

VNQ50

AUTONOMOUS TOW TRACTOR

Special for all weather, long-distance, large tonnage material traction.



11023.11lb

Rated Load
Capacity

4.92mph

Maximum
Driving Speed

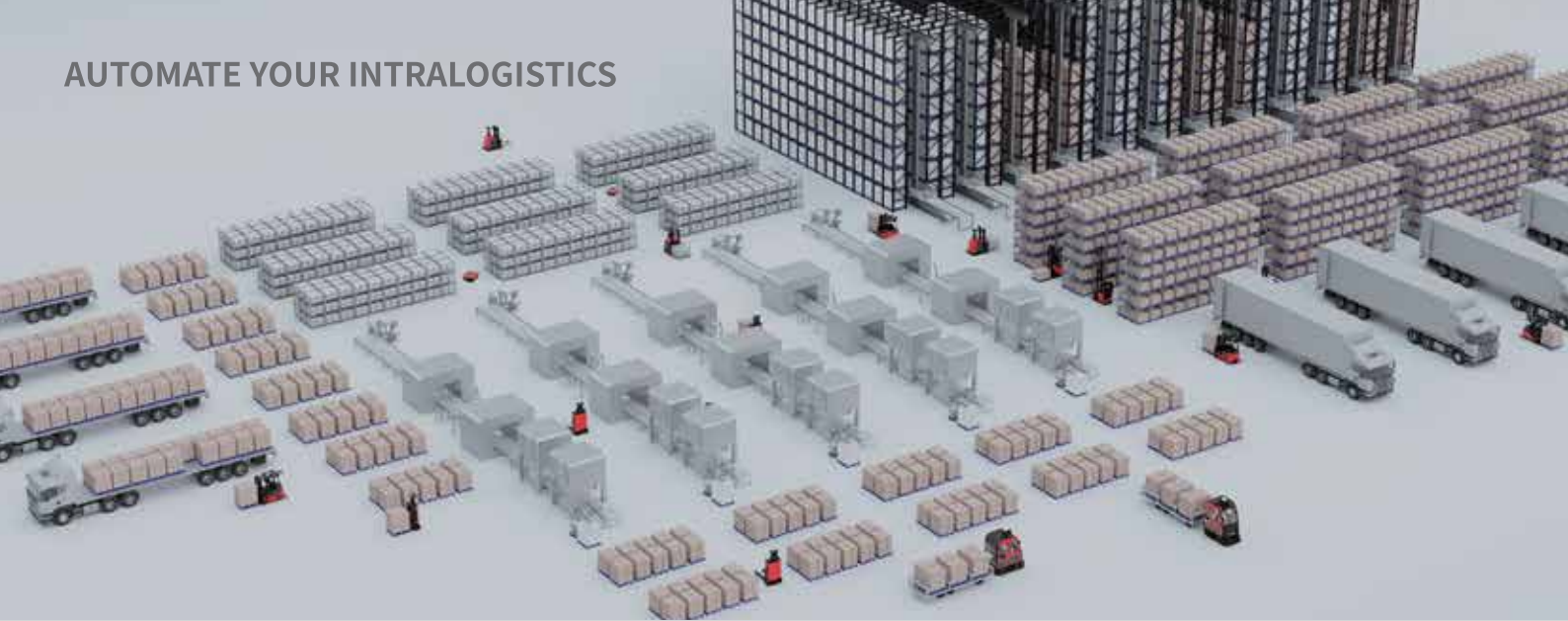
3D SLAM

Positioning Method

66.93in

Min. Turning
Aisle Width

AUTOMATE YOUR INTRALOGISTICS



Fundamental Technical Parameters

Weight	2600kg (5732.02lb)
Rated Load Capacity (Q)	5000kg (11023.11lb)
Dimensions (L1/b1/h1)	1610x860x2010mm ^① (63.39x33.86x79.13in)
Center Height of Traction Pin (h2)	290/345/400mm (11.42/13.58/15.7in)
Wheelbase	1050mm (41.34in)
Sound level at driver's ear	<70dB
Positioning Method	3D SLAM ^③
Rated drawbar pull	1000N ^②
Cart Type	Quad Steer

Service brake	Electro-magnetic
Minimum Turning Radius (Wa)	1300mm (51.18in)
Position Accuracy	±20mm/±1°
Type of Operation	Automatic / Manual Seated ^④
Drive motor output (60 min.rating)	3kW
Battery Type	LFP Battery
Voltage/Capacity	24V/270Ah
Charging Mode	Manual/ Automatic Charging

Motion Performance

Straight Forward (Full-Load/Empty-Load)	2.0m/s, 2.2m/s (4.47mph, 4.9mph)
Straight Backward (Empty-Load)	0.6m/s (1.34mph)

Turning Forward (Full-Load/Empty-Load)	0.3m/s, 0.6m/s (0.67mph, 1.34mph)
Turning Backward (Empty-Load)	0.6m/s (1.34mph)

Environmental Requirement

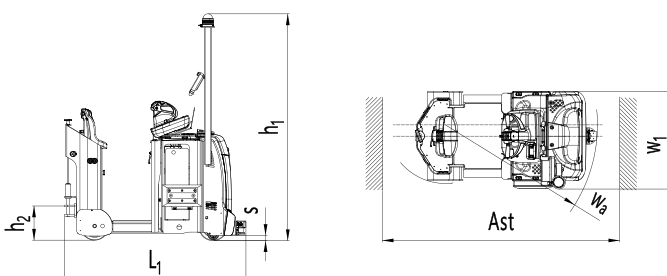
Min. Turning Aisle Width (Pallet Size L*W:1000*1200mm, Across Forks Lengthwise)	1700mm(Excluding Cart) (66.93in)
Working Temperature	-5°C-45°C
Working Humidity	20-95%
Ground Flatness	±5mm/m ² (±0.20in/m ²)
Maximum Climbing Ability (Full-Load/Empty-load)	2.8°, 13°
Maximum Groove Width	30mm (1.18in)
Maximum Step Height	20mm (0.79in)

Safety Protection

Front	Primary personnel detection safety system	
Rear	/	
Top	Secondary object 3D laser detection system	
Side	Primary personnel detection safety system	
Safety standards	ANSI/ITSDF B56.5 EN 1175:2020	ISO 3691-4:2020 EN ISO 12100:2010
Other	Emergency Stop Button + Acousto-Optic Alarm	

① Optional vehicle rain cover;
 ② Optional: visual positioning, magnetic nail positioning;
 ③ Base on level, dry surface with rolling resistance of 200N/t;
 ④ Options under automatic mode: automatic hook holding function;
 Due to improvements, the specifications and parameters may be changed without notice. Please consult the sales staff for details.

Product Drawing



Contact us

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