Innovative AMR Technologies for Your Business

Technical Specification

EAPe15

Pay Load

1500KG

Lifting Height

205MM

Length/Width/Height

1580/880/1880MM

Transport Robot

The APe15 AMR robot integrates 2D/3D SLAM navigation, laser odometry, and perception technologies, providing robust adaptability for edge-line transportation, dense storage, and aisle storage applications. It achieves ±5 mm high-precision positioning (compatible with reflector and marker-based navigation) and ensures vehicle consistency through advanced manufacturing processes. Multiple positioning algorithms enable automatic recognition and precise pickup and placement of pallets and racks/cages.

AiTEN

Translog SYSTEMS

Motion Performance

The maximum operating speed is 1.5 m/s (fully loaded). The system can overcome obstacles up to 10 mm in height, cross gaps up to 30 mm, and climb slopes of 5°. It interfaces with external systems such as elevators, automatic doors, and conveyor lines. It is compatible with various load carriers, including pallets, totes, cages, and racks.

AI Recognition

The system employs AI-powered perception for high-precision, adaptive detection of pallets, racks, and cages across multiple specifications, colors, and angles, ensuring stable pickup and placement operations.

Endurance

It supports both manual and automatic charging, utilizing $LiFePO_4$ (lithium iron phosphate) batteries that offer high safety and up to 2,000 charge-discharge cycles. The battery supports fast charging, delivering 6–8 hours of runtime under rated conditions with a charging time of less than 2 hours.

Safety Performance

The system features active safety with 360° planar obstacle detection, enabling forward 3D obstacle avoidance as well as detection of low-height and overhead obstacles. It is equipped with fork-tip collision detection, emergency stop buttons, and anti-collision bumpers, and complies with CE certification standards.

Communication

Supports dual-band high-power Wi-Fi 6 (802.11ax) for doubled signal coverage, with optional expansion to industrial-grade Ethernet. Compatible with 802.11b/g/n/ac/ax Wi-Fi protocols.

Human-Machine Interaction

Equipped with a human-machine interface (HMI) display for real-time monitoring of system status and operational parameters.

Quality Assurance

Each AMR undergoes rigorous testing (e.g., load testing, durability testing) and full-process inspection before delivery, ensuring compliance with 48-hour fault-free operation standards.

Technical Data

Features	1	Product Model			EAPe15
	2	Drive Type			Electric
	3	Operation Mode			Laser Guidance
	4	Pay Load	Q	kg	1500
	5	Load Center	C	mm	600
	6	Front Overhang	X	mm	847/918
	7	Wheelbase	Y	mm	1036/1107
Wheels	1	Tire			Polyurethane Wheels
	2	Number of Wheels (Driving Side/Load-bearing Side)			1x-4/4
	3	Drive Wheel Size	mm	mm	210x70
	4	Load Wheel Size	mm	mm	82x80
	5	Stabilizer Wheel Size	mm	mm	75x23
	6	Rear Track Width	b10	mm	380
	7	Front Track KWidth	b11	mm	580
Motor	1	Drive Motor Power		kw	AC 0.75
	2	Lifting Motor Power		kw	DC 0.8
	3	Battery Voltage/Capacity		V/ah	24/60 Lithium Battery

Dimensions	1	Total Height(Forks Lowered)	H1	mm	1880
	2	Lifting Height	H3	mm	205
	3	Max. Height (Forks ar Full Elevation)	H4	mm	1880
	4	Fork Groung Clearance (Lowest Position)	H5	mm	87
	5	Total Length	L1	mm	1580
	6	Total Width	b1	mm	880
	7	Vehicle Body Width	b2	mm	755
	8	Fork dimensions	s/e/l	mm	180/70/1150
	9	Fork Spread	b3	mm	560
	10	Min Ground Clearence	m	mm	20
	11	Right-angle Stacking Aisle Width	Ast	mm	2030
	12	Turning Radius	Wa	mm	1340
Performance	1	Travel Speed (loaded/unloaded)		m/s	1/1.5
	2	Lifting Speed (loaded/unloaded)		mm/s	40/50
	3	Lowering Speed (loaded/unloaded)		mm/s	0-120
	4	Maximum Gradeability (loaded/unloaded)		%	3/5
	5	Brake Type			Electromagnetic Brake

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