J-ELEPHANT

J-ELEPHANT Fork Robot

AUTO-WAREHOUSE , LET IT SIMPLE



Contact Us

www.jelep.com

010-62998908 sales@jelep.com

Room 1401, Tower A,
12 Yumin Rd, Chaoyang District, Beijing, China

Beijing J-Elephant Technology Co., Ltd.

ABOUT J-ELEPHANT

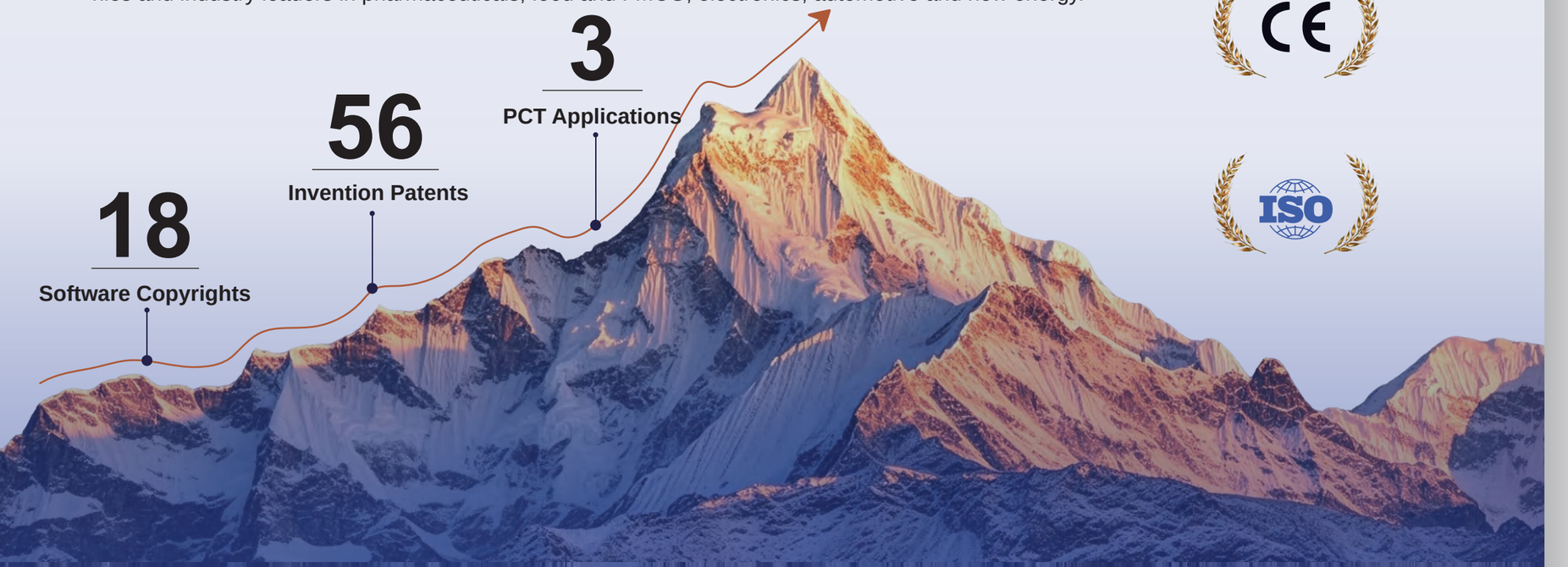
J-ELEPHANT develops physical intelligence robots for warehousing and manufacturing.

Focused on pallet storage and transfer, we combine a native robotic chassis, multi-form fork robots and physical intelligence systems. From single-pallet autonomy to system-wide coordination, we reshape logistics and make automated warehousing simpler. Our customers include Fortune Global 500 companies and industry leaders in pharmaceuticals, food and FMCG, electronics, automotive and new energy.

