

VisionNav
Robotics

FULL SPECTRUM
LOGISTICS AUTOMATION

VNE40

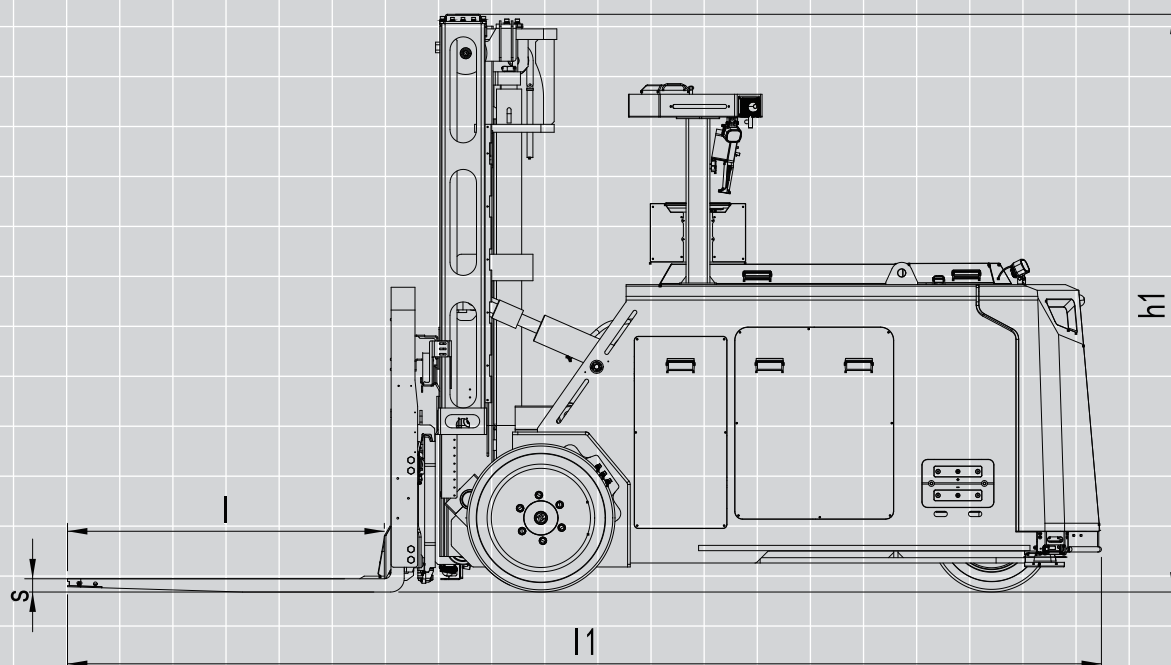
COUNTERBALANCE TRUCK AGV



B56.5



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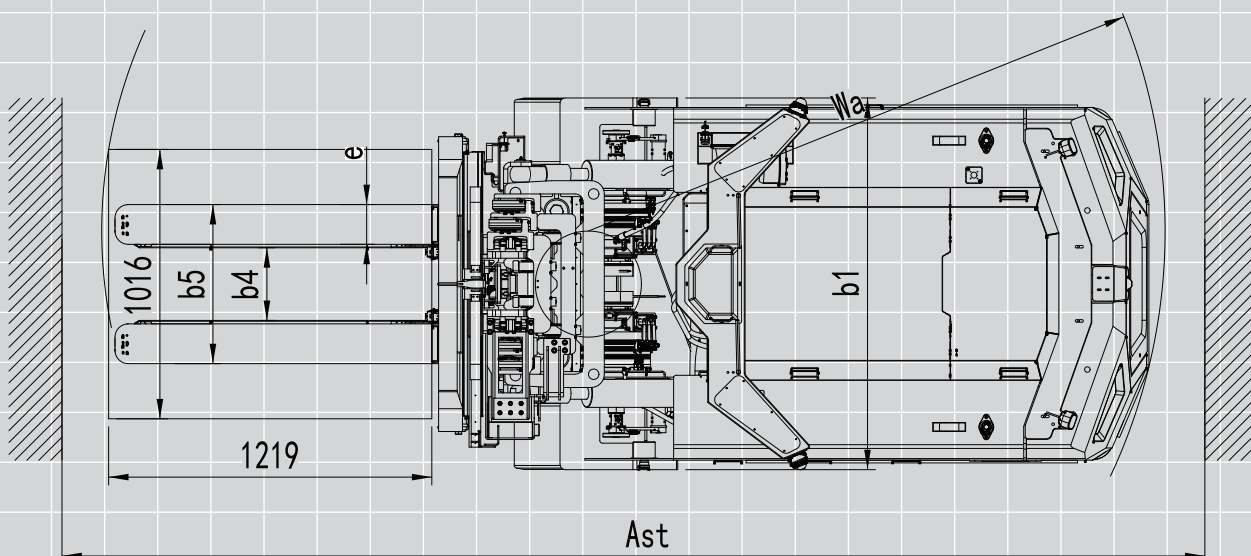


