



MAG1500 Single Conveyor

Technical Specifications



Material Transport to and from Production Lines

Automated Transfers Between Production Stages

Sequenced or Priority-Based Delivery

Handling of Returnables and Heavy Modules

Performance

Max load	1500 kg
Maximum speed	1.4 m/s (without load) / 1.2 m/s (with load)
Loading / Unloading	75 sec (V-Marker Side Docking) Dock & Undock: 45 sec & 15 sec Conveyor Transfer: 15 sec
	60 sec (Magnetic Tape Docking) Dock & Undock: 30 sec & 15 sec Conveyor Transfer: 15 sec
Acceleration	0.1 m/s

Docking Accuracy (Linear)	40 mm (V-Marker Side Docking) 10 mm (Magnetic Tape Docking)
Docking Accuracy (Angular)	2 deg (V-Marker Side Docking) 0.5 deg (Magnetic Tape Docking)
Navigation Accuracy	± 25 mm (Linear) ± 0.5 deg (Angular)
Climb Grade	≤ 2 (Gradual)
Conveyor Height	554mm (Height can be customized based on center of mass analysis)

Frame & Build

Dimension	1670*990*576 mm
Robot Base Weight	550 kg (350 AMR + 200 Conveyor Module)
Ground Clearance	40 mm
Supported Payload	1200 × 1000 mm EU pallets (Wider pallets require custom conveyor design)

Traversable gap	10 mm
Suspension	Dual spring system
Turning Radius	0 deg (On spot rotation)
Min. Door Width	30 cm (on each side full speed)
	30 cm (on one side 0.3m/s, with low safety)

Battery & Charging

Battery Chemistry	LiFePO4
Battery Capacity	70 Ah
Battery Running time	9 - 10 hrs

Full Charge Time	2 - 3 hrs
Battery Life	2500 Full Charge Cycles
Battery Voltage	48V

Environment

Temperature	15-50 (Indoor Use Only - No Water on Floor)	Humidity	10-95% non-condensing
IP Rating	IP20		

Sensing & Indication

Safety Scanning Laser	360-degree view, 2 × 2D Safety-rated LiDAR (Front & Back) Class 1 Safety Rated Laser, PLd safety per ISO13849-1	Sensors	1 x Intel D345i 3D camera, 2 x Mechanical Bumper (Front & Back)
Emergency Stop	4 (Corners)	Indicators	4 x LEDs on corners, 2 x LEDs on sides

Processing & Communication

Computing Unit	High Performance Computer with 16GB RAM and 64GB SSD	Indicators	4 x LEDs on corners, 2 x LEDs on sides
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Interface

Screen / Touch Panel	4.3 inch, 800*480 pixel HMI Display	Start Button	System Start
Toggle Button	On / Off	Auto/Manual Key	Toggle between auto and manual modes
Brake Bypass Switch	Engage/Disengage	I/O	2 X RJ 45 GBE LAN, 2 x USB 3.1, 6 X GPIO, 1 x Manual charging slot
Resume Button	To resume after e-stop release		

Use Cases

Automotive Industry

- Smart Stamping Parts Transport
- Dynamic Sequenced Delivery to Assembly Lines (JIT & JIS)

FMCG Industry

- Raw Material Transport from Warehouse to Production
- Finished Goods Movement to Dispatch Zone
- Sterile Material Handling

Feel Free to reach out to discuss @
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