

End-to-End Automation

Prime Robotics is a dynamic and innovative manufacturer headquartered in Denver, Colorado. We are driven by our mission to deliver end-to-end robotic solutions that enable fully automated warehouse and fulfillment facilities.

At the core of our product portfolio is the Robotic Control Software (RCS), a powerful platform that enables a highly flexible and scalable range of technologies. Our offerings include AMRs, dynamic picking arms, high-density robotic storage systems, and a wide range of pick stations.

With our suite of robots and software solutions, you can achieve an unmatched return on investment (ROI). Our technologies save time and money at every level of your operation, allowing you to streamline processes, boost productivity, and optimize resource allocation. We are dedicated to helping you achieve operational excellence while driving success in your warehouse and fulfillment operations.

In response to increasing consumer demands and evolving order profiles, warehouses and fulfillment centers are facing the need to accommodate a larger number of SKUs. Automated Storage and Retrieval Systems (AS/RS) offer a cost-effective solution using vertical storage to address this challenge. Pallet AS/RS solutions employ floor-to-ceiling steel racking and Autonomous Mobile Robots (AMRs) to optimize product density. By going vertical, these systems save space and provide advantages such as redundant picking capability and pallet sequencing, which are difficult to achieve with standard racking and fork trucks.

When it comes to selecting an AMR for high-density storage in AS/RS system, Prime Robotics' RackBot is a leading choice. RackBot is designed to move pallets weighing up to 3,000 lbs. effortlessly. It is an ideal AMR for accommodating a wide range of products and SKUs in high-density storage environments. Furthermore, RackBot can seamlessly integrate with Prime's MobilePallet solution to enhance workflow efficiency and overall throughput.



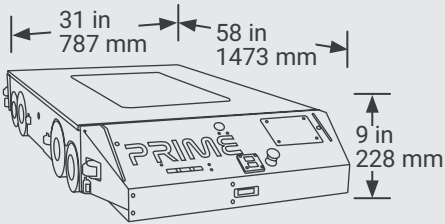
Integration

Highly customizable and user-friendly, Prime's automation platform provides an intelligent yet simple and scalable solution. Our solutions can seamlessly integrate with any Warehouse Management System (WMS), Enterprise Resource Planning (ERP), Programmable Logic Controller (PLC), or operations management software—making it easy to operate and highly adaptable to unique requirements.

Safety

At Prime, ensuring robot safety is a top priority. To guarantee a safe working environment, our Autonomous Mobile Robots (AMRs) are equipped with advanced safety and obstacle avoidance features such as LiDAR, bump bars, and emergency stop buttons. These features enable our robots to operate safely and efficiently, minimizing the risk of accidents and ensuring the safety of everyone in the work area.

RackBot AMR Specifications



Model	RackBot (RB-3000)
Dimensions (LxWxH)	58 x 31 x 9 in. 1473 x 787 x 228 mm
Vehicle Weight	1,100 lbs. 500 kg
Payload	3,000 lbs. 1360 kg
Lift Height	3.9 in. 100 mm
Lift Speed	5.0 seconds
Max Speed	3.4 mph 1.5 m/s
Navigation	QR Code
Obstacle Avoidance	Depth Camera + Laser
Position Accuracy	±5mm
Battery	48V/100Ah Lithium
Charging Method	Manual/Auto
Charger Power Requirements	110V, 20 Amp
Run Time	8 hrs.
Charge Time	<2 hrs.
Operation Temperature	32-113 °F 0-45 °C