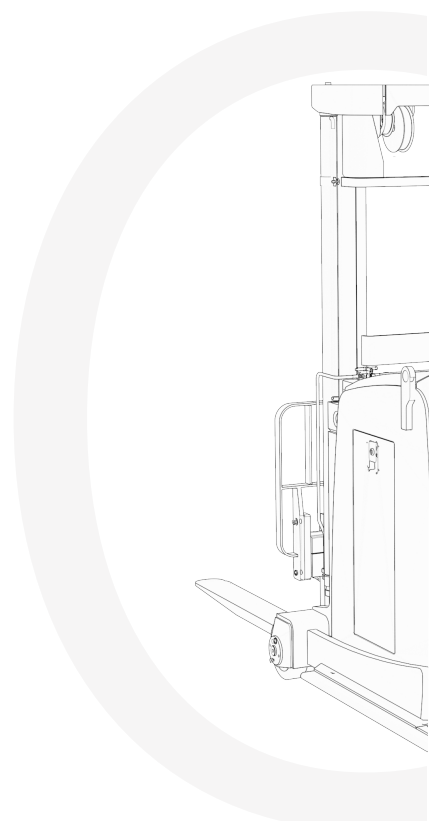
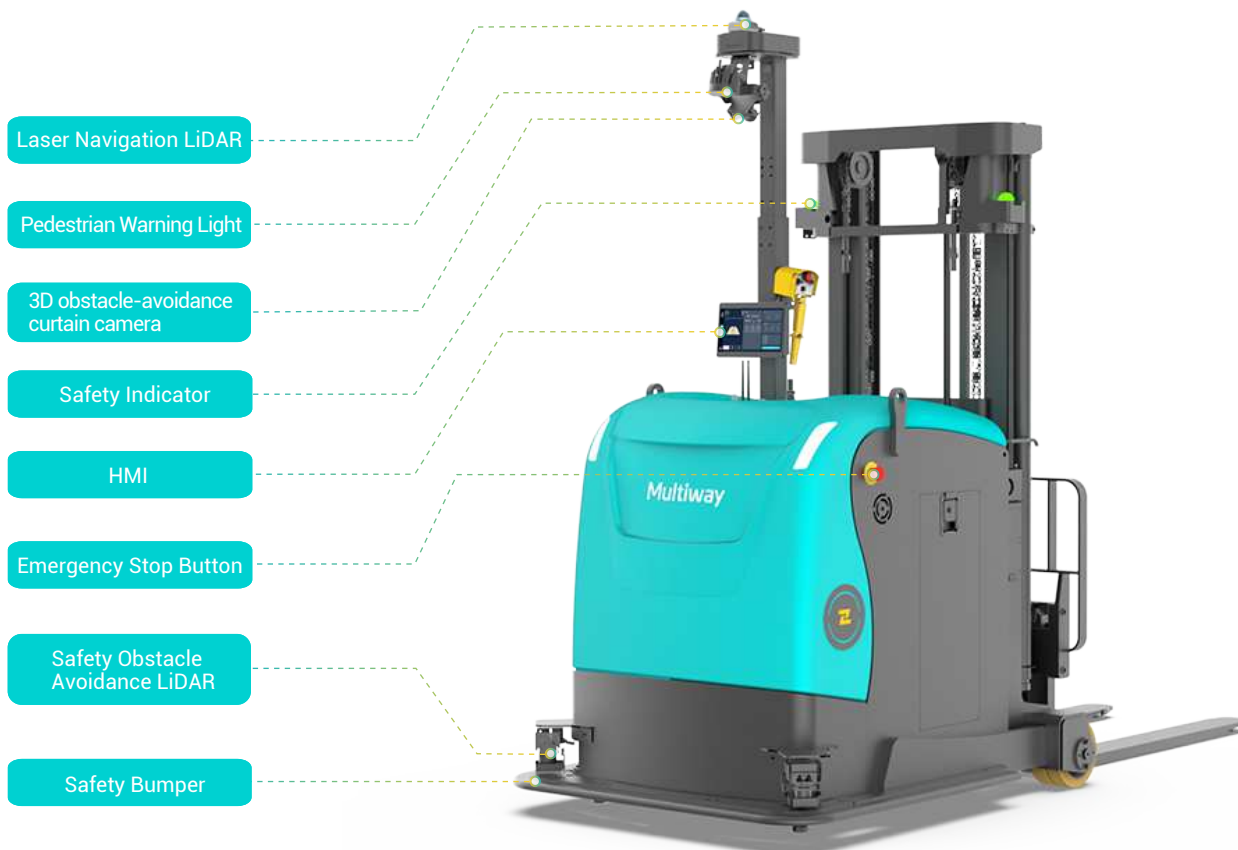


