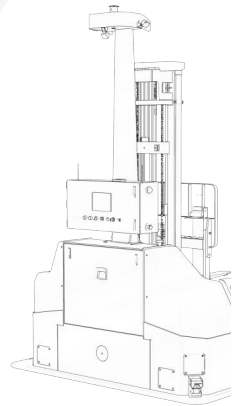


O Series

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.

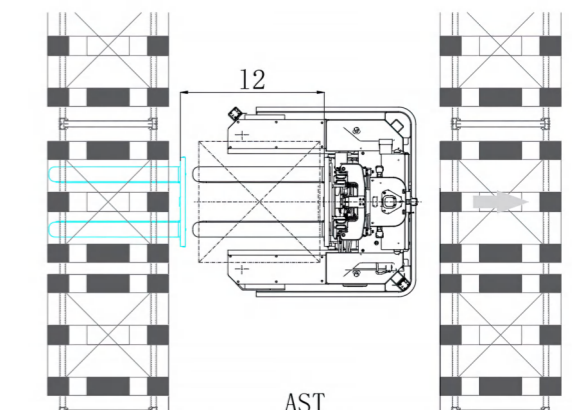
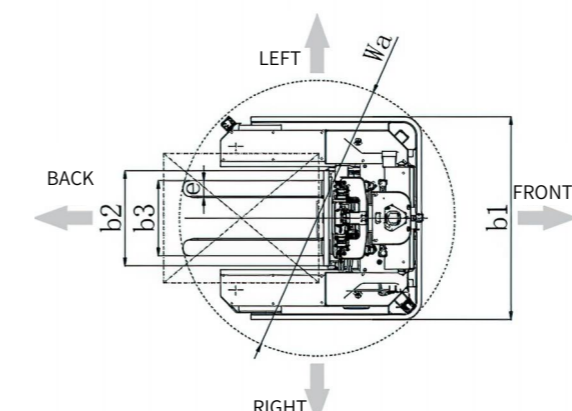
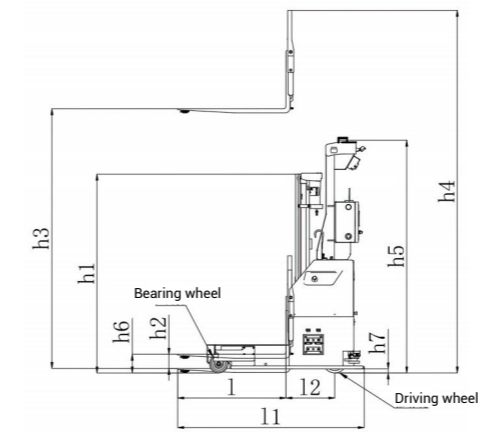
O Series

015/020/030
Sideloader Unmanned
Forklift Truck



Specifications

Model		O15	O20	O30
Navigation		Laser/ 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 W_a (mm)		1075	1530	1650
Aisle Width (mm)		2300	2740	2830
Maximum Lifting Height (mm)		4500	5000	8000
Dimensions LxWxH (mm)		1850x1580x (2350~2980)	2380x2110x (2350~3444)	2470x2220x (2350~3562)
Fork Dimensions lxexs (mm)		1070x122x40	1070x125x45	1220x150x50
Fork Rack Width b2 (mm)		745	850	1348
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)		100/140	65/100	200/220
Max Descent Speed (No Load/Full Load) (mm/s)			100/95	260/200
Mast Forward speed (No Load/Full Load) (mm/s)		90/90		120/120
Max Climb Capability (No Load/Full Load) (S2-5min) % (tanθ)			≤5°	
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%	



Aisle Width				
Model		O15	O20	O30
1000 ↑ x1000mm Pallet	AST (mm)	2300	2740	2830
1000 ↑ x1200mm Pallet				
1200 ↑ x1200mm Pallet				

Mast Specification

Duplex Mast														
Model		O15/O20							O30					
Lifting height	h_3 (mm)	2500	3000	3300	3500	3700	4000	4500	3000	3300	3500	3700	4000	4500
Mast closure height	h_1 (mm)	1980	2230	2380	2480	2580	2730	2980	2750	2900	3000	3100	3250	3500
Mast height when lifting	h_4 (mm)	3427	3927	4227	4427	4627	4927	5427	4200	4050	4550	4900	5200	5700
Free lifting height	h_2 (mm)	0												

