

XQE122

Indoor Reach Stacking AMR 1200kg



- Compact indoor reach stacking AMR for high-level stacking (5.5m lifting height) and transport in narrow aisles.
- Perfect for distributed dense storage for pallets, boxes and irregular loads.
- Seamless integration with industrial automation equipment and WMS/WES/ERP system for automated workflows.
- SLAM navigation precision with $\pm 10\text{mm}$ positioning accuracy and 3D vision-guided load alignment.
- Multi-layer safety system with 3D obstacle detection, fork sensors and PLD lidar for 360° protection.
- 48V/150Ah Li-ion battery with fast charging and optional auto-charging station for continuous uptime.
- Intuitive touchscreen or PDA, mobile phone and call box controls for easy task assignment and status monitoring.



Manufacturer			EP
Model designation			XQE122
Drive			Electric
Load capacity	Q	kg	1200
Service weight		kg	2880
Load center distance	c	mm	600
Fork dimensions	s/e/l	mm	40/100/1200
Lift height	h3	mm	5500
Travel speed, laden/unladen		m/s	1/1
Max. gradeability, laden/unladen		%	3/5
Turning radius	Wa	mm	1544
Battery voltage/nominal capacity			48/150
Safety protection			Lidar Emergency stop button
Positioning			3D visual navigation
Parking accuracy		mm	± 10
Navigation accuracy		mm	± 10

FEATURE

The XQE122 represents a new generation of indoor reach-type Autonomous Mobile Robots (AMRs), engineered to deliver comprehensive material handling automation. Combining high-precision stacking with autonomous transfer, this agile XQE122 with a load capacity of 1200kg and max lifting height of 5.5m, creates optimized distributed warehousing solutions across diverse environments.

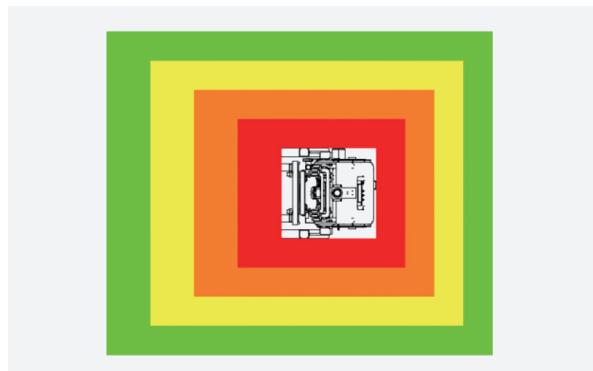
■ Perfect for Complex Warehousing Applications

The XQE122 excels in automated high-level stacking within conventional aisle widths, reaching lifting height of 5.5m to handle pallets, stacked boxes, custom frames and irregular carriers. The compact size, with its length to fork faces (l2) of 1365mm, and the reach-type fork mechanism maximize storage density and enhance space utilization.

It enables distributed dense storage configurations and seamless collaboration with industrial automation equipment (robotic arms) and larger automated systems (WMS system, MES system, ERP system, etc.), positioning it as a transformative tool for modern logistics operations demanding space efficiency and operational continuity.

■ Precise Stacking and Multiple Control Accesses

Leveraging advanced SLAM (Simultaneous Localization and Mapping) navigation, the XQE122 guarantees millimeter-precision pallet placement and retrieval. It features positioning accuracy of $\pm 10\text{mm}$ and real-time 3D vision-guided load alignment, ideal for low-clearance racking or narrow operating conditions. The XQE122 enables error-free pallet handling even in tight spaces. Besides, operators interact through an intuitive touchscreen or command the system via PDA, mobile phone and call box, enabling rapid task assignment and status monitoring.



