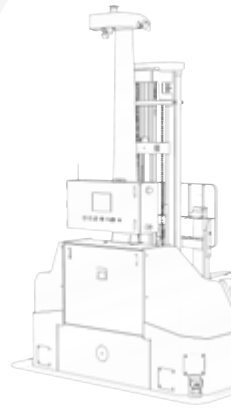
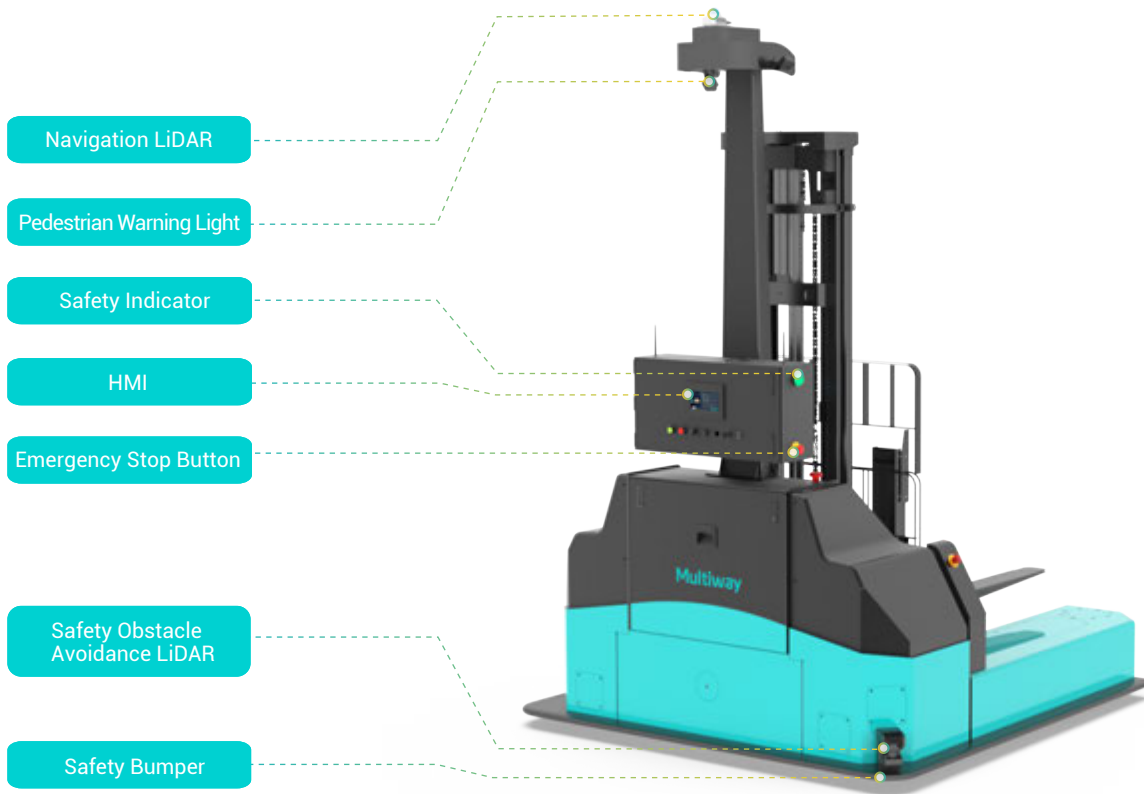


O Series

Sideloader Unmanned Forklift Truck

015/020/030





Introduction

Sideloader Forklift MW-O Series is widely used in ground handling and high-position loading/unloading in multiple scenarios, like high-density and VNA (Very Narrow Aisle) storage. Its biggest feature is that the fork extends from the side, and allows barrier-free operation in very narrow aisle, maximizing aisle space savings. With a load capacity of up to 3000 kg, a lifting height of up to 4500 mm, high precision of $\pm 10\text{mm}$, MW-O Series can ensure the safety and stability of high-position stacking and loading/unloading, greatly improves the storage capacity rate.

Features



Environment Adaptive

With laser navigation and positioning, there's no need to renovate the on-site environment



Highly Intelligent

A whole range of functions such as mapping, path planning, auto-charging, and intelligent operations for various scenarios.



