# Intelligent Four-way Shuttle

Density Storage Solution
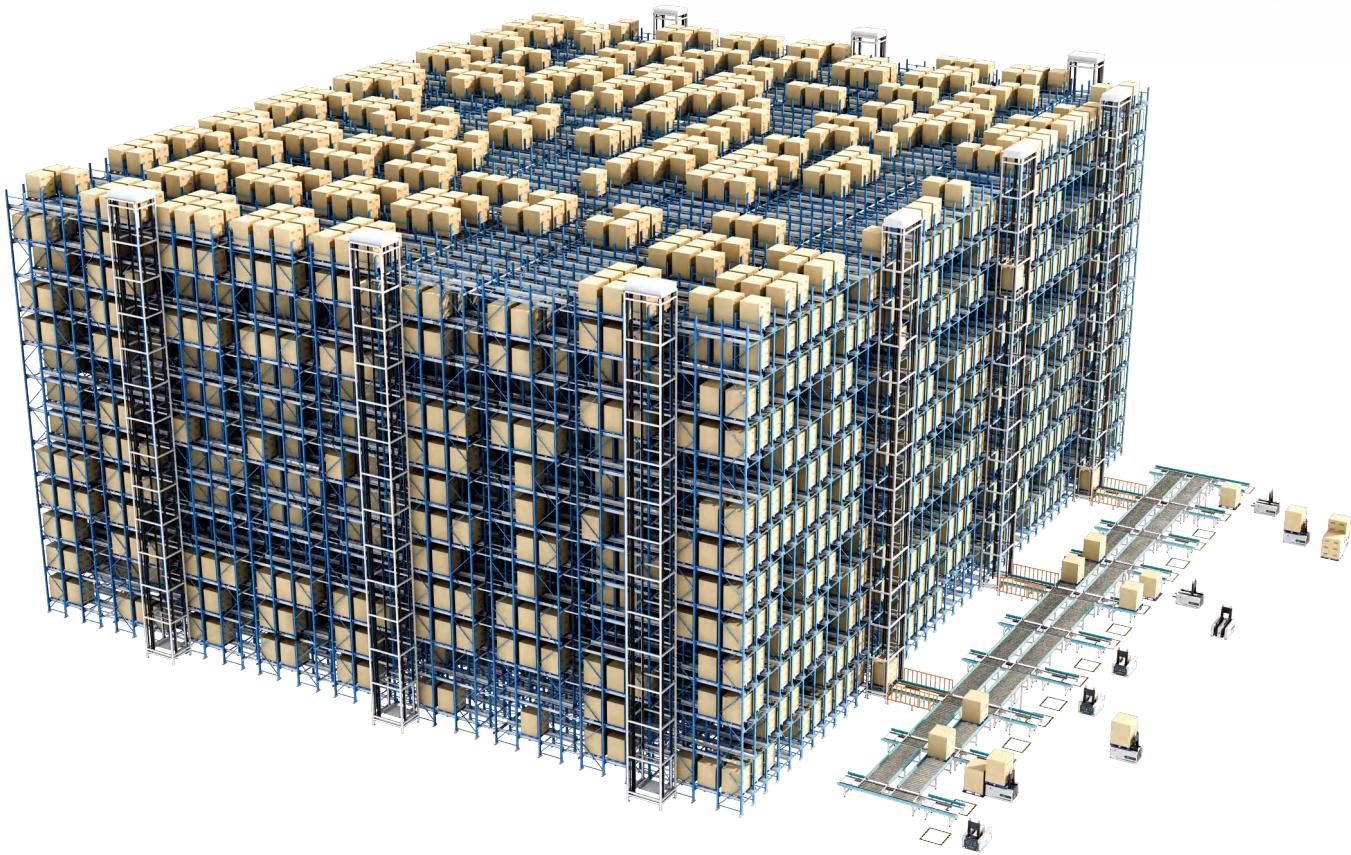
Intelligent four-way shuttle customizable solution

The intelligent four-way shuttle is a warehousing robotic equipment developed for the intensive storage of stereoscopic warehouse. It can operate in four directions automatically and has cluster scheduling and automatic charging functions. It is able to cooperate with other equipment such as elevators and conveyor lines. It can combine with RCS, WCS, WMS and other software systems to be used in a fully automatic stereoscopic warehouse, which is applicable in dense storage scenarios in industries such as food, medicine, automobiles, and new energy.

