PRIME robotics

MobilePallet

Goods-to-Person Robot for Pallet Operations

Integrated Warehouse Automation

Prime Robotics is a premier provider of end-to-end automation solutions tailored for distribution centers and warehouses.

Prime's suite of robot and execution software solutions transform fragmented workflows, empowering clients to unlock operational productivity and efficiency.

Committed to revolutionizing warehouse, supply chain, and factory operations, Prime strives to elevate businesses through best-in-class automation solutions and services.

Prime Robotics' MobilePallet is a rugged and durable Goods-to-Person (G2P) Autonomous Mobile Robot (AMR) for pallet and material handling operations. Equipped to handle heavy pallets and cases, MobilePallet tackles even the most challenging projects. By sequencing and optimizing the transportation of pallets, MobilePallet improves productivity, utilization of resources, and overall throughput—maximizing return of investment.

Prime's MobilePallet is the ideal solution for any warehouse pallet operation:

- Moves pallets and cases with payload up to 4,400 lbs.
- Replenishes pallets in 10 seconds or less
- Integrates with other automation solutions, enhancing workflow efficiency and handling both light and heavy-duty pallet management operations



Integration

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

Safety

To guarantee a safe working environment, our AMRs are equipped with advanced safety and obstacle avoidance features, including LiDAR, bumpers, and emergency stop buttons. These features enable our robots to operate safely and efficiently, minimizing the risk of accidents and ensuring safety of human workers.

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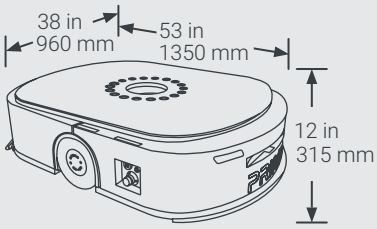
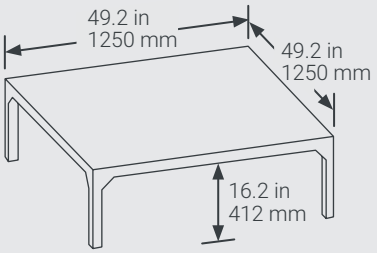


MobilePallet Specifications

Model	MobilePallet (MP-4400)
Dimensions (L x W x H)	53 x 38 x 12 in 1350 x 960 x 315 mm
Vehicle Weight	1,100 lbs 500 kg
Payload	4,400 lbs 2000 kg
Lift Height	3.2 in 80 mm
Lift Speed	3.0 seconds
Max Speed	2.7 mph 1.2 m/s
Navigation	QR Code + IMU or SLAM
Obstacle Avoidance	LiDAR
Position Accuracy	±10mm ±1°
Battery	48V/60Ah Lithium
Charging Method	Manual/Auto
Charger Power Requirements	110V, 20 Amp
Run Time	~10 hours
Charge Time	<2 hrs
Operation Temperature	32-113 °F 0-45 °C



Platform Specifications

Dimensions (L x W x H)	49.2 x 49.2 x 16.2 in 1250 x 1250 x 412 mm
Legs/Frame (square tube)	2 x 2 x 0.12 in 50 x 50 x 3 mm
Top Thickness	0.08 in 2 mm