Dense Storage

The narrowest roadway is only 2.3 meters



Intelligent Safety

Comprehensive fault self-detection
360° obstacle avoidance and sound & light warning

Scenarios



Long materials handling

Suitable for handling and stacking long volume materials such as metal, steel, pipe, wood, etc. Effectively avoid the problem of space occupation by using ordinary forklifts.



Automatic (un)loading

Compatible multiple models (wing door, flat door). Compatible with multiple sizes of cargo (automatic allocation).



Narrow roadway handling

MW-O Series is widely used in ground handling and high-position loading/unloading in multiple scenarios, such as high-density and VNA (Very Narrow Aisle) storage.



Large tonnage material handling

Its biggest feature is that the fork extends from the side, and allows barrier-free operation in very narrow aisle, maximizing aisle space savings; With a load capacity of up to 3000 kg, a lifting height of up to 8000 mm, greatly improves the storage capacity rate.

O Series

O15/O20/O30
Sideloader Unmanned
Forklift Truck

Specifications

Basic Parameter	Model	O15	O20	O30
	Navigation	LiDAR Navigation / Sky Navigation / Mixed Navigation		
	Communication	Wi-Fi / 5G / Optical Communication		
	Driving Features	Forward, Reverse, and Turn		
	Control Mode	Auto/Manual		
	Rated Load Q (kg)	1500	2000	3000
	Load Center C (mm)		500	
	Weight (Including battery) (kg)	2200~2400	2960~3160	4770~5120
	Turning Radius Wa (mm)	1075	1530	1650
	Aisle Width (mm)	2300	2740	2830
	Maximum Lifting Height (mm)	4500	5000	8000
	Dimensions L×W×H (mm)	1850x1580x (2350~2980)	2380x2110x (2350~3444)	2470x2220x (2350~3562)
Movement Specifications	Fork Dimensions l×exs (mm)	1220x122x40	1220x125x45	1220x150x50
	Fork Outer Space b3 (mm)		600	
	Minimum Height of Fork From the Ground h6 (mm)	50±5	55±5	60±5
	Positioning precision/ Stop Angle (Center of bearing wheel) (mm/°)		±10/±1	
	Obstacle Clearing Capability		≤10	
	Climbing Capacity		≤3° (5%)	
	Cross-Groove Capability (mm)		≤30	
	Max Driving Speed (No Load/Full Load) (m/s)		1.38/1.5	
	Max Lifting Speed (No Load/Full Load) (mm/s)	140/100	100/65	220/200
	Max Descent Speed (No Load/Full Load) (mm/s)	95/100		200/260
Battery Specifications	Mast Forward speed (No Load/Full Load) (mm/s)	90/90		
	Max Climb Capability (No Load/Full Load) (S2-5min) % (tanθ)		≤5° 120/120	
	Battery Voltage/Capacity (V/Ah)	24V/200AH	24V/200AH	48V/300AH
	Charging Mode		Auto/Manual	
	Run time	6~8h		
	Battery Life	Complete charge-discharge 2500 times ≥70%		

Note: In the real-time update of product parameters, the above parameters are for reference only and shall prevail.

