

VisionNav
Robotics

FULL SPECTRUM
LOGISTICS AUTOMATION

VNST20

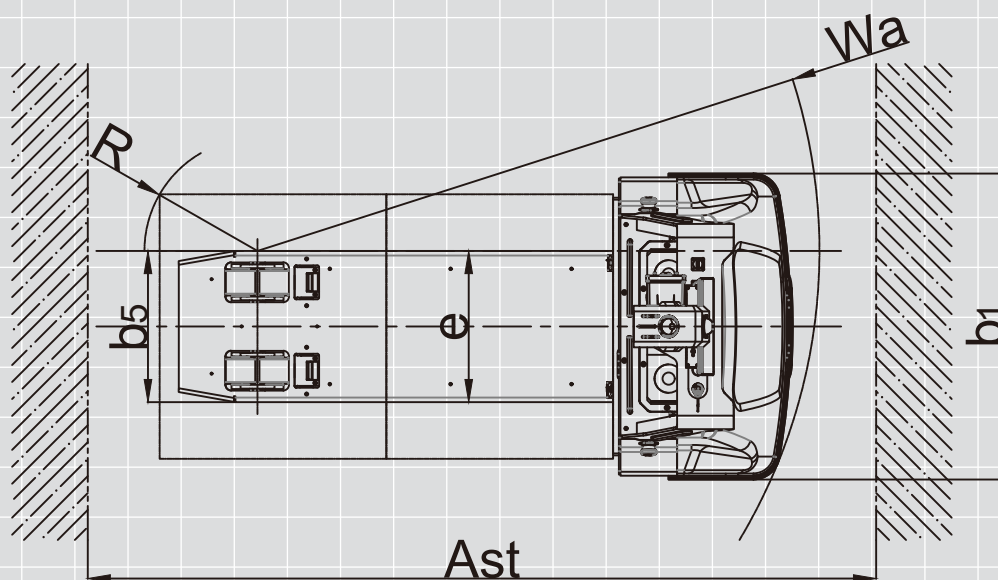
SINGLE FORK SLIM PALLET JACK AGV



B56.5



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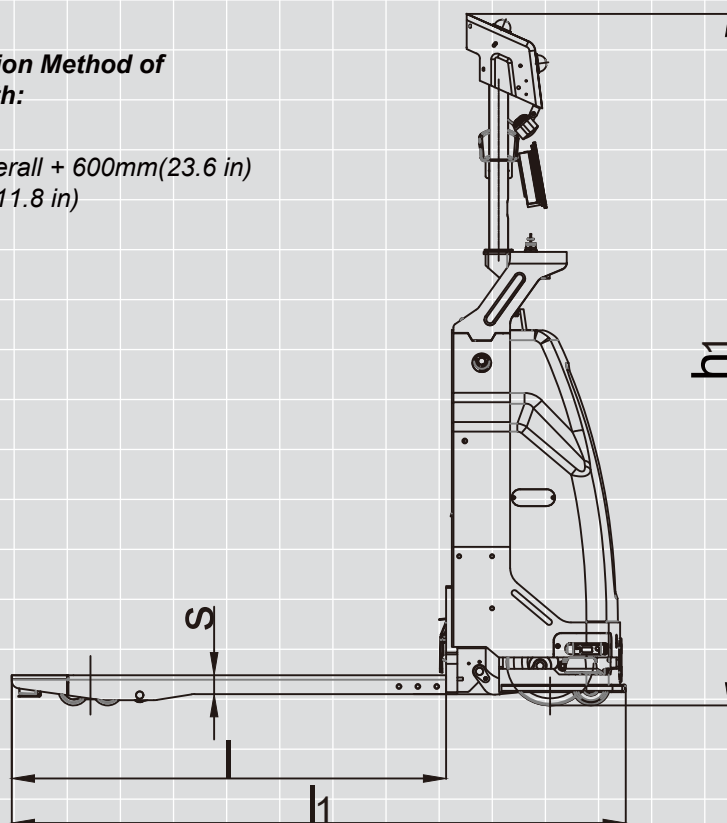


**Recommended Calculation Method of
Min. Stacking Aisle Width:**

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

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

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



		Metric	Imperial
POSITIONING AND PERCEPTION	1	Positioning Method	3D SLAM
	2	Perception Method	3D LiDAR
	3	Positioning Accuracy	±8mm/±1° ±0.31in/±1°
	4	Put-away Adaptability	±10mm/±0.5° ±0.39in/±0.5°
	5	Loading Adaptability	±100mm/±10° ±3.94in/±10°
GENERAL SPECIFICATIONS	6	Operation Mode	Auto/Manual
	7	Overall Dimensions	1625x800x1830mm 63.93x31.50x72.05in
	8	Max. Fork Lifting Height	100mm 3.9in
	9	Weight	450kg 992lb
	10	Rated Load Capacity	1000kg 2205lb
	11	Load Center	600mm 23.62in
	12	Fork Dimensions (l/e/s, excl. slots)	1150x400x50mm 45.28x15.74x1.97in
	13	Optional Fork Length	750/850/1050/1250/1350/1450/1550mm 30/34/37/41/49/53/57/61in
	14	Width Across Forks	300/400/500mm 11.8/15.7/19.7in
	15	Ground Clearance, Fork Lowered	116mm 4.6in
	16	Min. Turning Radius	1490mm 58.7in
BATTERY	17	Battery Type	Lithium Iron Phosphate Battery (LFP)
	18	Voltage/Battery Capacity	48V40Ah
	19	Charging Mode	Manual/ Automatic Charging
PERFORMANCE	20	Max Forward Speed (Loaded/Empty)	1.4m/s, 1.8m/s 3.13mph , 4.03mph
	21	Max Reverse Speed (Loaded/Empty)	0.6m/s, 0.6m/s 1.34mph , 1.34mph
	22	Max Turning Forward Speed (Loaded/Empty)	0.3m/s, 0.6m/s 0.67mph , 1.34mph
	23	Max Turning Reverse Speed (Loaded/Empty)	0.3m/s, 0.3m/s 0.67mph , 0.67mph
	24	Fork Lift Time (Loaded/Empty)	3.3s, 1.7s
	25	Fork Lower Time (Loaded/Empty)	3.3s, 3.3s
DEPLOYMENT ENVIRONMENT	26	Min. Stacking Aisle Width	2090mm 82.3in
	27	Min. Turning Aisle Width	1300mm 51.2in
	28	Ambient Temperature	-5°C~ 40°C 23°F~ 104°F
	29	Ambient Humidity	20%~90%
	30	Ground Flatness	±5mm/m² ±0.20 in/sqft
	31	Max. Climbing Capability	5%(3°), 5%(3°)
	32	Max. Gap Width	30mm 1.18in
	33	Max. Obstacle Height	10mm 0.39in
SAFETY PROTECTION	34	Forward Safety	3D LiDAR+Safety Laser Scanner+ Anti-Collision Bumper
	35	Reverse Safety	3D LiDAR+Safety Laser Scanner
	36	Top Safety	3D LiDAR
	37	Side Safety	Laser Scanning+Anti-Collision Bumper
	38	Others	Emergency Stop+Acoustic-optic Alarm

* Performance Specifications: Specifications are based on 55x24in(1400x600mm) load size, and with across forks on width.

Additional Inforamtion

- 1.Customization: Customizable fork length, fork width.
- 2.Optional Accessories: Barcode Scanner, RFID Reader, Dashcam, among others.
- 3.Load Capacity variation: Optional fork dimension, longer load dimensions may result in a derating of capacity.