3
PCT Applications

56
Invention Patents

18
Software Copyrights





CONTENTS

03 / NATIVE CHASSIS

05 / PRODUCT FAMILY

11 / SOLUTION

15 / CUSTOMER CASE

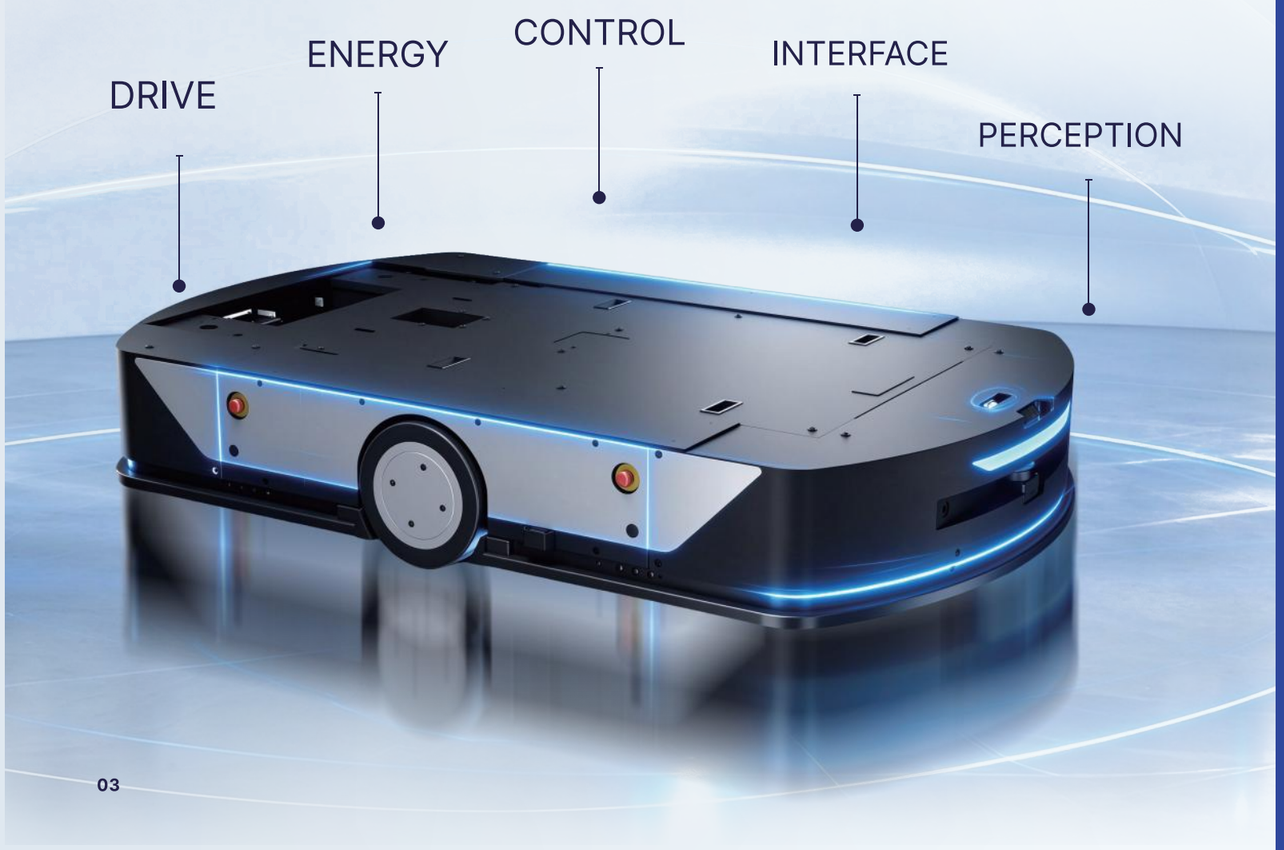
Native by Design.
Shaping the Future.

J-ELEPHANT Fork Robot

A new generation of native fork robots, built by J-ELEPHANT from first principles.

Breaking with conventional forklift architecture, J-ELEPHANT integrates drive, energy, control, perception and standard interfaces into one robotic chassis. The “robotic chassis + multi-form fork robot” architecture underpins the E, FK and RS Series, spanning pallet transport, low- and mid-level handling, and high-bay dense storage. This shared platform unifies interfaces and fleet scheduling, enables flexible combinations and improves investment efficiency—creating a new model for pallet logistics.

Native Chassis



Five Innovations

01 **Differential Drive**
Proven in Millions of AGVs · Stable Control

02 **Turning Diameter = Vehicle Length**
Proven in Millions of AGVs · Stable Control

03 **Integrated Load Geometry**
Isosceles-Triangle Stability · No Counterweight

04 **Unified Chassis Architecture**
Shared Architecture · Less Heterogeneity

05 **Unified Perception, Control & Interfaces**
One Robot Architecture · Smoother Fleet Scheduling

Shared DNA

Chassis Standards • **Module Standards**

Software Standards • **Delivery Standards**

Product Family

One Native Chassis. Three Series.

For Diverse Storage and Handling Needs.

