XPL201

Automated High-speed Transport AMR For Heavy-duty Applications

LI-ION TECHNOLOGY

EP — Let's grow together
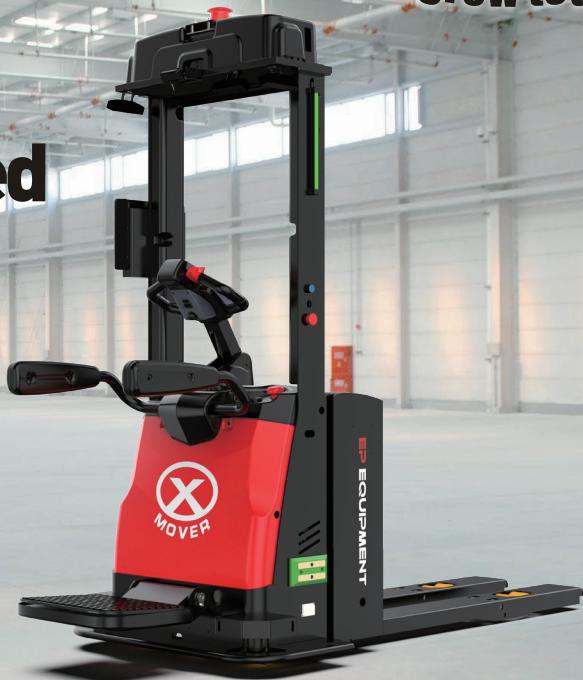
- Designed for long-distance and heavy-duty transport tasks thanks to high-speed (2.5 m/s travel speed) and robust chassis.
- SLAM navigation precision with ±10mm positioning accuracy and 3D vision-guided load alignment.
- Seamless integration with cargo lifts, auto doors, industrial automation equipment and WMS/WES/ERP system.
- Multi-layer safety system with 3D obstacle detection, fork sensors and PLD lidar for 360°protection.
- Flexible storage location management within user-defined zones for higher warehousing efficiency.
- Intuitive touchscreen or PDA, mobile phone and call box controls for easy task assignment and status monitoring.
- 24V/205Ah Li-ion battery with fast charging and optional auto-charging station for continuous uptime.

CE

| Manufacturer			EP
Model designation			XPL201
Drive			Electric
Load capacity	Q	kg	2000
Service weight		kg	625
Load center distance	c	mm	600
Fork dimensions	s/e/l	mm	55/170/1150
Lift height	h3	mm	110
Travel speed, laden/unladen		m/s	2/2.5
Max. gradeability, laden/unladen		%	8/10
Turning radius	Wa	mm	1785
Battery voltage/nominal capacity			24/205
Safety protection			Bumper | Lidar | Emergency stop button
Positioning			2D visual navigation
Parking accuracy		mm	±10
Navigation accuracy		mm	±10

⬂ FEATURE

The XPL201 redefines industrial-scale material moving as a automated high-speed transport AMR engineered for heavy-duty and long-distance applications. The robot combines chassis robustness, transfer capability and adaptive automation technology, delivering unparralleled efficiency for demanding logistics scenarios.

1 Suitable for long-distance transportation in large warehouses

2 High-speed and heavy-duty work

3 Capable of intensive material handling and cross dock operations

■ High-speed and Heavy-duty Automation for Large-scale Logistics lar

The XPL201 excels in long-distance goods transfers and production line feeding across facilities. With the load capacity of 2000kg and the travel speed of up to 2.5 m/s, it tackles high-intensive scenarios across manufacturing plants and distribution centers.

In addition to A-B transfer, the XPL201 is ideal for large-scale operations in mega-warehouses working as a fleet together. The workhorse can seamlessly integrated into existing systems (WMS, MES, and ERP system) and various industrial equipment (cargo lifts, auto doors and conveyor lines), for coordinated, and automated workflows.