# SE Series

## 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.



### Highly Intelligent

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



### Non-stop pallet pose identification

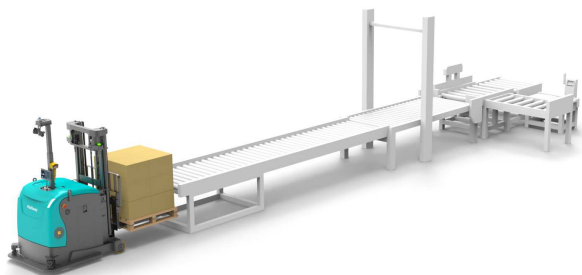
Visual perception non-stop pallet pose identification can realize fast and accurate pick-and-place of goods.



### 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.

# SE Series

SE15/SE20/SE30 Counterbalanced Forklift



## Specifications

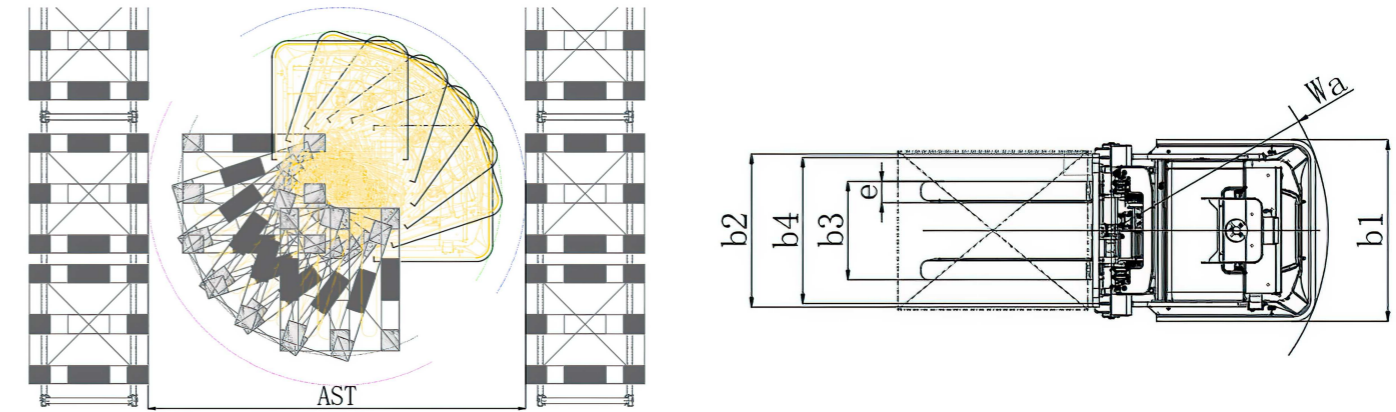
| Model  | SE15   | SE20                  | SE30                  |
|--|--|-----------------------|-----------------------|
| Navigation   | LiDAR Navigation / Sky Navigation / Mixed Navigation |                       |                       |
| Communication  | Wi-Fi / 5G / Optical Communication                   |                       |                       |
| 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)                                    | 2800   | 3300                  | 4700                  |
| Turning Radius Wa (mm)   | 1386   | 1800                  | 1955                  |
| Aisle Width (mm)   | 3300   | 3800                  | 3800                  |
| Maximum Lifting Height (mm)  | 2512x1144x(1950~2300)                                | 4500                  | 4500                  |
| Dimensions LxWxH (mm)  | 1070x122x40  | 2950x1145x(1950~2820) | 3121x1488x(1950~2820) |
| Fork Dimensions l x e x s (mm)                                     |  | 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%)               |                       |
| Cross-Groove Capability (mm)                                       |  | ≤30                   |                       |
| 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 Voltage/Capacity (V/Ah)                                    | 24V/200AH  |                       | 48V/300AH             |
| Charging Mode  | Auto/Manual  |                       |                       |
| Run time   | 6~8h   |                       |                       |
| Battery Life   | Complete charge-discharge 2500 times ≥70%            |                       |                       |