Advantages of the product

Precise and Efficient

Driving and Positioning Accuracy within ±2mm
Operational Speed reaches 2m/s

Stable Operation, Flexible Movement

Four-way operation, Cargo in-situ horizontal reversol
Suitable for a variety of complex scenes

High Density Storage

Multi-depth Dense Storage
3-4 Times More Storage Capacity than Usual
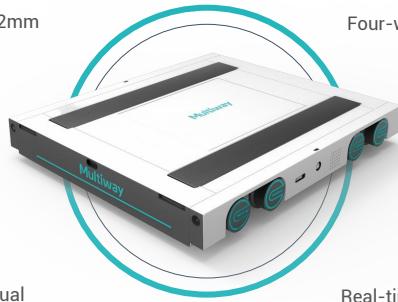
Smart Dispatching

Cloud Dispatching, Path Optimization
Real-time and efficient scheduling of multiple vehicles

Visual Protection

Through real-time perception of the environment, detecting cargo over-loading, avoiding the risk of cargo overturning
Detecting the falling of load, real-time video stream transmission terminal, manual judgment and processing in time, ensuring operation efficiency and safety
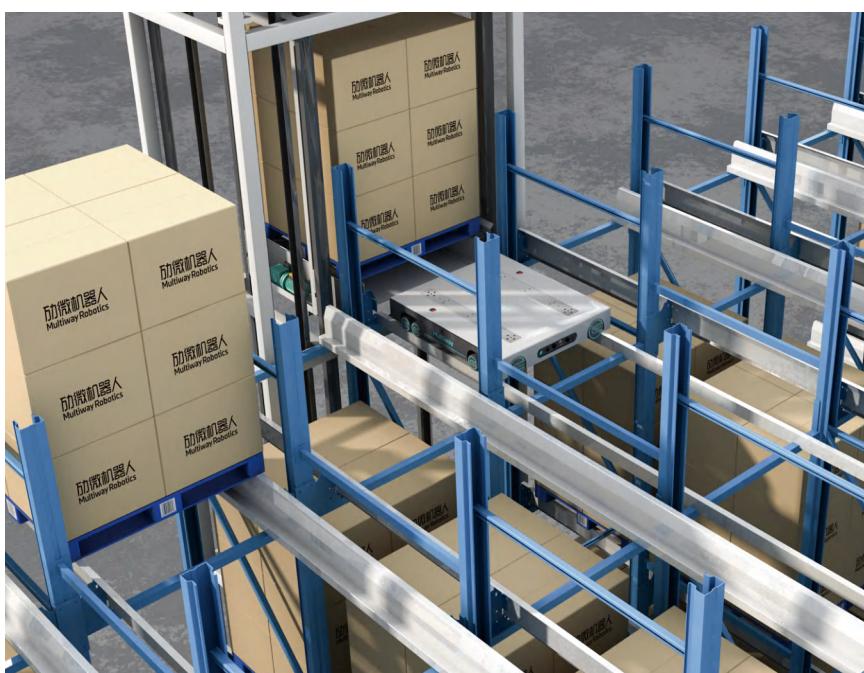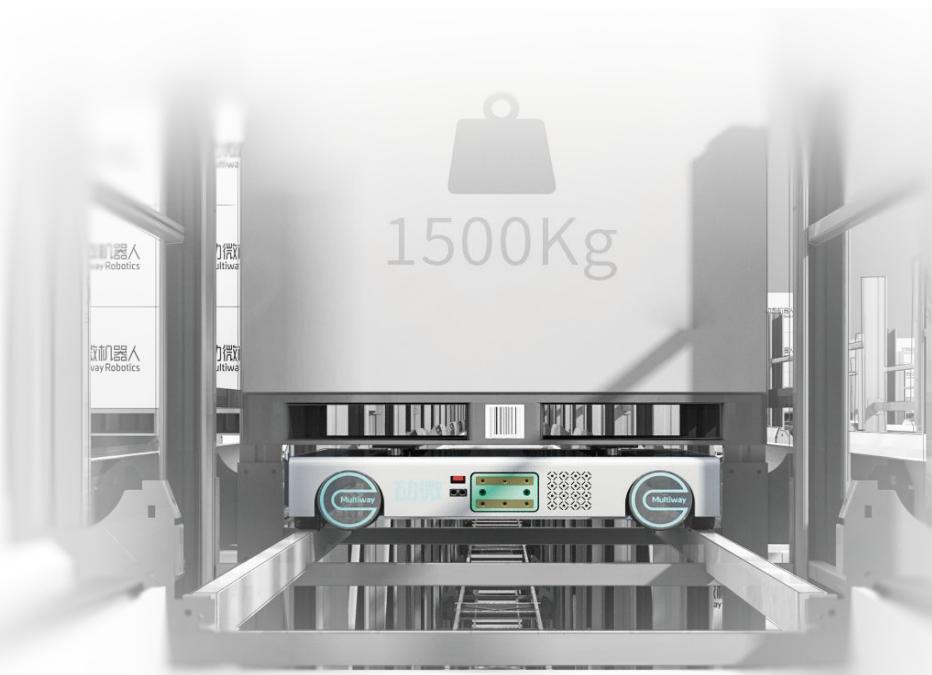
Product Specifications