2T

Suitable for large–scale long–distance handling

Suitable for high–speed and heavy–load

Suitable for dense material handling and storage

2.5M/S
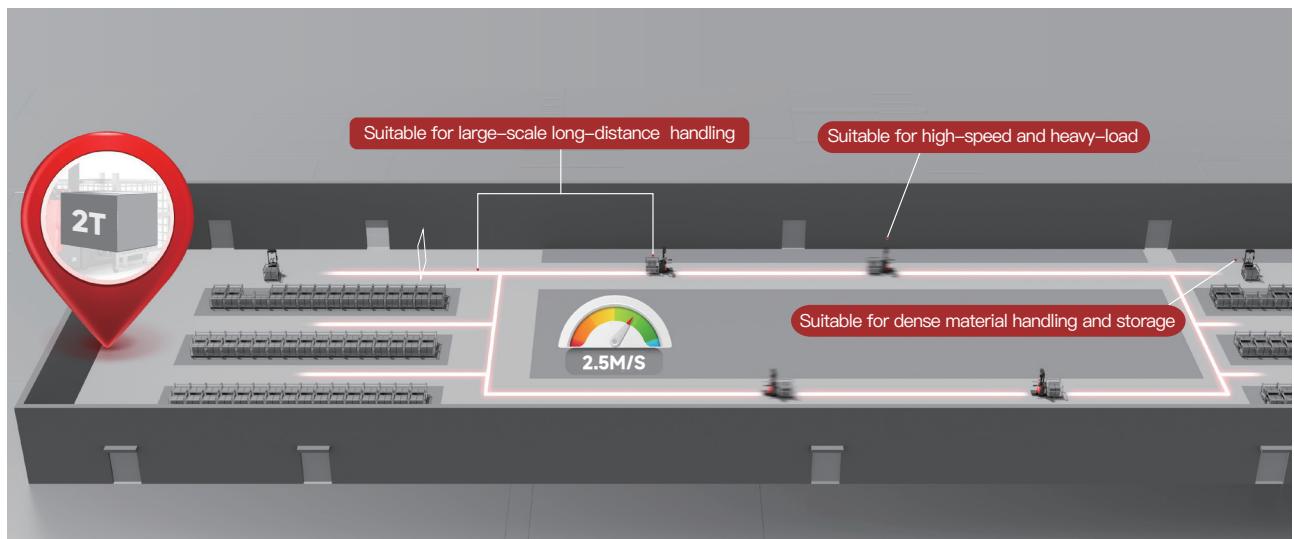
⃊ FEATURE

■ Precise Positioning and Multiple Control Accesses

Leveraging advanced SLAM (Simultaneous Localization and Mapping) navigation, the XPL201 guarantees millimeter-precision pallet placement and retrieval. It features positioning accuracy of ±10mm and real-time 2D vision-guided load alignment.
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.


■ Dynamic Loading/unloading Colum Management

Flexible storage location management allows operators to redefine loading/unloading zones in real-time with the help of external cameras or integrated automation system. The XPL201 autonomously adjusts workflows to execute precise material handling within these dynamic boundaries—no infrastructure modifications required.

■ Multi-layered Safety Protection

The XPL201 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 2D 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.
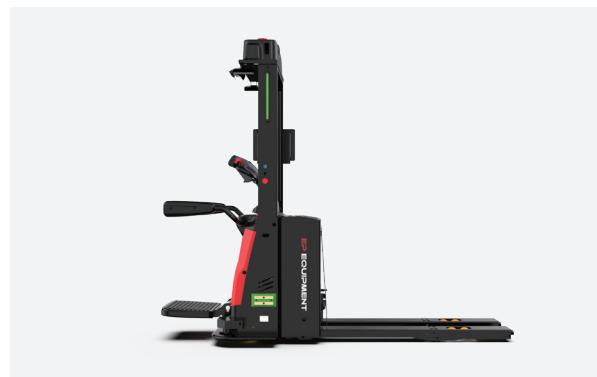
■ Sustainable Power Management

The XPL201 comes standard with a 24V/205Ah lithium battery supporting opportunity charging and zero maintenance, and a 24V/100A external charger for rapid manual recharging. For uninterrupted workflow, an optional 24V/100A automatic charging station allows self-docking during workflow pauses, utilizing intelligent power management to maintain 24/7 readiness without human intervention.


