relevant Entities did not represent a violation of the export controls and investment restrictions applicable to these Relevant Entities.

During the Track Record Period, we had sold our AMR solutions to the non-sanctioned entities located in the Relevant Regions. Given that Relevant Regions were not Compressively Sanctioned Countries, and our customers located in the Relevant Regions were not Sanctioned Targets, as advised by our International Sanctions Legal Adviser, our sales to the Relevant Regions did not represent any Primary Sanctioned Activities.

The United States government through executive orders provided grounds for secondary sanctions designation on entities engaging in certain designated activities under the respective executive orders. Operating in certain sectors in the Russia may subject an entity to secondary sanctions risks. The “technology”, “electronics”, and “manufacturing” sectors of the Russia economy were designated under EO 14024 effective since April 15, 2021, providing authority to OFAC to impose sanctions on any person found to “operate in” such designated sector. Among the three aforementioned sectors, the “electronics” and “manufacturing” sectors of the Russia economy were designated after the Russia-Ukraine conflicts in 2022 (i.e. February 24, 2022). Our last transaction involving Russia was sale of certain goods by the Group to a Russia-based non-sanctioned entity entered into on July 29, 2021 and the Group has since then ceased all activities with Russia. As advised by our International Sanctions Legal Adviser, on the basis that the we have immediately ceased the transactions with Russia after the said conflicts, those sectoral determinations designated after the conflicts are not applicable to us; and considering the totality of our sales to Russia, before the said conflicts, including that we have no presence in Russia and our then customers in Russia were not sanctioned entities, the Group’s business dealings are unlikely to result in the imposition of designations under secondary U.S. sanctions. Please also see “Risk Factors — We could be adversely affected as a result of any sales we make to certain countries that are, or become subject to, sanctions administered by the United States, the European Union, the United Kingdom, the United Nations, Australia and other relevant sanctions authorities.”

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AWARDS AND RECOGNITIONS

The following table sets forth major awards and recognitions we received as of the Latest Practicable Date.

Award/Honor/Recognition	Award Year	Awarding Authority
“Best in Intralogistics” certifications	2025	IFOY
RBR50 Innovation Awards	2025	Robotics Business Review (RBR)
Best Warehouse Robotics Company Award	2025	LogiSYM
GGGC Five-Year Industry Contribution Award for Enterprises	2024	Gaogong Mobile Robot
2024 Top 30 Leading Globalization Brands Going Overseas.	2024	Forbes
The Best Use of Robotics or Automation in Retail Award	2024	Robotics & Automation Awards
The Best Use of Robotics Award . .	2024	The Best Use of Robotics Award
Supply Chain Innovator of the Year	2024	Supply Chain Asia Awards
RBR50 Innovation Awards	2024	Robotics Business Review
Top Supply Chain Projects 2024 . .	2024	Supply & Demand Chain Executive
First Prize for Scientific and Technological Progress	2023	China Federation of Logistics and Purchasing
Supply Chain Excellence Awards . .	2023	Supply Chain Excellence
UK Robotics and Automated Warehouse Innovation Award . . .	2023	Robotics and Automation Exhibition
Global Unicorn List	2023	Hurun Report
Hurun Under 40 China Entrepreneurial Leaders	2023	Hurun Report
Industry Innovation Star Award . . .	2023	CCID Sci-Tech Innovation Star
Most Influential IoT Innovation List	2023	Fortune China
iF Award	2023	iF Industry Forum Design
Seventh Batch of National Manufacturing Industry Single Champion	2022	Ministry of Industry and Information Technology of China

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Award/Honor/Recognition	Award Year	Awarding Authority
Beijing’s Hidden Champion Enterprise	2022	Beijing Municipal Bureau of Economy and Information Technology, and Beijing Federation of Industry and Commerce
Second Prize for Scientific and Technological Progress	2022	China Federation of Logistics and Purchasing
Supply Chain Excellence Awards . .	2022	Supply Chain Excellence
IFOY (International Intralogistics and Forklift Truck of the Year) Award for Best in Intralogistics Certificate	2022	German Conveyor Technology and Intralogistics Association
Good Design Award (Japan).	2022	Japan Industrial Design Promotion Organization (JIDPO)
European Product Design Award™	2022	Farmani Group
Logistics Innovation Awards	2022	SITL Europe (International Week of Transport and Logistics)
Supply Chain Excellence Awards . .	2021	Supply Chain Excellence
European Product Design Award™	2021	Farmani Group
Fast Company’s Most Creative People in Business	2021	Fast Company
Unicorns HK	2021	Hong Kong Innovation and Technology Foundation & Venture Capital
VENTURE50 in Hard Tech	2021	Qingke/Venture Capital
RBR50 Innovation Awards	2020	Robotics Business Review
Supply Chain Excellence Awards . .	2020	Supply Chain Excellence
IFOY (International Intralogistics and Forklift Truck of the Year) Award for Best in Intralogistics Certificate	2020	German Conveyor Technology and Intralogistics Association
RBR50 Innovation Awards	2019	Robotics Business Review
Supply Chain Excellence Awards . .	2019	Supply Chain Excellence
DELIVER Rising Star Award	2019	The Deliver
The Fortune China 40 Under 40 for Founder, Zheng Yong	2018	Fortune China