

Max N10 Pallet Stacker

AUTOMATED INDUSTRIAL LIFT TRUCK



FEATURE HIGHLIGHTS

- **RUGGED**
Robust Industrial Vehicle with up to 2,650 lb. Payload Capacity
- **SMART**
Autonomous Pallet Location
- **FLEXIBLE**
Infrastructure-free Natural Features Navigation with High-Resolution LiDAR and SLAM Technology
- **SAFE**
Compliant with ANSI B56.5-2012
- **PRODUCTIVE**
Travels up to 4 mph in autonomous mode with full load in forward or reverse with Automatic Opportunity Charging for Maximum Availability
- **EFFICIENT**
Wi-Fi communications to SurePath Fleet Controller and On-Board Touchscreen Operator Interface
- **MODULAR**
Based on the Max N10 Modular Mobile Robot Platform

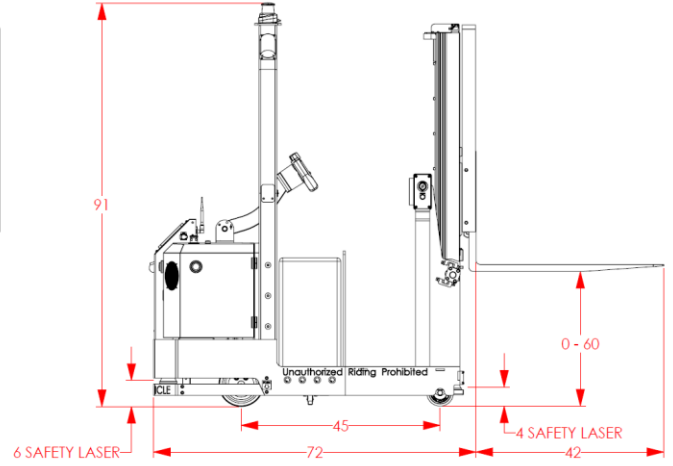
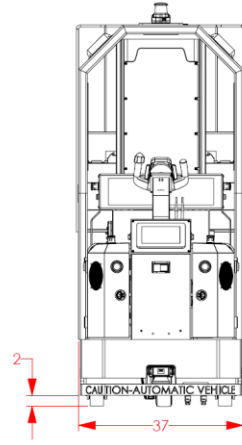
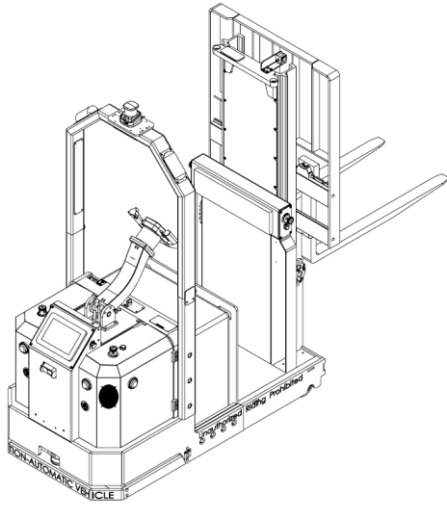
Industrial manufacturers and distribution centers looking to boost performance and reduce costs are searching for LEAN rack or pallet handling solutions that are safe, proven, and reliable to: improve worker and product safety, reallocate precious labor resources to more value-add activities, and improve delivery throughput and consistency.

The Max N10 Pallet Stacker is an automated counterbalanced lift truck that can automatically pick and place pallets or racks from the floor level, trailer decks, conveyors, or racks up to 5 feet high. Standard payload capacity is 1,770 lbs. (800 kg), with a high capacity version for up to 2,650 lbs. (1,200 kg).

With its smart pallet finding capability, the Max N10 pallet Stacker can pick pallets that have been displaced from their expected location. The vehicle sensors will identify the pallet, its location and orientation, and then dynamically re-plan a travel path for a successful pick. It can even recognize pick a desired pallet from a stack of pallets.

The vehicle design is compliant to ANSI safety standards with non-contact collision avoidance for both forward and reverse travel. Under the supervision of the SurePath Fleet Controller, the optimum vehicle will be allocated to a transport task and its path will be dynamically planned to provide the fastest delivery. The vehicle will travel along a network of allowed paths throughout the facility. Operators can feel safe that the operation is predictable and repeatable. They can safely coexist with the industrial vehicles and never be surprised by the vehicle behavior.

“Customer reception of our Max N10 natural feature guided mobile robot platform in tugger and conveyor deck configuration has been tremendous...this latest addition to the product family leverages this success and offers pallet or rack handling, expanding the automated transport of materials within the facility.” said AutoGuide Mobile Robots President and CEO Rob Sullivan. The modular design helps drive down costs and enables AutoGuide to offer the industry’s best lead-times.



SPECIFICATIONS

Payload Capacity	1,770 lbs. (800 kg) Standard, 2,650 lbs. (1,200 kg) High Capacity
Travel Speed	Variable up to 4 mph (1.8 m/sec) at Full Load
LIDAR	Ultra-High Density, Up to 250,000 Measurements/sec, Resolution: 1 mm, 0.014 degrees
Path Indicator	Dual LEDs assist operator in the returning vehicle to Auto mode at any point on the path
Pallet Sensing	Laser Scanner for Pallet recognition and locating, capacitive presence sensor
Wireless Communications	Configurable 2.4 GHz or 5 GHz Wi-Fi
Hybrid Operation	Operator platform with pressure sensitive mat and Steering Wheel, Mode switch (Off/Auto/Manual)
System Status Indicators	Dual Light Poles (Green, Yellow, Red), flashing LEDs, and 80 dB Horn
Start/Reset Buttons	Green w/status light
Onboard Operator Interface	10 in. Touchscreen GUI, Main Status Screen (Operating Mode, Location, Destination, Navigation Status, Communication State, Battery Level), Manual Destination Select Screen, Alarm Screen, Maintenance and Diagnostics Screens
Grade	Up to 4%, Full Load/Full Speed
Drive	AC Servo with maintenance-free sealed gear train
Steering	AC Servo with maintenance-free sealed gear train
Drive Wheel	10 in. diameter, Polyurethane
Chassis Wheels	6" diameter, Polyurethane
Brakes	Regenerative Braking with fail-safe emergency disc brake
Turning Radius	69 in. Outside Radius; 8 in. Load Distance (Aisle Width = Outside Radius + Load Distance + Load Length + Clearance)
Gross Weight w/Battery	4,210 lbs.
Battery	24 VDC, 600 Amp-hr. capacity
Battery Connector	SB 350A-600V Gray
Battery Compartment	31 in. L x 14.75 in. W x 35 in. H
Battery Charging	24 VDC, up to 200 amp
Safety Standards	ANSI/ITSDF B56.5-2012 Compliance, Full Load/Full Speed
Collision Avoidance	Guarded non-contact Laser Scanners Front and Rear (category 3 compliant), 270-degree scan coverage each w/Smart Zones based on current vehicle speed and direction
E-Stops	Category 3 Locking Mushroom Buttons
Environment	Operating Temperature 32-104° F (0-33° C), Relative Humidity <85% (non-condensing)
Floor Conditions	Free from oils, moisture, or debris; gaps or steps < 0.25 in. (6 mm)