24V/205Ah
Li-ion battery

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Basic parameters				
1.1	Manufacturer			EP
1.2	Model designation			XPL201
1.3	Drive			Electric
1.4	Operator type			Standing
1.5	Load capacity	Q	kg	2000
1.6	Service weight		kg	625
1.7	Navigation			Slam/Reflector
1.8	Communication			Wi-fi + 5G
1.9	Positioning accuracy		mm	±10
1.1	Indoor/Outdoor			Indoor
Battery parameters				
2.1	Battery voltage/nominal capacity		V/Ah	24/150
2.2	Battery type			Li-ion battery
2.3	Battery weight		kg	50
2.4	Usage time		h	6-8
Size				
3.1	Dimensions	l1/b1/h1	mm	2100/981/2175 (L*W*H)
3.2	Load center distance	c	mm	600
3.3	Load distance, center of drive axle to fork	x	mm	980
3.4	Wheelbase	y	mm	1430
3.5	Length to face of forks	l2	mm	1033
3.6	Fork dimensions	s/e/l	mm	55/170/1350
3.7	Distance between fork-arms	b5	mm	540/600/685
3.8	Lowered height	h13	mm	90
3.9	Lift height	h3	mm	110
Other parameters				
4.1	Travel speed, laden/unladen		m/s	2/2.5
4.2	Max. gradeability, laden/unladen		%	8/10
4.3	Maximum floor level deviation		mm	≤8
4.4	Turning radius	Wa	mm	1785
Channel requirements				
5.1	Aisle width for pallets 1000×1200 lengthways	Ast	mm	1800
5.2	Aisle width for pallets 1000×1200 crossways	Ast	mm	2500
5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)	Ast	mm	3600/3000
Safety				
6.1	Emergency stop button			Two sides
6.2	Voice and light			Audible and visible
6.3	Front protection			Lidar + 3D camera
6.4	Back protection			Fork-tip Lidar + Camera
6.6	Physical bumper			Front + two sides
6.7	Pallet in-place detection switch			Position Switch
7.2	Communication			WIFI
7.4	Charging power			●24V/50A
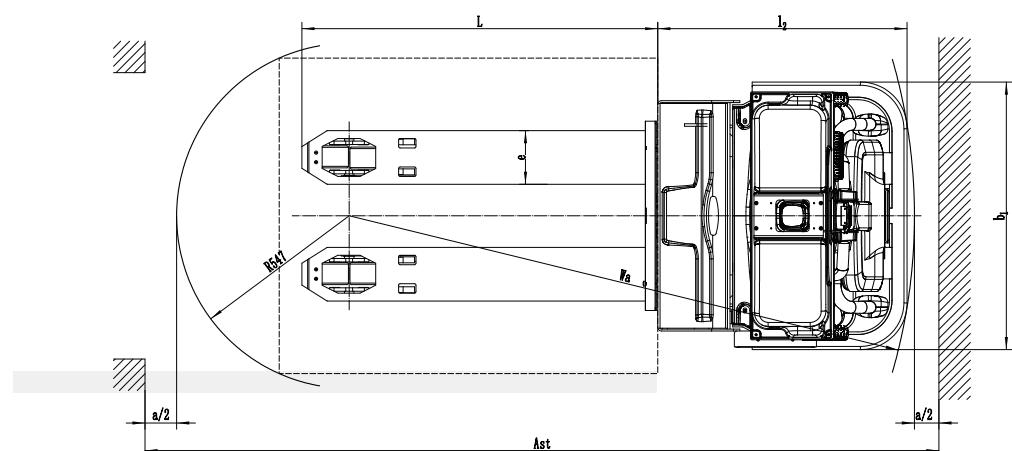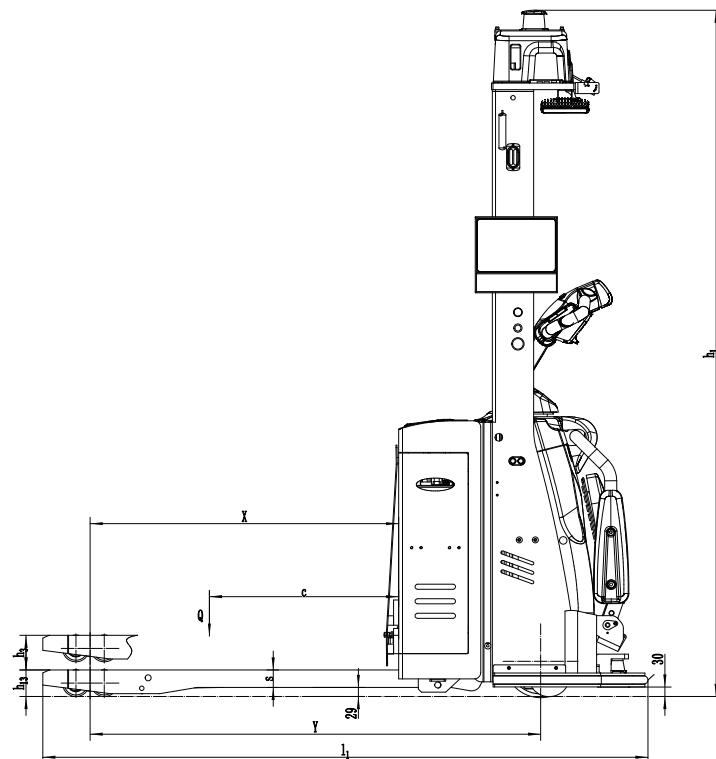
Option:

OPTIONS	XPL201
Battery	●24V/205Ah
Charger	●24V-50A External charger ○24V-100A External charger
Automatic charging pile	○24V-100A
Warning light	●Red light ●Turn light
Front protection	●Double lidar, 360° ●3D Camera
Rear protection	●Fork-tip sensor ○Camera ○Fork-tip Lidar
Interaction method	●Screen ○Buttons
Note　●Standard　○Optional　-Inconformity	