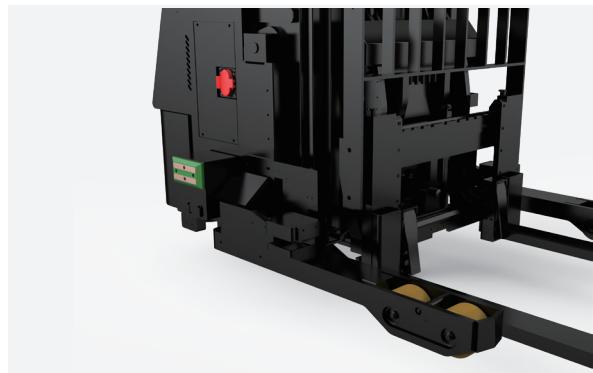
■ Multi-layered Safety Protection

The XQE122 is equipped with a multi-layered safety system to ensure safe co-working alongside personnel and warehouse infrastructure during intensive operations. The comprehensive protection system integrates an overhead 3D obstacle avoidance camera to detect objects in its path. It also adopts a fork tip photoelectric sensor preventing collisions during loading and unloading, and three PLD Lidars for 360° obstacle scanning.



■ Sustainable Power Management

The XQE122 comes standard with a 48V/150Ah lithium battery supporting opportunity charging and zero maintenance, and a 48V/100A external charger for rapid manual recharging. For uninterrupted workflow, an optional 48V/100A automatic charging station allows self-docking during workflow pauses, utilizing intelligent power management to maintain 24/7 readiness without human intervention.



Automated High-speed Transport AMR For Heavy-duty Applications

XQE122

Base Parameters	1.1	Manufacturer	EP		
	1.2	Model designation	XQE122		
	1.3	Drive	Electric		
	1.4	Operator type	Pedestrian		
	1.5	Load capacity	Q	kg	1200
	1.6	Service weight		kg	2880
	1.7	Navigation	3D SLAM/QR code		
	1.8	Communication	Wi-Fi/5G		
	1.9	Positioning accuracy	±10		
	1.10	Indoor/Outdoor	Outdoor		
Battery Parameters	2.1	Battery voltage/nominal capacity	V/Ah		
	2.2	Battery type	Li-ion battery		
	2.3	Battery weight	kg		
	2.4	Usage time	h		
	3.1	Dimensions	I1/b1/h1	mm	2426/1240/3053
Size	3.2	Load center distance	c	mm	600
	3.3	Load distance, center of drive axle to fork	x	mm	318
	3.4	Wheelbase	y	mm	1265
	3.5	Length to face of forks	l2	mm	1197
	3.6	Fork dimensions	s/e/l	mm	40/100/1200
Other Parameters	3.7	Distance between fork-arms	b5	mm	350-780
	3.8	Lowered height	h13	mm	60
	3.9	Lift height	h3	mm	5500
	4.1	Forward distance	l4	mm	590
	4.2	Travel speed, laden/unladen		m/s	1/1
Channel Requirements	4.3	Max. gradeability, laden/unladen		%	3/5
	4.4	Maximum floor level deviation		mm	≤20
	4.5	Turning radius	Wa	mm	1544
	5.1	Aisle width for pallets 1000×1200 lengthways	Ast	mm	1440
	5.2	Aisle width for pallets 1000×1200 crossways	Ast	mm	2102
Safety	5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)	Ast	mm	2891
	6.1	Emergency stop button			Two sides
	6.2	Voice and light			Audible and visible
	6.3	Front protection			Lidar
	6.4	Back protection			Fork root lidar + Physical bumper
Option List	6.5	Side protection			Lidar
	6.6	Physical bumper			Front + two sides
	6.7	Pallet in-place detection switch			Rear Fork Root
	7.1	Battery			•48V/150Ah
	7.2	Charger			•48V/100A External Charger
	7.3	Warning light			•Turn light •Warning light
	7.4	Front protection			•Lidar •Two sides Lidar
	7.5	Rear protection			•Fork tip lidar •Fork root lidar
	7.6	Interaction method			•Screen •Buttons

If there are improvements of technical parameters or configurations, no further notice will be given.
The diagram shown may contain non-standard configurations.

