

# 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  $\pm 10$ 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 centre distance	c	mm	600
Fork dimensions (s/e/l)	s/e/l	mm	40/100/1200
Lifting height	h3	mm	4500
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 slam/QR code
Parking accuracy		mm	$\pm 10$
Navigation accuracy		mm	$\pm 10$

# 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.

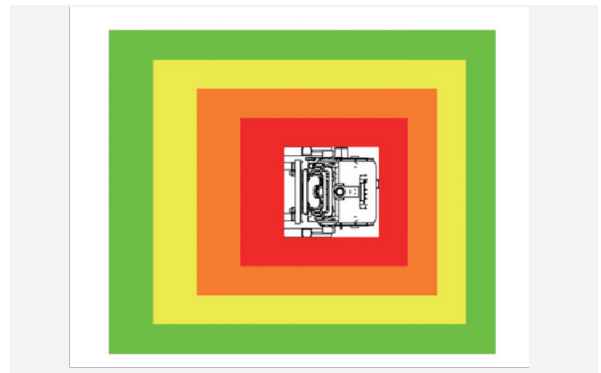
## ■ Perfect for Complex Warehousing Applications

The XQE122 excels in automated high-level stacking with 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.



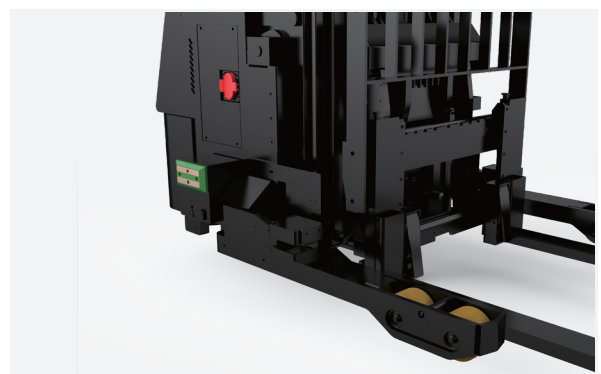
## ■ Multi-layered Safety Protection

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.

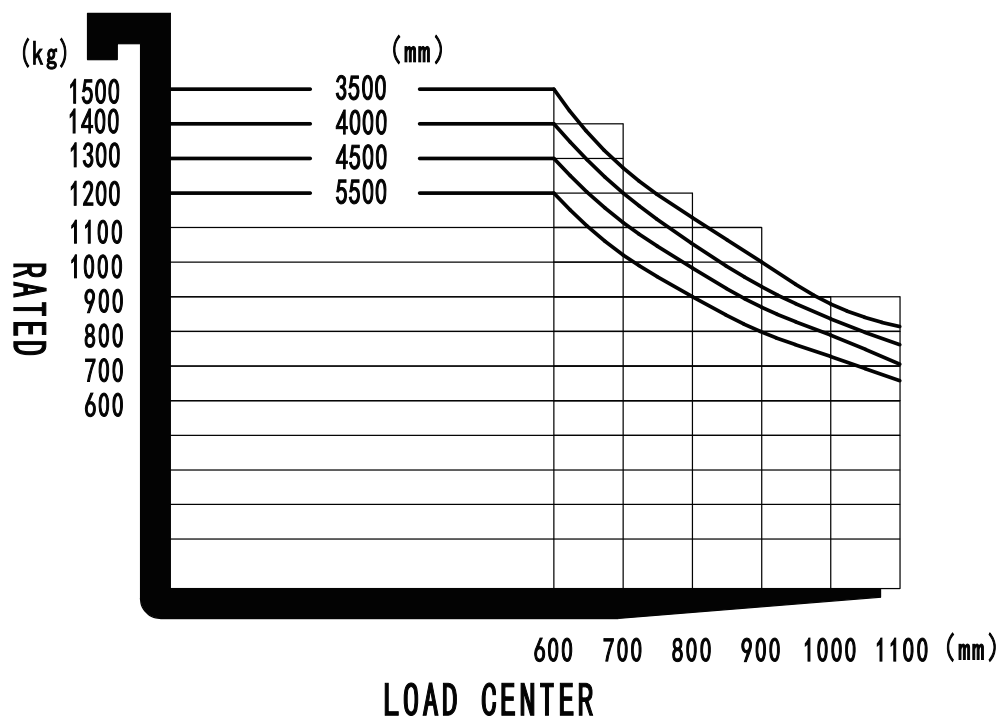


# Automated High-speed Transport AMR For Heavy-duty Applications

## XQE122

Basic 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		mm	±10	
	1.10	Indoor/Outdoor			Outdoor	
BatteryParameter	2.1	Battery voltage/nominal capacity		V/Ah	48/150	
	2.2	Battery type			Li-ion battery	
	2.3	Battery weight		kg	100	
	2.4	Usage time		h	5/6	
Size	3.1	Dimensions	l1/b1/h1	mm	2426/1240/2718	
	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	
	3.7	Distance between fork-arms	b5	mm	350-780	
	3.8	Lowered height	h13	mm	60	
Other-Parameters	3.9	Lift height	h3	mm	4500	
	4.1	Forward distance	l4	mm	590	
	4.2	Travel speed, laden/unladen		m/s	1/1	
	4.3	Max. gradeability, laden/unladen		%	3/5	
	4.4	Maximum floor level deviation		mm	≤20	
	4.5	Turning radius	Wa	mm	1544	
	ChannelRequirements	5.1	Aisle width for pallets 1000×1200 lengthways		Ast	mm
5.2		Aisle width for pallets 1000×1200 crossways		Ast	mm	2102
5.3		Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)		Ast	mm	2800
Safety	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	
	6.5	Side protection			Lidar	
	6.6	Physical bumper			Front + two sides	
	6.7	Pallet in-place detection switch			Rear Fork Root	
Option List	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.



## Mast Option

Mast types	height			
	Lift height	Height, mast lowered	Free lift	Height, mast extended
2-Standard Mast	3200	2823		4173
3-Standard Mast	4500	2718	1368	5523
3-Optional Mast	5500	3053	1700	6528