

VisionNav
Robotics

FULL SPECTRUM
LOGISTICS AUTOMATION

VNST20

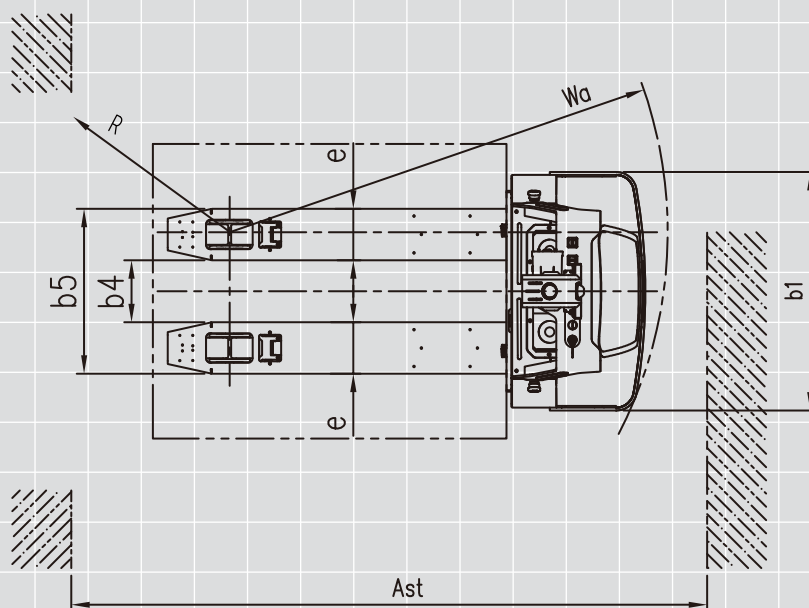
SLIM PALLET JACK AGV



B56.5



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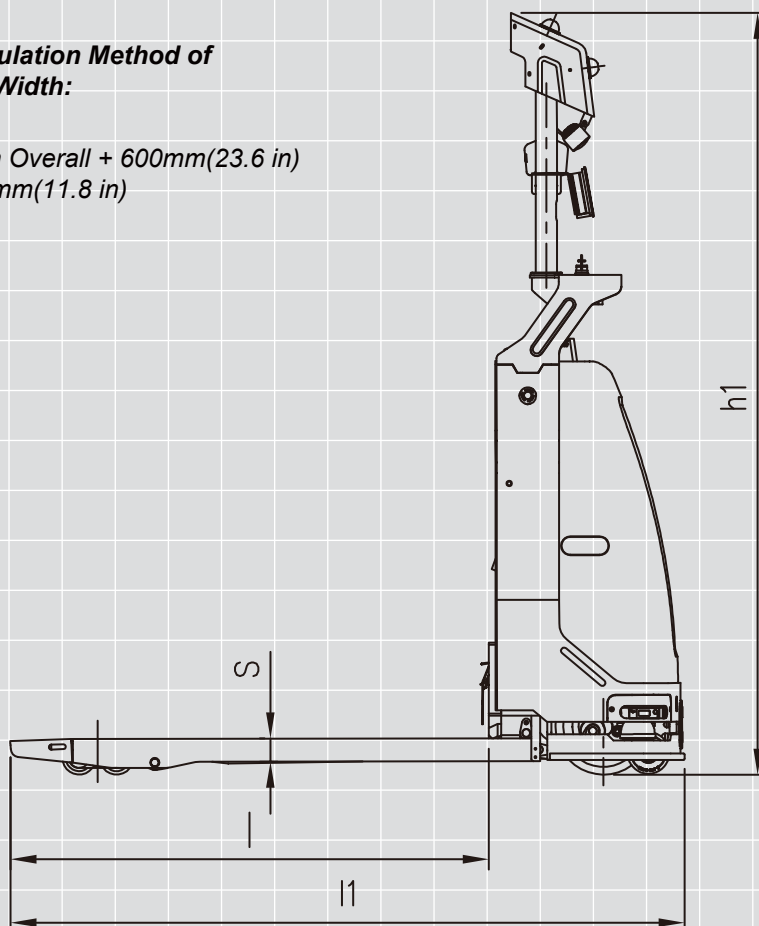


**Recommended Calculation Method of
Min. Stacking Aisle Width:**

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

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

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



Metric

Imperial

POSITIONING AND PERCEPTION	1	Positioning Method	3D SLAM	
	2	Perception Method	3D LiDAR	
	3	Positioning Accuracy	±8mm/±1°	±0.3in/±1°
	4	Put-away Adaptability	±8mm/±1°	±0.3in/±1°
	5	Loading Adaptability	±100mm/±10°	±3.94in/±10°
GENERAL SPECIFICATIONS	6	Operation Mode	Auto/Manual	
	7	Overall Dimensions	1620x800x1830mm	63.78x31.50x72.05in
	8	Max. Fork Lifting Height	115mm	4.5in
	9	Weight	520kg	1145.4lb
	10	Rated Load Capacity	2000kg	4409.25lb
	11	Load Center	600mm	23.62in
	12	Fork Dimensions (l/e/s, excl. slots)	1150x175x50mm	45.28x6.89x1.97in
	13	Optional Fork Length	850/950/1000/1200/1350/1450/1550mm	33.5/37.4/39.4/47.2/53.2/57.1/61in
	14	Width Across Forks	560mm	22in
	15	Width Inside Straddle	210mm	22.05in
	16	Min. Turning Radius	1431mm	56.4in
BATTERY	17	Battery Type	Lithium Iron Phosphate (LiFePO ₄)	
	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)	0.3m/s, 0.3m/s	0.67mph , 0.67mph
	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	Max. Fork Lifting Speed (Loaded/Empty)	30mm/s, 60mm/s	0.67mph, 1.34mph
	25	Max. Fork Lowering Speed (Loaded/Empty)	30mm/s, 30mm/s	0.67mph , 0.67mph
DEPLOYMENT ENVIRONMENT	26	Min. Stacking Aisle Width	2250mm	88.58in
	27	Min. Turning Aisle Width	1900mm	74.80in
	28	Ambient Temperature	-5°C~ 40°C	23°F~ 104°F
	29	Ambient Humidity	20%~90%	
	30	Ground Flatness	±5mm/m ²	±0.07in/ft ²
	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	Laser Scanning Height	110mm	4.33in
	35	Forward Safety	3D LiDAR+Safety Laser Scanner+ Anti-Collision Bumper	
	36	Reverse Safety	3D LiDAR+Non-contact sensor	
	37	Top Safety	3D LiDAR	
	38	Side Safety	3D LiDAR+Safety Laser Scanner+ Anti-Collision Bumper	
	39	Others	Emergency Stop Button + Acousto-Optic Alarm	

* Performance Specifications: Specifications are based on the model equipped with a 1219x1016mm(48x40in) load size, and with across forks on width.

Additional Inforamtion

- 1.Fork Accessories: Customizable fork length, fork width.
- 2.Optional Accessories: 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.