Basic Parameter

Movement Specifications

Battery Specifications

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

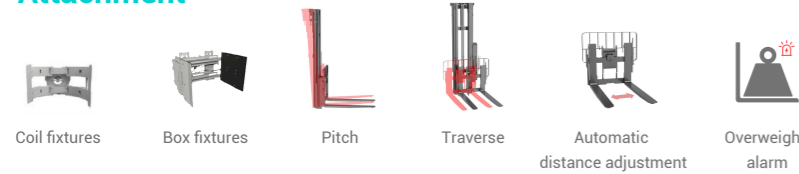


| Aisle Width            |          |      |      |      |
|------------------------|----------|------|------|------|
| Model                  |          | SE15 | SE20 | SE30 |
| 1000 ↑ x 1000mm Pallet | AST (mm) | 3150 | 3650 | 3900 |
| 1000 ↑ x 1200mm Pallet |          | 3300 | 3800 | 4000 |
| 1200 ↑ x 1200mm 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       |      |      |      |      |      |      |      |      |      |

### Attachment



### Customize

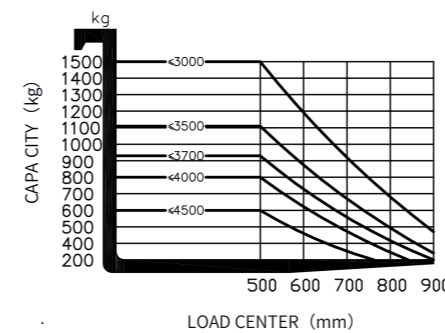


### Carrier

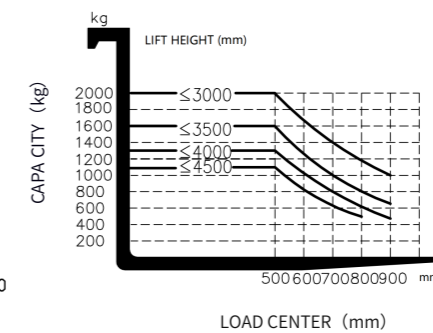


## Load curve

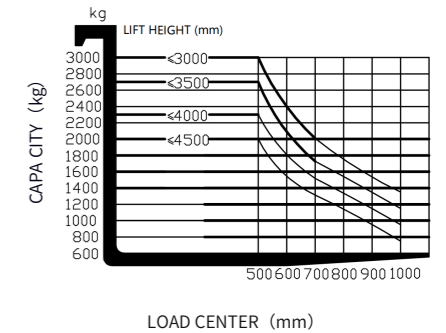
SE15-CAPACITY CHART (mm) LIFT HEIGHT (mm)



SE20-CAPACITY CHART (mm) LIFT HEIGHT (mm)

