



EP's Smart Intralogistics Solution Automated X-Movers

The 4th Generation of Material Handling



X-Mover Series

Semi-automatic Pallet Truck Series



Model		▶ EXP15	▶ XP15	▶ XP15-MM	▶ RPG201
Transport	Point to point	●	●	●	●
	Point to many point	●	●	●	●
	Many to many point		○	○	○
	Conveyor			●	
Block stacking	Palletising & stacking of goods				
	Crate stacking				
	Extraordniary loads				
Cage stacking	Storage cage stacking (wire frame)				
	Specialised cage stacking (RV7/ 8)				
Pallet frames	Removable shelf stacking (stacking pallets)				
Racking	Conventional shelving (<5m)				
	Narrow aisle racking 13m				
Carts towing					

Product application cases

Note: ● Standard ○ Optional

X-Mover Series

Transport AMR Stacking AMR VNA AMR Towing AMR



Model		▶ XPL201	▶ XQE122	▶ XNA151	▶ XTD401
Application	Transport	Point to point	●	●	●
		Point to many point	●	●	●
		Many to many point	●	●	●
		Conveyor		●	●
	Block stacking	Palletising & stacking of goods		●	●
		Crate stacking		●	●
		Extraordinary loads		●	●
	Cage stacking	Storage cage stacking (wire frame)		●	●
		Specialised cage stacking (RV7/ 8)		●	●
	Pallet frames	Removable shelf stacking (stacking pallets)		●	●
	Racking	Conventional shelving (<5m)		●	●
		Narrow aisle racking 13m			●
	Carts towing				●

Product application cases

Note: ● Standard ○ Optional

EXP15

Entry level semi-automatic pallet truck

Product features

Manual and automatic

Record and run via 8-button keypad



Basic parameters	1.1	Manufacturer			EP
	1.2	Model designation			EXP15
	1.3	Operator type			Pedestrian
	1.4	Load capacity	Q	kg	1500
	1.5	Service weight		kg	230
	1.6	Navigation			2D Visual navigation
	1.7	Communication			No Communication
	1.8	Positioning accuracy		mm	±20
Battery parameters	2.1	Battery voltage/nominal capacity		V/Ah	24/60
	2.2	Battery type			Li-ion battery
	2.3	Battery weight		kg	14
	2.4	Usage time		h	3-4
Size	3.1	Dimensions	l1/b1/h1	mm	1620/644(650)(700)/1420
	3.2	Load center distance	c	mm	600
	3.3	Load distance, center of drive axle to fork	x	mm	950
	3.4	Wheelbase	y	mm	1130
	3.5	Length to face of forks	l2	mm	450
	3.6	Fork dimensions	s/e/l	mm	55/150/1150
	3.7	Distance between fork-arms	b5	mm	540(600)(685)
	3.8	Lowered height	h13	mm	85
	3.9	Lift height	h3	mm	90
Other parameters	4.1	Travel speed, laden/unladen		m/s	1.1/1.25
	4.2	Lifting speed, laden/unladen		m/s	0.020/0.035
	4.3	Lowering speed, laden/unladen		m/s	0.058/0.046
	4.4	Max. gradeability, laden/unladen		%	5/5
	4.5	Maximum floor level deviation		mm	≤20
	4.6	Turning radius	Wa	mm	1400
Channel requirements	5.1	Aisle width for pallets 1000×1200 lengthways	Ast	mm	1400
	5.2	Aisle width for pallets 1000×1200 crossways	Ast	mm	1860
	5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)	Ast	mm	1970
Safety	6.1	Emergency stop button			Two sides
	6.2	Voice and light			Audible and visible
	6.3	Front protection			Top lidar + bottom lidar
	6.4	Back protection			Fork tip sensor
Option list	7.1	Battery			●24V/60Ah
	7.2	Charger			●24V-20A Manual
	7.3	Warning light			●Turn light
	7.4	Front protection			Top lidar + bottom lidar
	7.5	Rear protection			Fork tip sensor
	7.6	Interaction method			Keypad

