





3086.47lb Rated Load Capacity



2.91mph Max. Safety Driving Speed



62.99in Fork Lifting Hight



86.61in Min. Stacking Aisle Width

VNSL14(VL)-07 SLIM PALLET STACKER AGV







By using 3D SLAM navigation and 3D Laser perception module on narrow body pallet stacker AGV, the project implementation period is shortened and the AGV has high reliability; The AGV has narrow body design with customizable forks and supporting legs based on different scenarios, which provides great flexibility, and strong adaptability.



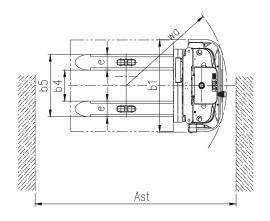


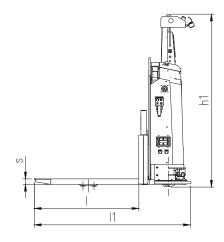




VisionNav Robotics

VNSL14(VL)-07





TECHNICAL SPECIFICATIONS

Body Weight	2204.62lb (1000kg)
Vehicle Dimensions (l1/b1/h1)	64.65x39.13x84.65in (1642x994x2150mm)
Fork Dimensions (l/e/s)	45.28x7.09x2.36in (1150x180x60mm)
Optional Fork Dimensions Series	49.21/53.1/57.09in (1250/1350/1450mm)
Fork Outer Width	22.05/26.77in (560/680mm)
Fork Inner Width	7.87/12.60in (200/320mm)
Positioning Method	3D SLAM navigation
Perception Method	3D Laser scanner
Goods Pick-up Self-adaptability	±3.94in/±10° (±100mm/±10°)

Fork Lifting Height	62.99in (1600mm)
Rated Load Capacity	3086.47lb (1400kg)
Load Center Distance	23.62in (600mm)
Min.Turning Radius	46.18in (1173mm)
Locating Precision	$\pm 0.39 in/\pm 0.5^{\circ} \ (\pm 10 mm/\pm 0.5^{\circ})$
Operation Mode	Automatic / Manual Handheld
Battery Type	Lithium iron phosphate
Voltage/Battery Capacity	24V/180Ah
Charging Mode	Manual/ Automatic Charging

MOTION PERFORMANCE

Straight Forward Speed (Full-Load/Empty-Load)	2.24mph , 2.91mph (1.0m/s, 1.3m/s)
Straight Backward Speed (Full-Load/Empty-Load)	0.67mph, 0.67mph (0.3m/s, 0.3m/s)
Forward Turning Speed (Full-Load/Empty-Load)	0.67mph , 1.34mph (0.3m/s, 0.6m/s)

Backward Turning Speed (Full-Load/Empty-Load)	0.67mph , 0.67mph (0.3m/s, 0.3m/s)
Lifting Up Speed (Full-Load/Empty-Load)	0.26mph, 0.39mph (115mm/s, 175mm/s)
Lifting Down Speed (Full-Load/Empty-Load)	0.36mph, 0.28mph (160mm/s, 125mm/s)

ENVIRONMENTAL REQUIREMENT

Min. Stacking Aisle Width (Pallet Size L*W:1219*1016mm, Across Forks On Width)	86.61in (2200mm)
Min. Turning Aisle Width (Pallet Size L*W:1219*1016mm, Across Forks On Width)	70.87in (1800mm)
Working Temperature	-5°C~40°C
Working Humidity	20%~95%

Ground Flatness	$\pm 0.20 in/m^2~(\pm 5 mm/m^2)$
Max. Climbing Ability (Full-Load/Empty-Load)	5%, 5% (3°, 3°)
Max. Groove Width	1.18in (30mm)
Max. Step Height	0.39in (10mm)

SAFETY PROTECTION

Front	Laser Scanner Protection + Anti-Collision Bumper
Rear	Laser Scanner Protection + Non-Contact Sensor
Тор	Photoelectric Sensor + Ultrasound Scanner

Side	Laser Scanner Protection + Anti-Collision Bumper
Other	Emergency Stop Button + Acousto-Optic Alarm

[•] Customizable fork length, fork outer width, and supporting legs outer width; With duplex mast option, the lifting height can reach 62.99in, 98.43in, and 118.11in (body weight varies slightly with different mast selections); Other available options: 5G communication, battery heating, loads over height detection, UWB safety system, barcode scanner, dash camera, RFID reader, etc.

Maximum load capacity varies with lifting height, please refer to load capacity curve.

All the above parameters are obtained from the factory testing environment of standard products, and the vehicle parameters and performance of the project may vary according to actual conditions. Due to iterative upgrades on products, some of the specifications being listed above and the appearance of the products may not be able to change in time. For details, please contact our salespersons.