



VNP15

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COUNTERBALANCE STACKER AGV

Taking advantages of 3D SLAM navigation and 3D laser perception module, the project implementation period is shortened and the AGV has high reliability; The AGV has 360-degree safety protection with customizable forks and other tools based on different scenarios, which provides high level safety, great flexibility, and strong adaptability.



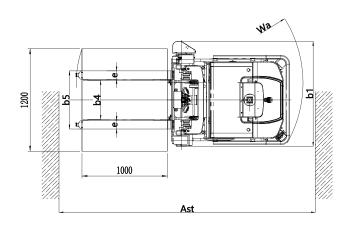


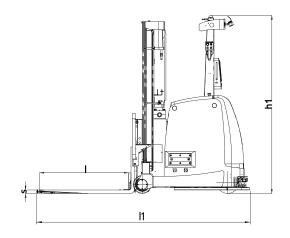




VisionNav Robotics

VNP15





TECHNICAL SPECIFICATIONS

Body Weight	2900kg (6393.41lb)
Vehicle Dimensions (l1/b1/h1)	2543x1344x2085mm (100.12x52.91x82.09in)
Fork Dimensions (l/e/s)	1040x100x40mm (40.94x3.94x1.57in)
Optional Fork Dimensions Series	890/1190/1340/1490/1640/1790mm (35.04/46.85/52.76/58.66/64.57/70.47in)
Fork Outer Width	560/680mm (22.05/26.77in)
Fork Inner Width	336/456mm (13.23/17.95in)
Positioning Method	3D SLAM
Perception Method	3D Laser scanner
Goods Pick-up Self-adaptability	±100mm/±10° (±3.94in/±10°)

Fork Lifting Height	3000mm (118.11in)
Rated Load Capacity	1500kg (3306.93lb)
Load Center Distance	500mm (19.69in)
Min. Turning Radius	1490mm (58.66in)
Stacking Accuracy	± 10 mm/ $\pm 0.5^{\circ}$ (± 0.39 in/ $\pm 0.5^{\circ}$)
Operation Mode	Automatic / Manual Handheld
Battery Type	Lithium iron phosphate
Voltage/Battery Capacity	24V/270Ah
Charging Mode	Manual/ Automatic Charging

MOTION PERFORMANCE

Straight Forward Speed (Full-Load/Empty-Load)	1.3m/s, 1.5m/s (2.91mph, 3.36mph)
Straight Backward Speed (Full-Load/Empty-Load)	0.6m/s, 0.6m/s (1.34mph, 1.34mph)
Forward Turning Speed (Full-Load/Empty-Load)	0.3m/s, 0.6m/s (0.67mph, 1.34mph)

Backward Turning Speed (Full-Load/Empty-Load)	0.3m/s, 0.6m/s (0.67mph, 1.34mph)	
Lifting Up Speed (Full-Load/Empty-Load)	100mm/s, 150mm/s (0.22mph, 0.34mph)	
Lifting Down Speed	180mm/s, 100mm/s (0.40mph, 0.22mph)	

ENVIRONMENTAL REQUIREMENT

Min. Stacking Aisle Width (Pallet Size L*W:1200*1000mm, Across Forks On Length)	3150mm (124.02in)
Min. Turning Aisle Width (Pallet Size L*W:1200*1000mm, Across Forks On Length)	2152mm (84.72in)
Working Temperature	-5°C~40°C
Working Humidity	20%~95%

Ground Flatness	±5mm/m² (±0.20in/m²)
Max. Climbing Capability (Full-Load/Empty-Load)	5%, 5% (3°, 3°)
Max. Groove Width	30mm (1.18in)
Max. Step Height	10mm (0.39in)

SAFETY PROTECTION

Front	Laser Scanner Protection + Anti-Collision Bumper	Side	Laser Scanner Protection + Anti-Collision Bumper
Rear	Laser Scanner Protection	Other	Emergency Stop Button + Acousto-Optic Alarm
Тор	Photoelectric Sensor + Ultrasound Scanner		

^{*} Customizable fork length, fork outer width, and supporting legs outer width; With duplex mast option, the lifting height can reach3000mm, 3500mm, 4000mm, and 4500mm. With triplex mast option, the lifting height can reach 4500mm (body weight varies slightly with different mast selections); Available fork type options: Side shifter and adjustable forks; Other available options: 5G communication, battery heating, battery trolley for battery swap, safety anti-collision bumper, 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.

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.