MOVING System

Moving

Flexible automation of your internal material flow





Intelligent and reliable moving with Geek+

The Geek+ moving system for load capacities up to 1,000 kg replaces fixed conveyor technology. With its navigation method based on SLAM technology and multi-sensor support, the system is extremely adaptable to the fast and flexible industrial production cycles, even for the most diverse load carriers.

The interface of the moving system is open and modular, so it can be docked to existing customer systems and connect various types of equipment to realize fully automated moving. The moving system can also optimize inventory management and increase storage utilization.



Full service over the entire lifetime

Full Service Lifecycle Service

Training Technical Remote support Implementation Operation & Support Resident On-site during peaks **Services** services Upgrade 7 x 24 h Cloud-based Multilingual user **Authorized** Regional service interface service platform partners centers



Your benefits with the Geek+ moving system



Rapid Deployment

Ready and easy deployment for single robots

Short project implementation cycle of only 2–4 weeks for multiple robots



High Investment Value

Increase in moving efficiency by at least 50%

Possible to achieve return on investment within a year



Highly adaptable

No need for environment modifications

Suitable for complex humanrobot interaction scenarios



Smooth Operation

Able to independently create and modify mapping according to requirements Customizable process management and charging policies



Flexible Scheduling

Flexible addition or removal of robots to fit changing needs

Supports the simultaneous utilization of different models of robots



Guaranteed safety for your employees

The Geek+ SLAM navigation technology enables safe operation in a mixed man-machine environment. Thanks to the 360-degree camera built into the robot and the lasers all around it, obstacles are always detected in time.



Comprehensive solutions for all moving tasks

The Geek+ moving system is suitable for transports in warehouses for e-commerce, retail, 3C (Computers, Communications, Consumer Electronics), automotive manufacturing, and many other industries. SLAM navigation enables autonomous mobile robots (AMRs) to follow virtual lines even in complex environments.

Each of the solutions has its strengths:

Geek+Lift

Geek+ Lift includes models that are equipped with lifting functions. Optionally, they can be adapted for different heights, docking mechanisms, and payloads.

Application areas:

- Pallet transport in the warehouse
- Bin or Shelf delivery of material to production lines
- Transport of equipment and products



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Geek+ Tugger

The Geek+ Tugger includes models that are equipped with strong pulling capabilities. It can position carts accurately and handle large carts effectively, also adaptable to different cart sizes. The M1000T model can tow multiple carts at the same time.

Application areas:

- Cage moving in warehouses
- Moving shelves in production lines
- Equipment moving in factories

Geek+ Bin Mover

Geek+ Bin Mover offers adaptable single-box and multi-box operating mechanisms in various sizes, including rollers, conveyors, etc. It can also be equipped with additional sensors to ensure safety and reliability and can automatically connect to the infrastructure for unmanned operations.

Application areas:

- Bin moving in the warehouse
- Moving shelves in production lines





Geek+ Robot Arm Hybrid

The Geek+ Robot Arm Hybrid integrates AMR and robot arm using the Geek+ moving system. It offers high efficiency, flexibility, and maneuverability, replacing conventional AGV and conveyor lines. It is easy to implement, with an ROI of less than two years.

Application areas:

- Order picking in intermediate storage and on the production line
- Multi-station material distribution on the production line
- Raw material distribution and automatic line feeding

The control system: Flexible, accurate, safe

Task Management System for logistic moving processes

Fully integrated with the Geek+ robot management system, the system manages tasks, processes, and scheduling of moving robots. Its robust process management capabilities can achieve optimal path planning and traffic control for hundreds of multi-type robots. It also supports cross-floor transportation. The system is user-friendly and easy to deploy.

Robot management system for the M Series

The system offers functions for processing and monitoring maps, charging station management, and log management. It can be connected to various robot modules such as rollers, traction, lifters, etc.

SLAM and QR code navigation

Geek+ transport robots are capable of both QR code navigation and SLAM navigation and switch to the most suitable navigation mode depending on the working conditions. SLAM navigation enables real-time positioning and mapping by using laser and camera sensors. With SLAM, robots can precisely control positioning and movement in a complex environment. With QR Code navigation, the robot can quickly follow an accurate path.



















Model	M100	M1000	P500	P800
Dimensions	740 x 500 x 210 mm	1,090 x 830 x 275 mm	950 x 702 x 275 mm	1,090 x 830 x 275 mm
Weight	68kg	200 kg	170 kg	195 kg
Payload	200 kg 200 kg lifting 75 kg towing 80 kg (roller)	1,000 kg	600 kg	1,000 kg
Navigation	Inertial + SLAM + Reflector navigation (customization) + QR code terminal positioning navigation (customization)	Inertial + hybrid navigation + Reflector navigation (customiza- tion) + QR code terminal positioning navigation (customization)	Inertia + QR code visual navigation	
Maximum working speed	1.8 m/s 2 m/s			
Full Load speed	1.5 m/s		1.6 m/s	
Control Precision	<20 mm, 2°			
Stop Precision	<10 mm, 1°			
Obstacle Avoidance	Laser radar + Ultrasonic	360° Laser radar + Safety edge	Default infrared obstacle avoidance, supporting laser radar	
Safety Circuit	FCC/CE	FCC/CE CE		
Battery	Lithium ion battery, 27Ah	Lithium ion battery, 39 Ah		
Battery Life	> 2,000 circulation			
Charge Mode	Auto Charge			
Endurance	8h	10h		
Operation temperature	0-40°	-20-50°		
Design Life	> 5 years			

About GEEK +

Geek+ is a global technology company that is one of the pioneers of the smart logistics revolution. Geek+ develops innovative logistics robots powered by artificial intelligence (AI) as well as automation solutions and implements flexible solutions for warehousing and supply chain management. These include automated goods-to-person order picking as well as self-learning, SLAM navigation-based point-to-point transport of goods and load carriers in logistics and manufacturing. The portfolio of ntegrated customer solutions is rounded off by the Geek+ sorting system for highly efficient goods and parcel sorting and autonomous, self-propelled forklifts.

Geek+ has deployed more than 10,000 AMR robots worldwide, leading the global smart logistics revolution. Customers include world-renowned brands such as Nike, Decathlon, Walmart, Toyota, and more, including nearly 40 Fortune 500 companies.





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