Multiway Robotics

SEseries

Counterbalanced Forklift

SE15/SE20/SE30





Introduction

Counterbalanced Forklift AGV SE series is applicable to automatic transfer and handling of goods on two-way or four-way entry pallets between different storage locations. With a load capacity of up to 3000 kg, a lifting height of up to 4500 mm, SE series features a fast driving speed, good climbing capability, and high load capacity. SE series is widely used in various scenarios including goods stacking, equipment docking, horizontal handling, high-level storage and auto truck loading/unloading.

Features



Environment Adaptive

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



Non-stop pallet pose identification

Visual perception non-stop pallet pose identification can realize fast and accurate pick-and-place of goods.



Highly Intelligent

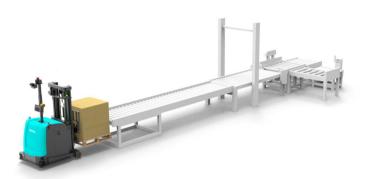
A whole range of functions such as mapping, path planning, auto-charging, and intelligent operations for various scenarios.



Intelligent Safety

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

Scenarios



Docking with Production Line

Efficient automatic transportation and turnover from the warehouse to the buffer area and production line zone.



Automatic (un)loading

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



Cage Stacking

The motion trajectory is dynamically constructed to achieve accurate stacking of up to 6 layers of material cages. It is also equipped with safety technology detection to ensure operating safety.



Intelligent handling

Load range between 1.5T to 3T, and the lifting height can reach 4.5m, which supports flexible handling in multiple scenarios such as line side warehouses, temporary storage areas, and ground storage warehouses.

Multiway Robotics leading intelligent intralogistics solution provider

SE Series SE15/SE20/SE30 Counterbalanced Forklift







Specifications

| <u></u> | | | | | | | |
|----------------------------|--|---|---|-----------------------|--|--|--|
| | Model | SE15 | SE20 | SE30 | | | |
| | Navigation | Laser/ Sky Navigation/ Mixed Navigation | | | | | |
| | Communication | Wi-Fi/ 5G/ Optical Communication | | | | | |
| | Driving Features | | Forward, Reverse, and Turr | 1 | | | |
| | Control Mode | Auto/Manual | | | | | |
| | Rated Load Q (kg) | 1500 | 2000 | 3000 | | | |
| | Load Center C (mm) | | 500 | | | | |
| Basic Parameter | Weight (Including battery) (kg) | 2800 | 3300 | 4700 | | | |
| Parameter | Turning Radius Wa (mm) | 1365 | 1800 | 1955 | | | |
| | Aisle Width (mm) | 3300 | 3800 | 3800 | | | |
| | Maximum Lifting Height (mm) | 3000 | 4500 | 4500 | | | |
| | Dimensions L×W×H (mm) | 2500x1145x(1950~2300) | 2950x1145x(1950~2820) | 3121x1488x(1950~2820) | | | |
| | Fork Dimensions Ixexs (mm) | 1070x122x40 | 1070x125x45 | 1220x150x50 | | | |
| | Fork Rack Width b2 (mm) | 750 | 964 | | | | |
| | Fork Outer Space b3 (mm) | 320/470/620 | | | | | |
| | Minimum Height of Fork From the Ground h6 (mm) | 50±5 | 60±5 | | | | |
| | Positioning precision/ Stop Angle (Center of bearing wheel) (mm/ | °) ±10/±1° | | | | | |
| | Obstacle Clearing Capability | ≤10 | | | | | |
| | Climbing Capacity | ≤3°(5%) | | | | | |
| Movement Specifications | Cross-Groove Capability (mm) | ≤30 | | | | | |
| opecifications | Max Driving Speed (No Load/Full Load) (m/s) | 1.5/1.38 | | | | | |
| | Max Lifting Speed (No Load/Full Load) (mm/s) | 150/100 | | | | | |
| | Max Descent Speed (No Load/Full Load) (mm/s) | 100/150-250 | | | | | |
| | Max Climb Capability (No Load/Full Load) (S2-5min) % (tanθ) | ≤3° | | | | | |
| Battery Specifications | Battery Voltage/Capacity (V/Ah) | 24V/200AH 48V/300AH | | | | | |
| | Charging Mode | Auto/Manual | | | | | |
| | Run time | 6~8h | | | | | |
| | Battery Life | Complete | 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.