Attachment



Automatic distance adjustmentPitchTraverseOverweight alarm

Customize

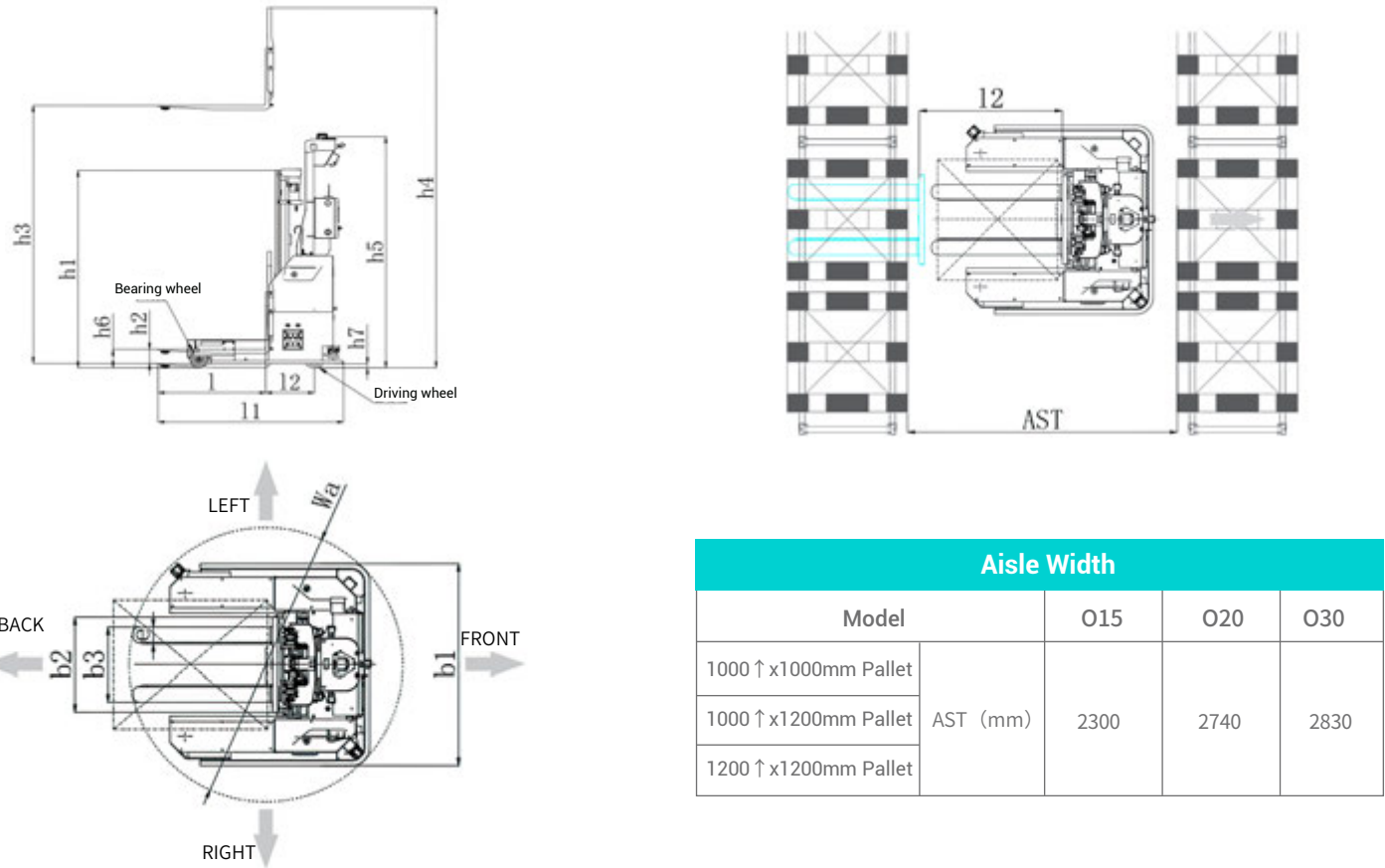


Explosion-proofCold chain

Carrier



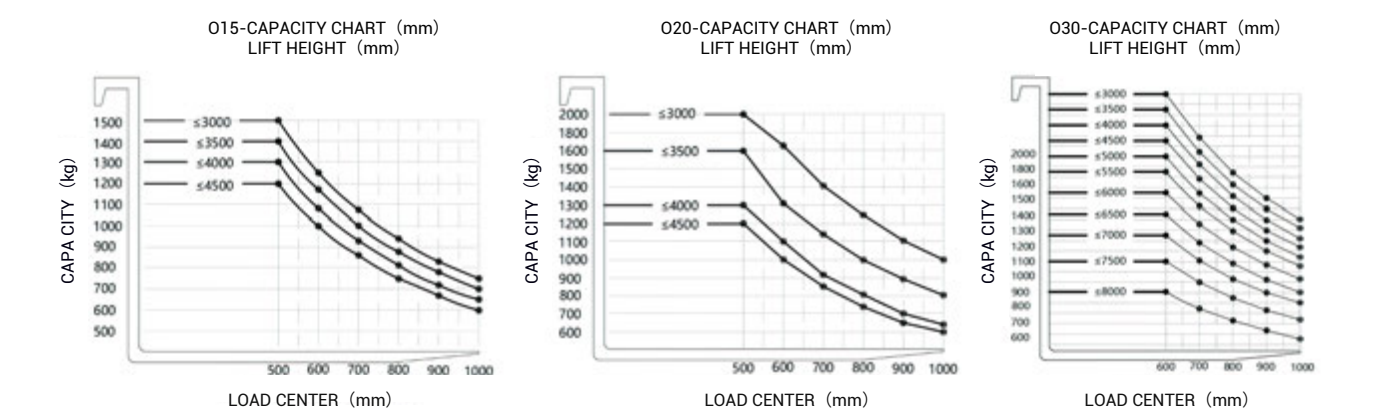
2-way pallet4-way palletCageCart



Mast Specification

Duplex Mast														
Model		O15/O20							O30					
Lifting height	h3 (mm)	2500	3000	3300	3500	3700	4000	4500	3000	3300	3500	3700	4000	4500
Mast closure height	h1 (mm)	1980	2230	2380	2480	2580	2730	2980	2750	2900	3000	3100	3250	3500
Mast height when lifting	h4 (mm)	3427	3927	4227	4427	4627	4927	5427	4200	4050	4550	4900	5200	5700
Free lifting height	h2 (mm)	0												

Load curve



Comprehensive safety protection:

Sound perception + obstacle avoidance + touch reception, 360° omnidirectional three-layer protection

Sensory Alerts

- Pedestrian Warning Light
- Sound & Light Warning

