



3086.47lb

Rated Load Capacity



4.47mph

Max. Safety Driving Speed



226.57in

Fork Lifting Height



127.95in

Min. Stacking Aisle Width

VNR14(VL)-01

REACH TRUCK AGV

CE

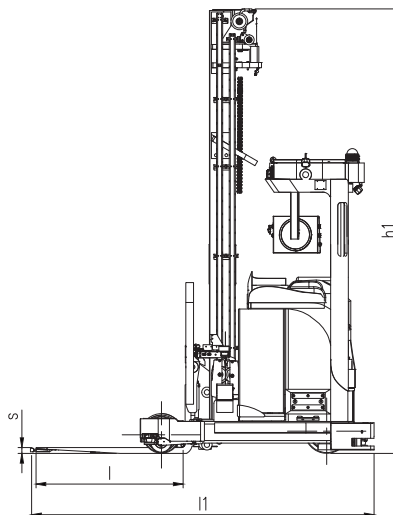
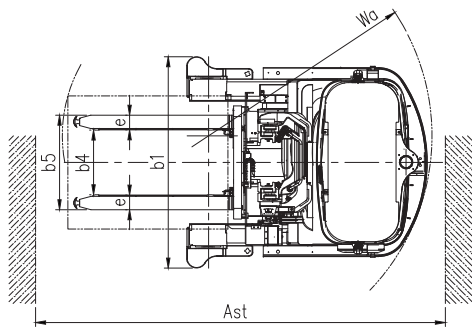


B56.5

The combination of navigation module (Vision-based or 3D SLAM) and 3D Laser perception module provides higher accuracy on different perspectives such as vehicle positioning, goods loading, goods unloading, and etc. The VNR series has 360-degree laser safety protection with mechanical protection. In addition, it is suitable for selective pallet rack, and other high position storage scenarios.



VNR14(VL)-01



TECHNICAL SPECIFICATIONS

Body Weight	2204.62lb (3140kg)
Vehicle Dimensions (l/b1/h1)	Reach Retracts 104.37x39.69x97.48in (2651x1635x2476mm)
	Reach Extends 121.06x64.37x97.48in (3075x1635x2476mm)
Fork Dimensions (l/e/s)	40.90x3.94x1.77in (1115x100x45mm)
Optional Fork Dimensions Series	49.80/53.74/57.68/61.61in (1265/1365/1465/1565mm)
Fork Outer Width (b5)	27.95in (710mm)
Fork Inner Width (b4)	19.13in (486mm)
Mast Forward Distance	16.69in (424mm)
Positioning Method	Vision-based Navigation
Perception Method	3D Laser scanner
Goods Pick-up Self-adaptability	$\pm 3.94\text{in}/\pm 10^\circ$ ($\pm 100\text{mm}/\pm 10^\circ$)

Fork Lifting Height	226.57in (5755mm)
Rated Load Capacity	3086.47lb (1400kg)
Load Center Distance	23.62in (600mm)
Min. Turning Radius	66.73in (1695mm)
Supporting Legs Height	13.38in (310mm)
Side Shift Range	$\pm 3.15\text{in}$ ($\pm 80\text{mm}$)
Stacking Accuracy	$\pm 0.39\text{in}/\pm 0.5^\circ$ ($\pm 10\text{mm}/\pm 0.5^\circ$)
Operation Mode	Automatic / Manual Seated
Battery Type	Lithium iron phosphate
Voltage/Battery Capacity	48V/400Ah
Charging Mode	Manual/ Automatic Charging

MOTION PERFORMANCE

Straight Forward Speed (Full-Load/Empty-Load)	4.47mph , 4.47mph (2.0m/s, 2.0m/s)
Straight Backward Speed (Full-Load/Empty-Load)	1.34mph , 1.34mph (0.6m/s, 0.6m/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 , 1.34mph (0.3m/s, 0.6m/s)
Lifting Up Speed (Full-Load/Empty-Load)	0.89mph , 1.48mph (400mm/s, 660mm/s)
Lifting Down Speed (Full-Load/Empty-Load)	1.23mph , 1.01mph (550mm/s, 450mm/s)

ENVIRONMENTAL REQUIREMENT

Min. Stacking Aisle Width (Pallet Size L*W:1219*1016mm, Across Forks On Width)	127.95in (3250mm)
Min. Turning Aisle Width (Pallet Size L*W:1219*1016mm, Across Forks On Width)	98.43in (2500mm)
Working Temperature	-5°C~ 40°C
Working Humidity	20%~95%

Ground Flatness	$\pm 0.12\text{in}/\text{m}^2$ ($\pm 3\text{mm}/\text{m}^2$)
Max. Climbing Capability (Full-Load/Empty-Load)	10%, 10% (6°, 6°)
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 + Contact Sensor
Top	Photoelectric Sensor + Ultrasound Scanner

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

* Side shifter is standard configuration, Optional 3D SLAM positioning; Optional triplex mast lifting height 226.57/285.63/336.81in (body weight varies slightly with the height of the door frame); Optional 5G communication, battery heating, battery trolley, cargo ultra high detection, UWB warning system, scan gun, traffic recorder, RFID card 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.