



MAG1400 Fork Open Pallet



Automated pallet and trolley handling for industrial material transport

EU standard pallet pick-up/drop-off with conveyor integration

Versatile load carrier transport for automotive WIP applications

Floor-to-machine material handling with guide leg accommodation

Performance

Max load	1500 kg
Max speed (with/without load)	1.2 / 1.5 m/s
Fork Lifting speed (with/without load)	115/170 mm/s
Fork Lowering speed (with/without load)	160/125 mm/s
Acceleration	0.4 m/s

Docking Accuracy (Linear)	20 mm (April 2 Tag),10 mm (April 4 Tag)
Docking Accuracy (Angular)	±0.5 deg
Docking / Undocking Time	30s dock, 15s undock
Lifting Height	1600 mm
Navigation Accuracy	±25 (Linear), ±0.5 (Angular),
Climb Grade	5% (with load) / 8% (without load)

Load Details

Pallets/Rack Types	Open Pallets and Racks
Pallet/Rack Sizes	1200*1200 (Customizable upon request)

Min Space Between Rack/Pallet	25 cm on each side
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Battery & Charging

Battery Capacity	210 Ah
Battery Running time	8 -10 hrs
Battery Chemistry	LiFePO4

Battery Life	3000 Full Charge Cycles
Full Charge Time	3 - 4 hrs
Charging Voltage	24V

Frame & Build

Dimension (L*B*H)	1722*951*2064
Robot Base Weight	680 kg
Ground Clearance	30 mm
Min Aisle Width (One Way)	1011 mm (depends on the payload)
Min Aisle Width (Two Way)	2022 mm (depends on the payload)
Min Width for 90 Degree Turn-in	1900+200 mm (subject to load length or custom fork)
Fork Width	180 mm

Traversable gap	10mm
Suspension	Spring Loaded
Turning Radius	1100 mm (subject to load length or custom fork)
Fork Length	1100 mm (Customizable)
Width Across Forks	555 - 680 mm
Fork Thickness	70 mm
Mast Height	2130 mm

Environment

Temperature	0-50 (Indoor Use Only - No Water on Floor)
IP Rating	IP20

Humidity	10-95% non-condensing
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Sensors & Indication

Safety Scanning Laser	2*2D LiDAR PLd Safety Rated, 2*3D LiDAR 1*2D LiDAR
Indicators	1* Front Circular & 1* Front Strip Light - for Machine State 1* Pedestrian Awareness Lamp 2*Tri Colour Light on Sides

Other Sensors	1*3D Camera for pallet/rack detection 2*Proximity Sensors 2*Tip End Push Sensors 1*Tilt Limit switch
Emergency Spot	2 (one on each side)

Processing & Sensing

Computing Unit	High Performance Computer with 16GB RAM and 128GB SSD
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Communication	Wi-Fi IEEE 802.11 a/b/g/n/ac
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Interface

Screen / Touch Panel	7inch TFT Display, 800*480 pixel
Toggle Button	On / Off
Brake Bypass Switch	Manual Break Switch

I/O	RJ45 *1
Resume Button	To resume after e-stop release

Feel Free to reach out to discuss @ www.botsync.co/contact-us