Coil fixtures



















Carrier



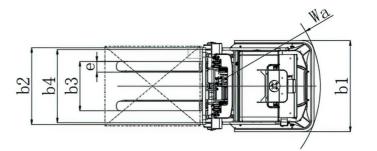


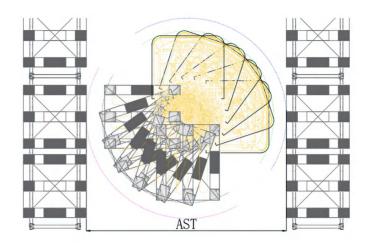


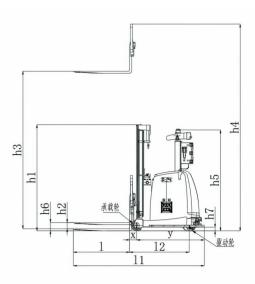








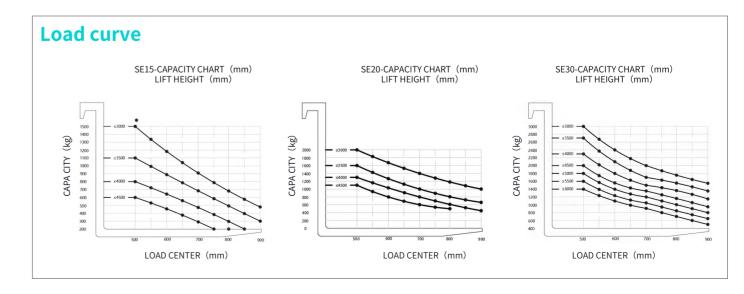




| Aisle Width | | | | | | | | |
|-----------------------|------------------------------|------|------|------|--|--|--|--|
| Model | | SE15 | SE20 | SE30 | | | | |
| 1000↑x1000mm Pallet | | 3150 | 3650 | 3900 | | | | |
| 1000 ↑ x1200mm Pallet | 00 ↑ x1200mm Pallet AST (mm) | | 3800 | 4000 | | | | |
| 1200 ↑ x1200mm Pallet | | 3350 | 3850 | 4100 | | | | |

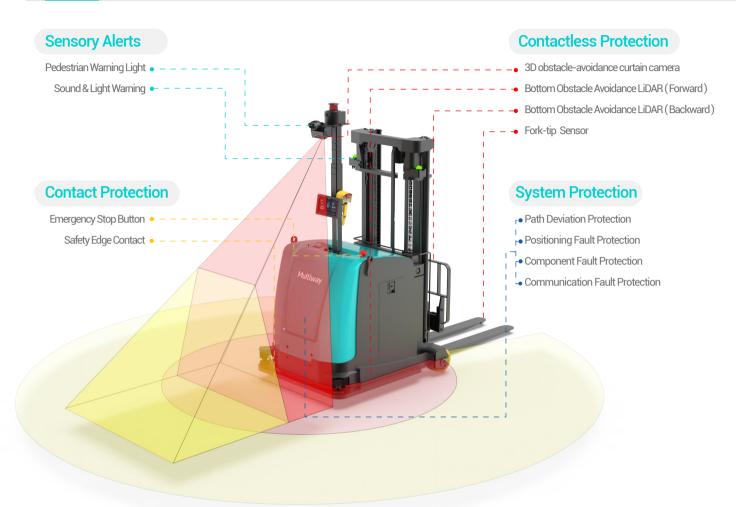
Mast Specification

| Duplex Mast | | | | | | | | | | | |
|--------------------------|------------|-----------|------|------|------|------|------|------|------|------|------|
| Model | | SE15/SE20 | | | | SE30 | | | | | |
| Lifting height | h3 (mm) | 2500 | 3000 | 3500 | 4000 | 4500 | 2500 | 3000 | 3500 | 4000 | 4500 |
| Mast closure height | h1 (mm) | 1770 | 2020 | 2270 | 2520 | 2770 | 1855 | 2105 | 2355 | 2605 | 2855 |
| Mast height when lifting | h4 (mm) | 3435 | 3935 | 4435 | 4935 | 5435 | 3550 | 4050 | 4550 | 5050 | 5550 |
| Free lifting height | h2 (mm) | | | | | 125 | | | | | |



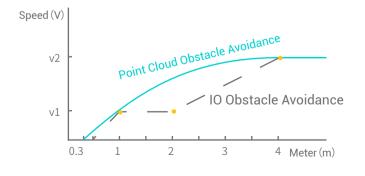
Comprehensive safety protection:

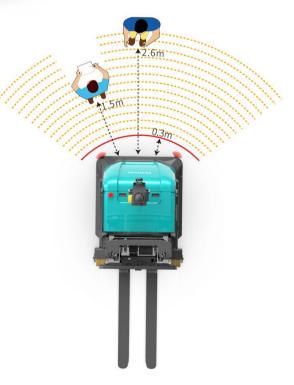
Sound perception + obstacle avoidance + touch reception, 360° omnidirectional three-layer protection



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 sidiaries 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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