

# Innovative AMR Technologies for Your Business

Technical Specification

## EAR1530

Pay Load

**1500KG**

Lifting Height

**3000MM**

Turning Radius

**1330MM**



### Reach Truck

The AR1530 AMR robot integrates 2D/3D SLAM navigation, laser odometry, and perception technologies, delivering robust adaptability for automotive rack disassembly/stacking, dense storage, dock operations, shelf docking, and robotic arm collaboration, with support for customized solutions. It achieves  $\pm 5$  mm positioning accuracy (compatible with reflector- and marker-based navigation) through advanced manufacturing processes that ensure vehicle consistency. Multiple algorithms enable automatic recognition, pickup/placement, and disassembly/stacking of pallets, spools, and racks. For safety, the system features 360° planar obstacle stopping, forward 3D obstacle avoidance, rear bottom obstacle detection, and identification of low-height and overhead obstacles. Additional safety features include load presence, spatial, height, and deviation detection, fork-tip collision detection, emergency stop buttons, anti-collision bumpers, and CE certification compliance.

# AiTEN

 **Translog**  
SYSTEMS

## Motion Performance

Maximum operating speed: 1.5 m/s (loaded); maximum lifting speed: 120 mm/s. Capable of clearing 10 mm obstacles, crossing 30 mm trenches, and climbing slopes up to 5°. Features a forward-moving mast design that minimizes operational space, with a forward extension of 450 mm. Optional smart attachments support fork side-shifting, opening/closing, and tilting, as well as customizable tools for high-precision, agile, and reliable performance across diverse scenarios.

## Endurance

Supports both manual and automatic charging with a LiFePO<sub>4</sub> (lithium iron phosphate) battery, offering high safety and up to 2,000 charge-discharge cycles. Fast-charging compatible, equipped with a 24V 210Ah battery that provides 6–8 hours of runtime under rated conditions and a charging time of less than 2 hours.

## 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.

## 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.

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## Technical Data

Features	1	Product Model			EAR1530
	2	Drive Type			Electric
	3	Operation Mode			Laser Guidance
	4	Pay Load	Q	kg	1500
	5	Load Center	C	mm	600
	6	Wheelbase	Y	mm	1110
Wheels	1	Tire			Polyurethane Wheels
	2	Drive Wheel Size	mm	mm	254x100
	3	Load Wheel Size	mm	mm	210x85
	4	Load Side Track Width	mm	mm	905
Motor	1	Drive Motor Power		kw	AC 2.5
	2	Lifting Motor Power		kw	DC 2.2
	3	Battery Voltage/Capacity	V/ah		24/210 Lithium Battery
	1	Battery Weight		kg	50
Performance	1	Travel Speed (loaded/unloaded)		m/s	1.5/2
	2	Lifting Speed (loaded/unloaded)		mm/s	90/120
	3	Lowering Speed (loaded/unloaded)		mm/s	100/90
	4	Maximum Gradeability (loaded/unloaded)		%	5/10
	5	Brake Type			Electromagnetic Brake

Dimensions	1	Total Height (Forks at Full Elevation)	H1	mm	3989
	2	Lifting Height	H3	mm	3000
	3	Fork Ground Clearance (Highest Position)	H2	mm	3000
	4	Fork Ground Clearance (Lowest Position)	H5	mm	65
	5	Mast Height	H6	mm	2047
	6	Charging Brush Plate Center Height	H7	mm	211
	7	Total Length	L1	mm	2360/2810
	8	Laser Center to Load Wheel Center Horizontal Distance	L2	mm	1113
	9	Laser Scanning Plane Height	H8	mm	1850
	10	Shift Distance	L4	mm	450
	11	Total Width (with Bumper)	b1	mm	1111
	12	Vehicle Body Width	b2	mm	800
	13	Fork dimensions	s/e/l	mm	127/40/1150
	14	Fork Spread	b3	mm	560
	15	Min Ground Clearance	m	mm	65
	16	Right-angle Stacking Aisle Width	Ast1	mm	2720
	17	Turning Radius	Wa	mm	1330
	18	Self-Weight		kg	2125



## Contact Us

**AiTEN**

T: +(86)400-106-0508  
E: marketing@aiten.com  
W: www.aitenrobot.com



**Translog**  
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T: +(48)22-815-33-87  
E: info@translog.com.pl  
W: www.translog.com.pl