Original Design
IP Protection

FK SERIES

Drive-In Racking · No Capacity Loss on Lift


JE-FK-Omni


JE-FK-25


JE-FK-36


JE-FK-46


JE-FK-65


JE-FK-65W


JE-FK-80

Low- and mid-level pallet storage and retrieval, with dense storage for better space utilization.

RS SERIES

High-Bay Storage · Narrow Aisles · Two-Way Handling


JE-RS-110

Efficient access to very high pallet positions, extending the height limits of dense storage.

E SERIES

Compact · Accessible · Agile

Agile, efficient floor-level pallet transport for diverse industrial production settings.


JE-1200E


JE-800E

Lean Structure. Rethought Mechanics.

01 | Isosceles-Triangle Stability



The forks stay within the chassis footprint. The load and center of motion form a stable isosceles triangle.

02 | Compact Structure



Designed for autonomy, the load and chassis form a more compact load-bearing structure.

03 | Better Space Utilization

Zero-radius turning: less space to turn.



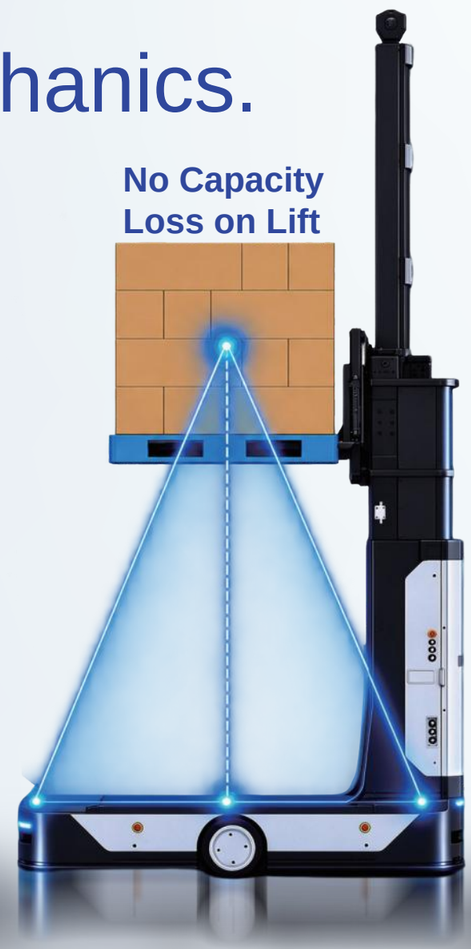
Narrow-aisle operation: 30–40% less aisle width.



Vertical space utilization: more storage within the same footprint.



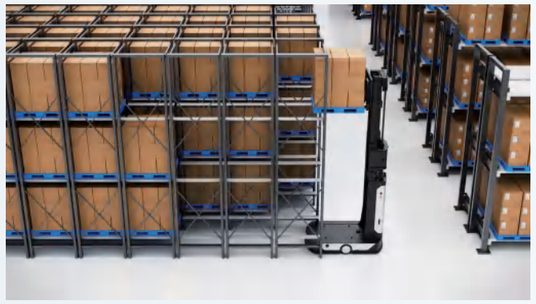
No Capacity Loss on Lift



FK Series

Developed in-house for pallet handling and storage, FK robots fit racking systems below 10 m, combining stable loads, agile turning and efficient access.

Racking Compatibility



Drive-In Racking



Selective Pallet Racking

One Robot. Multiple Racking Types.

Versatile Applications

2.2–8m Lift Range

Flexible lift heights for different warehouses and racking.

Fits 90% of Common Industrial Pallets

Supports multiple sizes of three-runner an perimeter-base pallets.