**Recommended Calculation Method of
Min. Stacking Aisle Width:**

$$Ast = \max(Ast1, Ast2)$$

$$Ast1 = \text{Vehicle Length Overall} + 600\text{mm}(23.6 \text{ in})$$

$$Ast2 = Wa + R + 300\text{mm}(11.8 \text{ in})$$



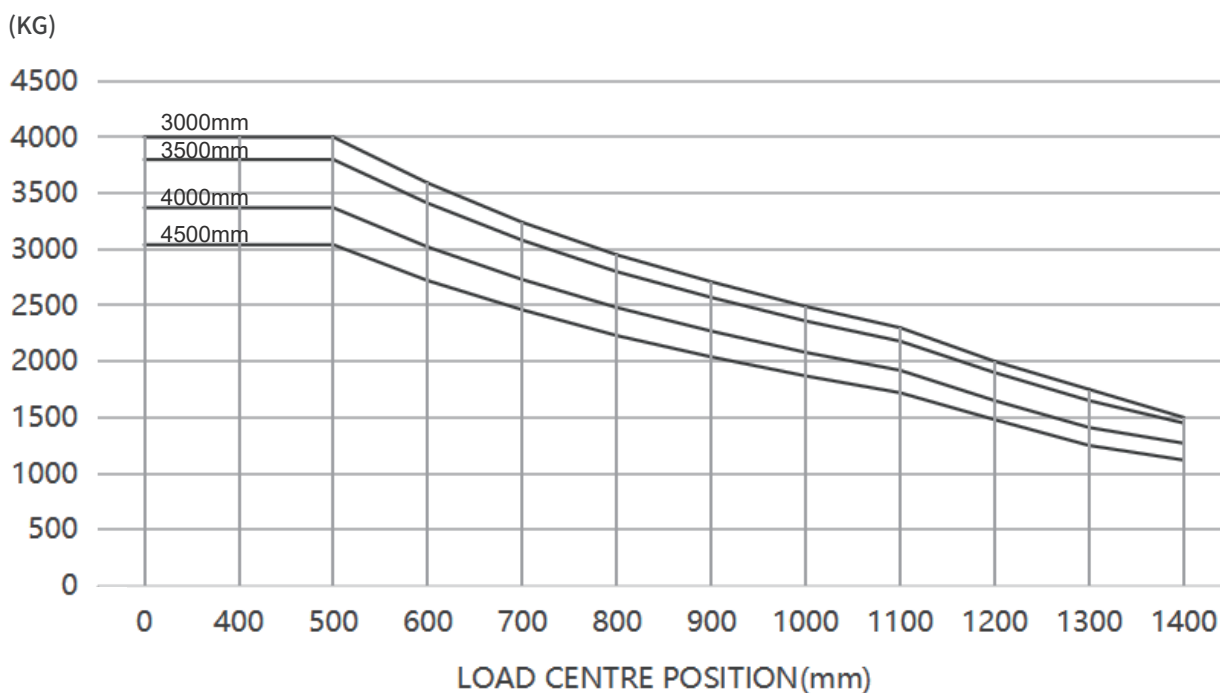
		<i>Metric</i>	<i>Imperial</i>
POSITIONING AND PERCEPTION	1	Positioning Method	3D SLAM
	2	Perception Method	3D LiDAR
	3	Localization Precision	±15mm/±0.5° ±0.59in/±0.5°
	4	Loading Adaptability	±100mm/±10° ±3.94in/±10°
GENERAL SPECIFICATIONS	5	Operation Mode	Auto/Manual
	6	Overall Dimensions	3810x1402x2150mm 150x55x85 in
	7	Max. Fork Lifting Height	Up to 3000mm, see Mast Chat Up to 118 in, see Mast Chat
	8	Weight	6300kg 13889 lb
	9	Rated Load Capacity	4000kg 8820 lb
	10	Load Center	500mm 19.7 in
	11	Fork Dimensions (l/e/s, excl. slots)	1190x150x50mm 47x5.9x2.0 in
	12	Optional Fork Length	895/1195/1345/1495/1645/1795mm 35/47/53/59/65/70 in
	13	Width Across Forks (incl. wire slots)	380~1020mm 15.0~40.1 in
	14	Width Inside Straddle (incl. wire slots)	54~694mm 2.1~27.3 in
	15	Min. Turning Radius	2200mm 86.6 in
BATTERY	16	Battery Type	Lithium Iron Phosphate (LiFePO ₄)
	17	Battery Voltage/Capacity	83.2V/500Ah
	18	Charging Mode	Auto/Manual
PERFORMANCE	19	Max Forward Speed (Loaded/Empty)	2.0m/s, 2.5m/s 4.47 mph, 5.59 mph
	20	Max Reverse Speed (Loaded/Empty)	1.0m/s, 1.0m/s 2.24 mph, 2.24 mph;
	21	Max Turning Forward Speed (Loaded/Empty)	1.0m/s, 1.0m/s 2.24 mph, 2.24 mph
	22	Max Turning Reverse Speed (Loaded/Empty)	0.6m/s, 0.6m/s 1.34 mph, 1.34 mph
	23	Max. Fork Lifting Speed (Loaded/Empty)	240mm/s, 350mm/s 0.54 mph, 0.78 mph