Contactless Protection

- 3*Three-layer Obstacle Avoidance (Forward, left, right)
- 1*Bottom Obstacle Avoidance LiDAR (Forward)
- 2*Bottom Obstacle Avoidance LiDAR (Backward)
- 2*Fork-tip Photoelectric Sensor

Contact Protection

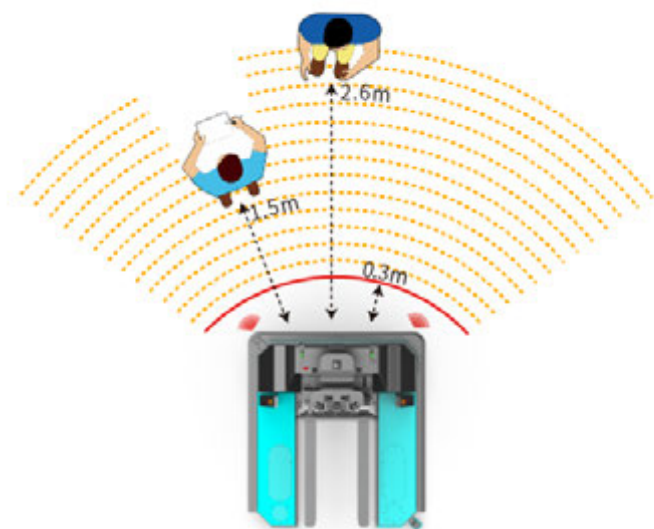
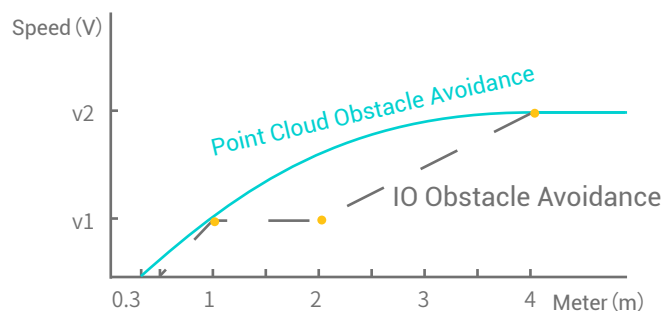
- Emergency Stop Button
- Safety Bumper

System Protection

- Path Deviation Protection
- Positioning Fault Protection
- Component Fault Protection
- Communication Fault Protection

Point Cloud Obstacle Avoidance:

The forward simulation algorithm can measure the distance to obstacles, autonomously plan the moving speed, ensure the vehicle accelerates and decelerates smoothly without sudden changes in speed.



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.



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