02 Semi-automatic Pallet Truck Series

The 4th Generation of
Material Handling

XP15

Semi-automatic

Product features

Manual and automatic

Set up by App with Bluetooth connection



Basic parameters	1.1	Manufacturer			EP
	1.2	Model designation			XP15
	1.3	Operator type			Pedestrian
	1.4	Load capacity	Q	kg	1500
	1.5	Service weight		kg	325
	1.6	Navigation			2D Visual navigation
	1.7	Communication			Wi-Fi / Bluetooth
	1.8	Positioning accuracy		mm	±20
Battery parameters	2.1	Battery voltage/nominal capacity		V/Ah	24/60
	2.2	Battery type			Li-ion battery
	2.3	Battery weight		kg	14
	2.4	Usage time		h	4-5
Size	3.1	Dimensions	l1/b1/h1	mm	1703/842/1470
	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	1210
	3.5	Length to face of forks	l2	mm	573
	3.6	Fork dimensions	s/e/l	mm	55/170/1260
	3.7	Distance between fork-arms	b5	mm	540/600/685
	3.8	Lowered height	h13	mm	90
	3.9	Lift height	h3	mm	95
Other parameters	4.1	Travel speed, laden/unladen		m/s	0.9/1.0
	4.2	Max. gradeability, laden/unladen		%	5/10
	4.3	Maximum floor level deviation		mm	≤20
	4.4	Turning radius	Wa	mm	1570
Channel requirements	5.1	Aisle width for pallets 1000×1200 lengthways			1200
	5.2	Aisle width for pallets 1000×1200 crossways			2500
	5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)			2800
Safety	6.1	Emergency stop button			Two sides
	6.2	Voice and light			Audible and visible
	6.3	Front protection			Top 180° Lidar + Bottom 180° Lidar
	6.4	Back protection			Fork-tip sensor
	6.6	Physical bumper			Front + two sides
	6.7	Pallet in-place detection switch			Position switch
	Option list	7.1	Battery		
7.2		Charger			●24V-20A External Charger
7.4		Warning light			○Blue light ●Turn light ○Warning light
7.5		Front protection			Top lidar + bottom lidar
7.6		Rear protection			●Fork-tip sensor ○Fork-tip lidar
7.7		Interaction method			○Screen ●Buttons

03 Semi-automatic Pallet Truck Series

The 4th Generation of
Material Handling

XP15MM

Semi-automatic

Product features

Manual and automatic

High lifting option for rollerbed or conveyors

Set up by App with Bluetooth connection



Basic parameters	1.1	Manufacturer			EP
	1.2	Model designation			XP15-MM
	1.3	Operator type			Pedestrian
	1.4	Load capacity	Q	kg	1200
	1.5	Service weight		kg	516
	1.6	Navigation			2D Visual navigation
	1.7	Communication			Wi-Fi / Bluetooth
	1.8	Positioning accuracy		mm	±20
Battery parameters	2.1	Battery voltage/nominal capacity		V/Ah	24/60
	2.2	Battery type			Li-ion battery
	2.3	Battery weight		kg	14
	2.4	Usage time		h	3-4
Size	3.1	Dimensions	l1/b1/h1	mm	1945/842/1740
	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	1322
	3.5	Length to face of forks	l2	mm	723
	3.6	Fork dimensions	s/e/l	mm	55/170/1070
	3.7	Distance between fork-arms	b5	mm	540/600
	3.8	Lowered height	h13	mm	90
	3.9	Lift height	h3	mm	1000
Other parameters	4.1	Travel speed, laden/unladen		m/s	1/1.5
	4.2	Max. gradeability, laden/unladen		%	4/8
	4.3	Maximum floor level deviation		mm	≤20
	4.4	Turning radius	Wa	mm	1666
Channel requirements	5.1	Aisle width for pallets 1000×1200 lengthways			1400
	5.2	Aisle width for pallets 1000×1200 crossways			2410
	5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)			2610
Safety	6.1	Emergency stop button			Two sides
	6.2	Voice and light			Audible and visible
	6.3	Front protection			Top 180° Lidar + Bottom 180° Lidar
	6.4	Back protection			Fork tip sensor
	6.6	Physical bumper			Front + two sides
	6.7	Pallet in-place detection switch			Position switch
	Option list	7.1	Battery		
7.2		Charger			●24V-20A External Charger
7.4		Warning light			○Blue light ●Turn light ○Warning light
7.5		Front protection			●Single lidar,180° ○Double lidar,270° ●3D Camera
7.6		Rear protection			●Fork-tip sensor ○Frok-tip camera ○Fork-tip lidar
7.7		Interaction method			○Screen ●Buttons