Technical Parameters

01. Pallet Compatibility

Model	JE-FK-Omni	JE-FK-25	JE-FK-36	JE-FK-46	JE-FK-65W	JE-FK-65	JE-FK-80
Navigation	QR Code	QR Code	QR Code	QR Code	QR Code	QR Code	QR Code
Max.Travel Speed	1.2m/s	1.5m/s	1.2m/s	1.2m/s	1.2m/s	1.2m/s	1.2m/s
Service Weight	1350kg	1300kg	1900kg	1950kg	3000kg	3200kg	4000kg
Max. Load	1000kg	1200kg (full lift range)	1200kg (full lift range)	1200kg (full lift range)	1200kg (full lift range)	1200kg (full lift range)	1200kg (full lift range)
Dimensions (L × W × H)	1555×1000×1725 (mm)	1650×800×2025 (mm)	1867×1000×2554 (mm)	1867×1000×2970 (mm)	2000×1230×2990 (mm)	2150×1000×3000 (mm)	2150×1230×3450 (mm)
Turning Mode	Omnidirectional	Zero-Radius Turning	Zero-Radius Turning	Zero-Radius Turning	Zero-Radius Turning	Zero-Radius Turning	Zero-Radius Turning
Min. Turning Diameter	1630mm	1650mm	1867mm	1867mm	2000mm	2150mm	2150mm
Min. Aisle Width	1750mm	1800mm	2100mm	2100mm	2200mm	2350mm	2350mm
Max. Lift Height	2200mm	2500mm	3600mm	4600mm	6500mm	6500mm	8000mm
Positioning Accuracy	±10mm	±10mm	±10mm	±10mm	±10mm	±10mm	±10mm
Battery Capacity	48V 100Ah	48V 60Ah	48V 105Ah	48V 105Ah	48V 150Ah	48V 150Ah	48V 230Ah
Battery Type	LFP	LFP	LFP	LFP	LFP	LFP	LFP
Charging	Manual / Automatic	Manual / Automatic	Manual / Automatic	Manual / Automatic	Manual / Automatic	Manual / Automatic	Manual / Automatic
Runtime	Approx. 10 h	Approx. 8 h	Approx. 8 h	Approx. 8 h	Approx. 8 h	Approx. 8 h	Approx. 8 h
Operating Temperature	0～45°C	0～45°C	0～45°C	0～45°C	0～45°C	0～45°C	0～45°C

02. Pallet Compatibility

Pallet Type	Pallet Material	Pallet Dimensions	Fork Entry Type	Entry Width	Entry Height	Vertical Clearance	Load Overhang	Load Support
	Wood, plastic	Width: 800–1200 mm; Length: 1100 / 1200 mm	Single / dual openings; any spacing	Opening ≥170 mm for 100 mm forks	≥85mm	100mm	≤20mm	Single ; paired pallets

RS SERIES

Developed in-house for high-bay dense storage, RS robots serve 1.8 m aisles and 12 m racking systems.



01
High-Bay Access

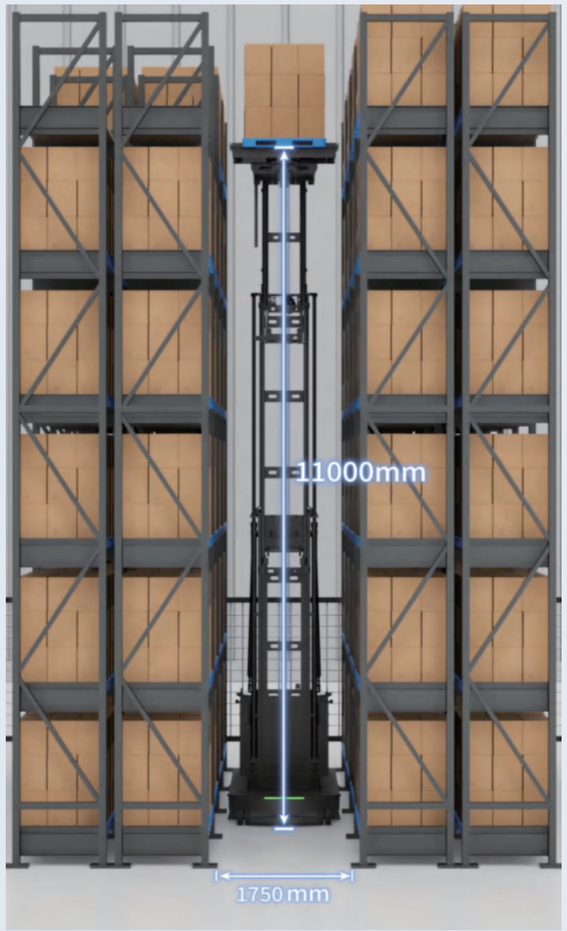
Up to 11 m lift for high-bay pallet storage.

02
Dense S torage

Min. racking aisle: 1.8 m.
Min. main aisle: 3.5 m

03
Two-Way Handling

Handle pallets at either end, serving both sides without leaving the aisle.



Model	JE-RS110-SXC
Navigation	QR Code
Max.Travel Speed	1.2m/s
Service Weight	9100kg
Max. Load	1200kg(≤7.5m) / 600kg(>7.5m)
Dimensions (L × W × H)	3300mm x 1570mm x 5020mm
Turning Mode	Zero-Radius Turning
Min. Turning Diameter	3300mm
Min. Aisle Width	1800mm
Max. Lift Height	11000mm
Positioning Accuracy	±10mm
Obstacle Detection	360°
Battery Capacity	48V 628Ah
Battery Type	LFP
Charging	Manual / Automatic
Runtime	Approx. 8 h
Operating Temperature	0~45°C

E SERIES

Developed in-house for industrial pallet transport, E robots offer agile movement and excellent accessibility.