Basic Parameter	Model	Z15
	Dimensions	1300x980x136mm
	Rated Load	1500kg
	Pallet Width	1200-1300mm
	Pallet Height	1000-1300mm
	Jacking Height	42mm
	Weight	400kg
	Temp. Environment	-5℃~45℃
Movement Specifications	Control Mode	Manual/Auto
	Driving Features	Four-way
	Jacking Method	Hydraulic Lifting (Mechanical Lifting)
	Drive Method	Hydraulic Drive (Servo Drive)
	Max Driving Speed	1.5m/s
	Positioning Accuracy	±2mm
	Jacking Time	4s
	Motion Noise Level（>1m）	≤75dB
Battery Specifications	Battery Type (Standard)	Lithium Iron Phosphate
	Standard Capacity	48V/40Ah
	Run time	6~8h
	Charging Mode	Auto/Manual
Safety Protection	Positioning Fault Protection	●
	Component Fault Protection	●
	Anti-Collision Detection	●

● Standard   The dimensions can be customized to satisfy project requirement

System functions

Change Direction in Place	Multi-shuttle Scheduling	Intelligent Dynamic Management
Route Planning	Drop Detection	Overload Detection
Temperature Detection	Modular Configuration	Safety System
Standard Port Interface	Free Combination of Storage Space	Automatic Charging

Multiway Robotics

Multiway Robotics, a leading intelligent intralogistics solution provider, is dedicated to improve intralogistics efficiency, ensure work safety and reduce labor operational cost.

Global Presence: The headquarters is located in Shenzhen, China, with production facilities in Zhejiang. Multiway has also established subsidiaries in the United States, Germany, Japan, South Korea, and more, extending business, operations, and services to 30+ countries and regions worldwide.

Our Expertise: Focusing on advanced robotics and AI technology, Multiway Robotics is committed to delivering cutting-edge Smart Intralogistics Solution to our customers. Multiway offers a comprehensive, integrated innovation delivery platform and solutions, ranging from core sensors and algorithms to self-developed unmanned forklifts and upper-level control systems. Hardware products include a full range of unmanned forklifts and four-way shuttle, while software systems encompass Multiway Cloud, WMS, RCS, WCS, on-site management systems, and various visual solutions.

Software： WMS, RCS, WCS, Multiway Cloud, Horizons, Simulation

Hardware: AGV forklifts, AGV Tugger, AMR & Four-way Shuttle

After successfully delivering numerous benchmark projects in industries such as factories, warehousing, and logistics, Multiway has become a trusted and ongoing collaborative partner for many industry-leading customers.

Contact Us

Offices:
USA · Atlanta | Japan · Tokyo | Korea · Seoul
Germany · Duisburg
China · Shenzhen

Hotline: + 86 400-8765-081

Official website: www.mw-r.com

Email: sales@mw-robot.com

Subscribe to get the latest Multiway Robotics news

Multiway Robotics | | Search