04 Semi-automatic Pallet Truck Series

The 4th Generation of
Material Handling

RPG201

Semi-automatic

Product features

Manual and Automatic

High speed manual operation, automatic transport

Set up by App with Bluetooth connection



Basic parameters	1.1	Manufacturer			EP
	1.2	Model designation			RPG201
	1.3	Operator type			Ride-on
	1.4	Load capacity	Q	kg	2000
	1.5	Service weight		kg	680
	1.6	Navigation			2D Visual navigation
	1.7	Communication			Wi-Fi / Bluetooth
	1.8	Positioning accuracy		mm	±20
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	1905/830/1690
	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	1428
	3.5	Length to face of forks	l2	mm	777
	3.6	Fork dimensions	s/e/l	mm	55/170/1150
	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	1.5/2
	4.2	Max. gradeability, laden/unladen		%	8/16
	4.3	Maximum floor level deviation		mm	≤20
	4.4	Turning radius	Wa	mm	1755
Channel requirements	5.1	Aisle width for pallets 1000×1200 lengthways			1400
	5.2	Aisle width for pallets 1000×1200 crossways			2606
	5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L x 1000 mm W)			2906
Safety	6.1	Emergency stop button			Two sides
	6.2	Voice and light			Audible and visible
	6.3	Front protection			Top 180° Lidar + Bottom 180° Lidar
	6.4	Back protection			Fork tip sensor
	6.6	Physical bumper			Front + two sides
	6.7	Pallet in-place detection switch			Position switch
	Option list	7.1	Battery		
7.2		Charger			●24V-20A External Charger
7.4		Warning light			○Blue light ●Turn light ○Warning light
7.5		Front protection			●Single lidar,180° ○Double lidar,270° ●3D Camera
7.6		Rear protection			●Fork-tip sensor ○Fork-tip lidar
7.7		Interaction method			○Screen ●Buttons

XPL201

High speed automatic transport

Product features

- Suitable for long-distance transportation in large warehouses
- High-speed and heavy-duty work
- Capable of intensive material handling and cross dock operations



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
Battery parameters	1.9	Positioning accuracy		mm	±10
	1.10	Indoor/Outdoor			Indoor
	2.1	Battery voltage/nominal capacity		V/Ah	24/205
	2.2	Battery type			Li-ion battery
Size	2.3	Battery weight		kg	50
	2.4	Usage time		h	6-8
	3.1	Dimensions	l1/b1/h1	mm	1915/835/2175 (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	780
	3.6	Fork dimensions	s/e/l	mm	55/170/1150
Other parameters	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
	4.1	Travel speed, laden/unladen		m/s	1.5/2
Channel requirements	4.2	Max. gradeability, laden/unladen		%	8/16
	4.3	Maximum floor level deviation		mm	≤20
	4.4	Turning radius	Wa	mm	1785
Safety	5.1	Aisle width for pallets 1000×1200 lengthways	Ast	mm	1200
	5.2	Aisle width for pallets 1000×1200 crossways	Ast	mm	2200
	5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)	Ast	mm	2400
	6.1	Emergency stop button			Two sides
	6.2	Voice and light			Audible and visible
	6.3	Front protection			Lidar + 3D camera
Option list	6.4	Back protection			Fork-tip Lidar + Camera
	6.6	Pallet in-place detection switch			Position Switch
	7.1	Battery			●24V/205Ah
	7.2	Charger			●24V/100A Manual
	7.3	Warning light			●Blue light ●Turn light ○Warning light
	7.4	Front protection			●Single lidar,180° ○Double lidar,270° ●3D Camera
	7.6	Interaction method			●Screen ○Buttons
Auto-charge	8.1	Rated input power (50Hz)			Single-phase 220V
	8.2	Communication			WIFI
	8.3	Size			622/422/1062
	8.4	Charging power			●24V/100A

XQE122

Automatic Reach Stacker

Product features

Stacking and transport

Flexible stacking of pallets, boxes, frames and wide loads

Distributed warehousing solution

3D camera controls for accurate load positioning



Basic parameters	1.1	Manufacturer			EP
	1.2	Model designation			XQE122
	1.3	Drive			Electric
	1.4	Operator type	Q	kg	Pedestrian
	1.5	Load capacity		kg	1200
	1.6	Service weight			2880
	1.7	Navigation			3D SLAM/QR code
	1.8	Communication		mm	Wi-Fi/5G
	1.9	Positioning accuracy			±10
	1.10	Indoor/Outdoor		V/Ah	Outdoor
Battery parameters	2.1	Battery voltage/nominal capacity			48/150
	2.2	Battery type		kg	Li-ion battery
	2.3	Battery weight		h	100
	2.4	Usage time	l1/b1/h1	mm	5-6
Size	3.1	Dimensions	c	mm	2426/1240/3053
	3.2	Load center distance	x	mm	600
	3.3	Load distance, center of drive axle to fork	y	mm	318
	3.4	Wheelbase	l2	mm	1265
	3.5	Length to face of forks	s/e/l	mm	1197.0
	3.6	Fork dimensions	b5	mm	40/100/1200
	3.7	Distance between fork-arms	h13	mm	350-780
	3.8	Lowered height	h3	mm	60
	3.9	Lift height	l4	mm	5500
	3.10	Forward distance		m/s	590
Other parameters	4.1	Travel speed, laden/unladen		%	1/1
	4.2	Max. gradeability, laden/unladen		mm	3/5
	4.3	Maximum floor level deviation	Wa	mm	≤20
	4.4	Turning radius	Ast	mm	1544
Channel requirements	5.1	Aisle width for pallets 1000×1200 lengthways	Ast	mm	1440
	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)			2891
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
		Side protection			Lidar
	6.5	Physical bumper			Front + two sides
Option list	6.6	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