01
Compact Pallet Handling

1:1.1 pallet-to-body ratio
1200 kg capacity

02
Agile Movement

Zero-radius turning
800–830 mm turning radius

03
Forward-Reaching Forks

Wheeled reach forks with flexible, decoupled lifting.

04
360° Perception

Diagonal dual LiDAR provides 360° coverage for safer operation.

05
JMS Coordination

In-house JMS enables flexible fleet scheduling and fully digital logistics data.

Model	JE-1200E	JE-800E
Navigation	QR Code + SLAM	QR Code + SLAM
Max.Travel Speed	1.5m/s	1.5m/s
Service Weight	430kg	400kg
Max. Load	1200kg	800kg
Dimensions (L × W × H)	1350mm × 1000mm × 371mm	1380mm × 936mm × 350mm
Turning Mode	Zero-Radius Turning	Zero-Radius Turning
Min. Turning Diameter	1660mm	1600mm
Min. Aisle Width	1800mm	1800mm
Max. Lift Height	400mm	400mm
Min. Fork Entry Height	86mm	95mm
Positioning Accuracy	±10mm(QR) / ±30mm(SLAM)	±10mm(QR) / ±30mm(SLAM)
Obstacle Detection	360°	360°
Battery Capacity	48V 40Ah	48V 40Ah
Battery Type	LFP	LFP
Charging	Manual / Automatic	Manual / Automatic
Runtime	Approx. 8 h	Approx. 8 h
Operating Temperature	0~45°C	0~45°C



HERO CASE 01

8m Mixed-Racking Warehouse

World-First Mixed-Racking Deployment



Racking Storage Cases

Customer Type	Application	Solution Configuration	Project Benefits
A Leading Global Chemical Company	Raw Material Warehouse Automation	JE-FK-80 + JE-FK-46 + Drive-In Racking	Storage Capacity +60% Handling Efficiency +30%
A Global Leader in Water Purification Equipment	8 m High-Bay Finished Goods Storage	JE-FK-65 + Drive-In Racking	Large-Scale Fleet Scheduling Automated Storage & Retrieval Storage Capacity ×1.5
Pharmaceutical Company	Raw Material Warehouse Automation	JE-FK-46 + JE-1200E + Drive-In Racking	Storage Capacity +45% Handling Efficiency +40%
Rail Transit Equipment Company	8 m High-Bay Storage for Semi-Finished Goods & Raw Materials	FK Series Robots + High-Bay Racking	Automated Storage & Retrieval Handling Efficiency +70%
Instrumentation Company	8 m High-Bay Storage for Raw Materials & Parts	FK Series Robots + Distributed Racking	Storage Capacity ×3 Logistics Efficiency +35%
New Energy Company	Line-Side Racking for Semi-Finished Goods	JE-FK-25 + Human–Robot Collaboration	Ultra-High-Precision Storage & Retrieval Automated Transport
Automotive Parts Company	Parts Racking Storage	JE-FK-65 + Human–Robot Collaboration	Storage Capacity +60% Logistics Efficiency +35%

HERO CASE 02

10m Automotive Parts Warehouse

Flexible Automotive Storage
Unlock vertical space for more storage and a more responsive supply chain.







Horizontal Handling

Customer Type	Application	Solution Configuration	Project Benefits
HW Core Smart Manufacturing Plant	Production Logistics	JE-800E	Fleet Scheduling for Nearly 50 Robots 2 Million+ km of Continuous Operation
Well-Known Drinking Water Group	Finished Goods & Packaging Material Transfer	JE-1200E	Operation on Steel Platforms Mixed Human–Robot Operations
Global Food Company	Production Logistics	JE-1200E	Automated Transport Coordination Across Equipment
A Leading Global Pharmaceutical Company	Production Logistics	JE-1200E	Production Logistics Automation Efficiency +50%
Automotive Parts Company	Production Logistics	JE-1200E	Transport Across Floors & Buildings Pallet-to-Person Delivery
Medical Device Company	Production Logistics	JE-1200E + Conveyor Line	Logistics Across Floors 1–3 Efficiency +30%
Rail Transit Parts Company	Dense Floor-Stacked Pallet Handling	JE-1200E	Human–Robot Collaboration Long-Distance Transport Across Zones