	24	Max. Fork Lowering Speed (Loaded/Empty)	300mm/s, 300mm/s 0.67 mph, 0.67 mph
DEPLOYMENT ENVIRONMENT	25	Min. Stacking Aisle Width	4400mm 173.2 in
	26	Min. Turning Aisle Width	2800mm 110.2 in
	27	Ambient Temperature	-5°C~ 40°C 23°F~ 104°F
	28	Ambient Humidity	20%~95%
	29	Ground Flatness	±10mm/m ² ±0.12in/ft ²
	30	Max. Climbing Capability	13%(7°), 15%(8.5°)
	31	Max. Gap Width	50mm 1.97 in
	32	Max. Obstacle Height	30mm 1.18 in
SAFETY PROTECTION	33	Laser Scanning Height	130/100mm 5.1/3.9 in
	34	Forward Safety	3D Lidar+Safety laser Scanner+ Anti-Collision Bumper
	35	Reverse Safety	3D LiDAR+Safety Laser Scanner+ Contact Sensor
	36	Top Safety	3D LiDAR
	37	Side Safety	3D LiDAR+Safety Laser Scanner+ Anti-Collision Bumper
	38	Others	Emergency Stop Button + Acousto-Optic Alarm

* Performance Specifications: Specifications are based on the model equipped with a 118-inch (3000 mm) duplex mast, a 1219x1016mm load size, and with across forks on short side 1016mm.

Appendix I: Mast Chart

DIMENSIONS		Options	Option 1		Option 2	
	1	Mast stages	Duplex mast		Triple mast	
	2	Lifting height	3000mm	118in	4500mm	117in
	3	Mast deployment height	4150mm	163in	5650mm	222in
	4	Gantry retracted dimensions	2130mm	83in	2180mm	86in

Appendix II: Load Chart



Additional Inforamtion

- 1.Fork Accessories: Optional side shifter and Fork Positioner; Customizable fork length, fork width.
- 2.Optional Accessories: Battery Trolley, Cargo Overheight Detection, UWB Kit, Bar Code Scanner, RFID Reader, Dashcam, among others.
- 3.Load Capacity variation: Optional masts, attachments, longer load dimensions or higher lifting heights may result in a derating of capacity.