XNA151

Narrow aisle stacking

Product features

- Up to 13m high narrow aisle stacking
- Fitting in current VNA aisles
- 3D slam and QR hybrid navigation for most accurate truck positioning
- 3D camera controls for accurate load positioning
- Unique 2-way stacking option



Basic parameters	1.1	Manufacturer			EP
	1.2	Model designation			XNA121
	1.3	Operator type			Pedestrian
	1.4	Load capacity	Q	kg	1200
	1.5	Service weight		kg	6500
	1.6	Navigation			3D SLAM/QR code
	1.7	Communication			Wi-Fi/5G
	1.8	Positioning accuracy		mm	±10
Battery parameters	2.1	Battery voltage/nominal capacity		V/Ah	48/560
	2.2	Battery type			Li-ion battery
	2.3	Battery weight		kg	
	2.4	Usage time		h	
Size	3.1	Dimensions	l1/b1/h1	mm	3145/1602/4465
	3.2	Load center distance	c	mm	600
	3.3	Load distance, center of drive axle to fork	x	mm	213
	3.4	Wheelbase	y	mm	1665
	3.5	Length to face of forks	l2	mm	3200
	3.6	Fork dimensions	s/e/l	mm	40/100/1136
	3.7	Distance between fork-arms	b5	mm	685
	3.8	Lowered height	h13	mm	70
	3.9	Lift height	h3	mm	8500
	3.10	Side movement distance	l4	mm	1300
Other parameters	4.1	Travel speed, laden/unladen		m/s	1/1
	4.2	Max. gradeability, laden/unladen		%	
	4.3	Maximum floor level deviation		mm	
	4.4	Turning radius	Wa	mm	1989
Channel requirements	5.1	Aisle width for pallets 1000×1200 lengthways	Ast	mm	1844
	5.2	Aisle width for pallets 1000×1200 crossways	Ast	mm	2581
	5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)	Ast	mm	1844
Safety	6.1	Emergency stop button			Front
	6.2	Voice and light			Audible and visible
	6.3	Front protection			Top 180° Lidar + Bottom 180° Lidar
	6.4	Back protection			Fork-tip sensor/Physical bumper
	6.5	Side protection			Lidar
Option list	6.6	Physical bumper			Front + two sides
	6.7	Pallet in-place detection switch			Rear Fork Root

XTD401

Indoor tow tractor

Product features

Towing multiple carts at one time



Basic parameters	1.1	Manufacturer			EP
	1.2	Model designation			XTD401
	1.3	Operator type			Pedestrian
	1.4	Load capacity	Q	kg	4000
	1.5	Service weight		kg	820
	1.6	Navigation			SLAM/Reflector
	1.7	Communication			WiFi/5G
	1.8	Positioning accuracy		mm	±20
Battery parameters	2.1	Battery voltage/nominal capacity		V/Ah	24/205
	2.2	Battery type			Li-ion battery
	2.3	Battery weight		kg	260
	2.4	Usage time		h	5-6
Size	3.1	Dimensions	l1/b1/h1	mm	1575/910/2255
	3.2	Load center distance	c	mm	-
	3.3	Load distance, center of drive axle to fork	x	mm	-
	3.4	Wheelbase	y	mm	975
	3.5	Length to face of forks	l2	mm	-
	3.6	Fork dimensions	s/e/l	mm	-
	3.7	Distance between fork-arms	b5	mm	-
	3.8	Lowered height	h13	mm	-
	3.9	Lift height	h3	mm	-
	3.10	Side movement distance	l4	mm	-
Other parameters	4.1	Travel speed, laden/unladen		m/s	1/1.4
	4.2	Max. gradeability, laden/unladen		%	3/15
	4.3	Maximum floor level deviation		mm	≤20
	4.4	Turning radius	Wa	mm	1345
Channel requirements	5.1	Aisle width for pallets 1000×1200 lengthways	Ast	mm	-
	5.2	Aisle width for pallets 1000×1200 crossways	Ast	mm	-
	5.3	Aisle width for one-sided loading/unloading (pallet: 1200 mm L × 1000 mm W)	Ast	mm	-
Safety	6.1	Emergency stop button			Two sides
	6.2	Voice and light			Audible and visible
	6.3	Front protection			Top 180° Lidar + Bottom 180° Lidar
	6.4	Back protection			3D Camera
	6.5	Side protection			-
Option list	6.6	Physical bumper			Lidar
	6.7	Pallet in-place detection switch			Front + two sides

Material Handling to Material Moving

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