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

Attachment

Automatic distance adjustment, Pitch, Traverse, Overweight alarm

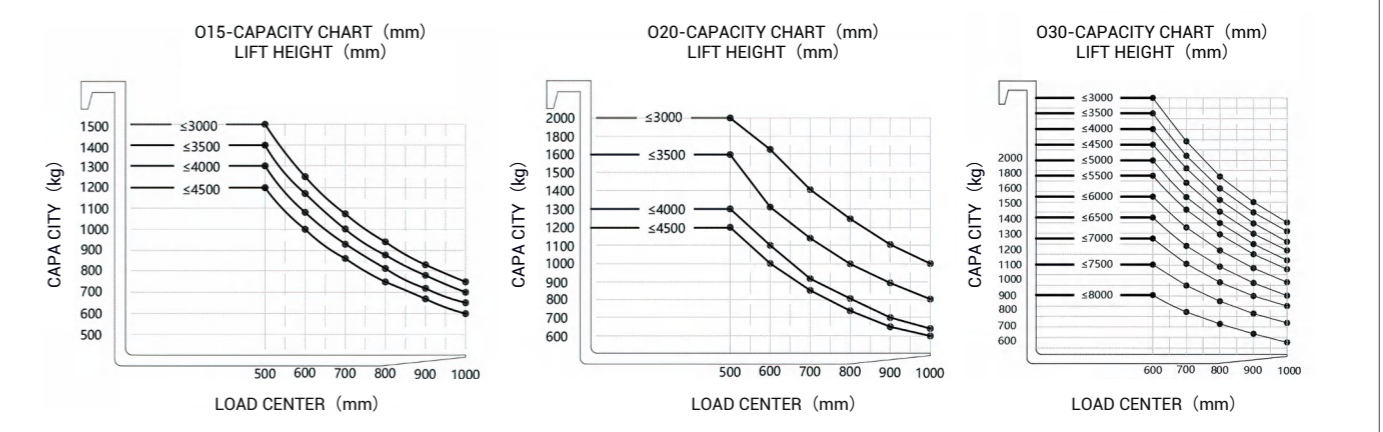
Customize

Explosion-proof, Cold chain

Carrier

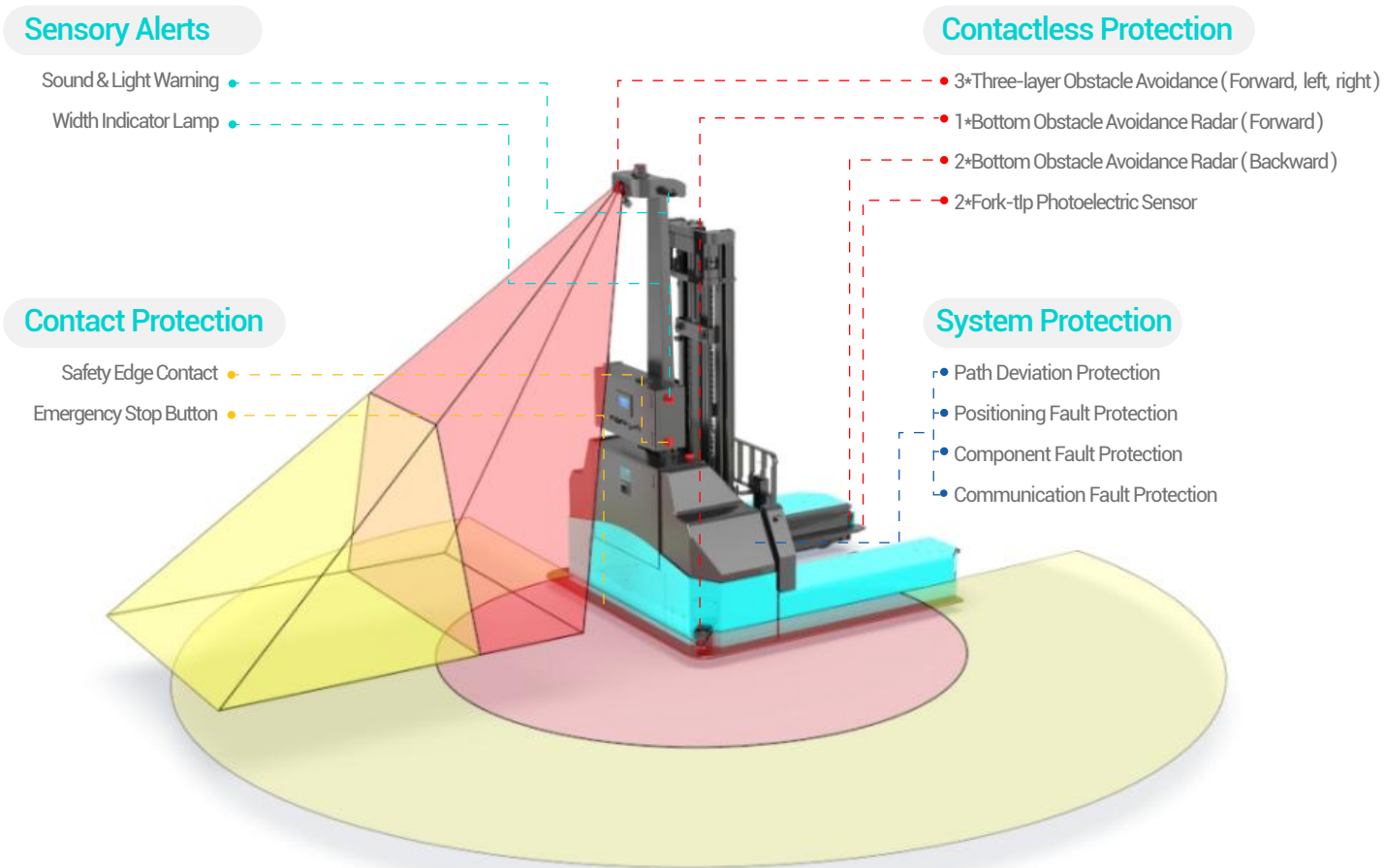
2-way pallet, 4-way pallet, Cage, Cart

Load curve



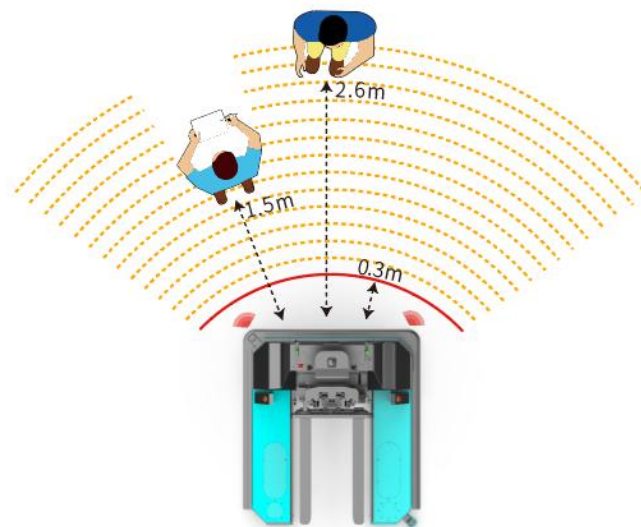
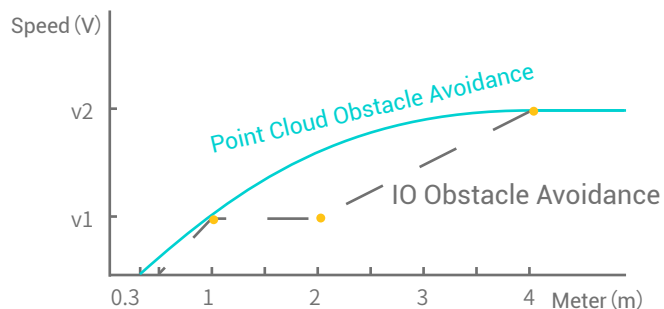
Comprehensive safety protection:

Sound perception + obstacle avoidance + touch reception, 360° omnidirectional three-layer 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, with the mission of "Establish a new and efficient employment mode", is dedicated to drive continuous upgrades in social productive forces.

Global headquarter and laboratory are located in Shenzhen, China, with production facilities in Hefei. Multiway has also established sub subsidiaries in the United States, Germany, Japan, South Korea, and more, extending business, operations, and services to 30+ countries and regions worldwide. Focusing on advanced robotics and AI technology, Multiway Robotics is committed to delivering cutting-edge intelligent manufacturing and smart logistics solutions 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.

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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