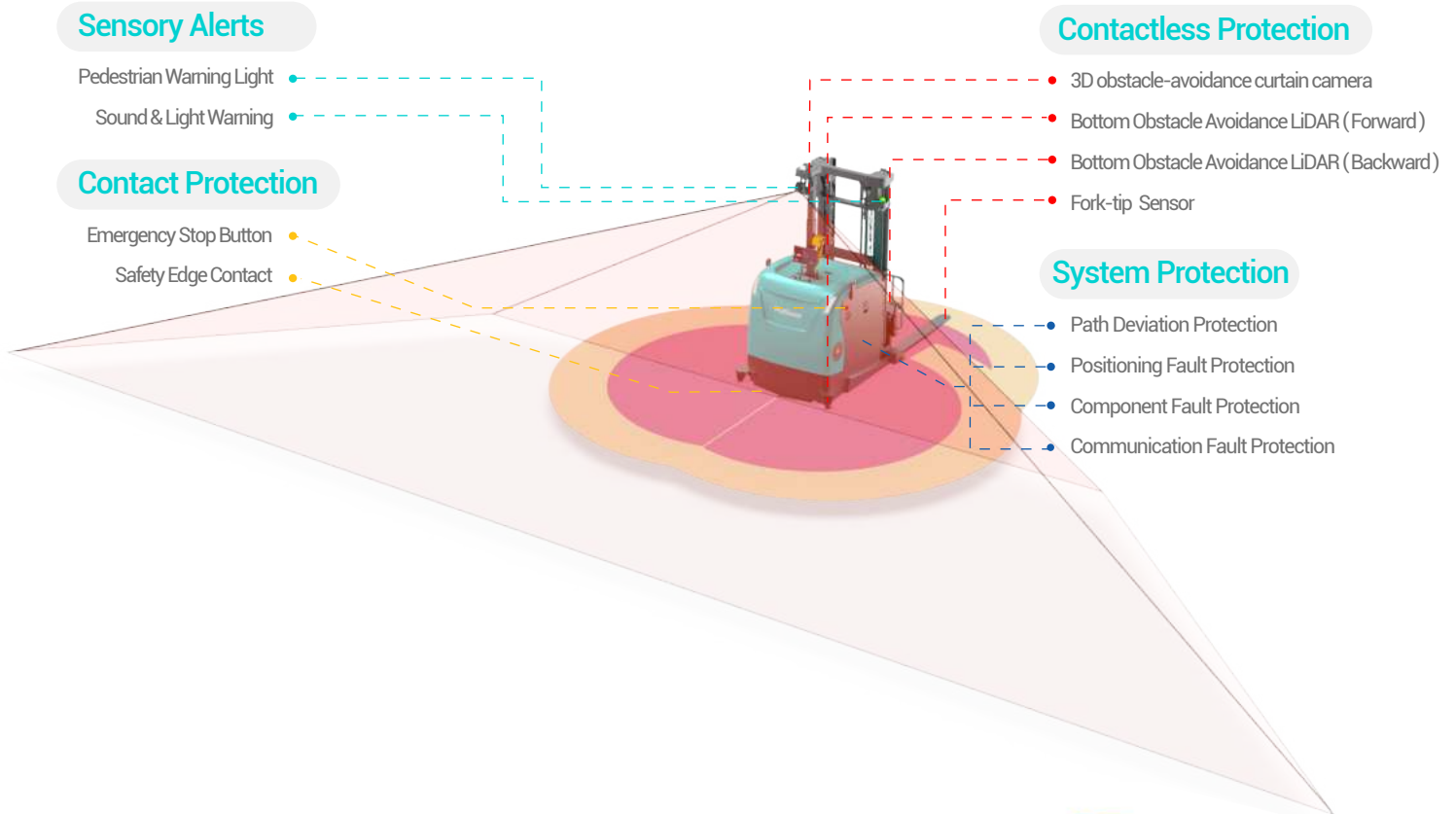


SE30-CAPACITY CHART (mm) LIFT HEIGHT (mm)



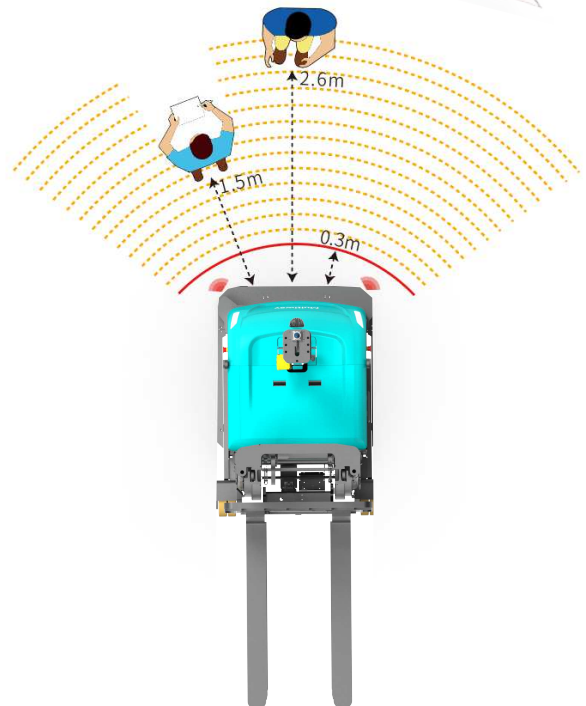
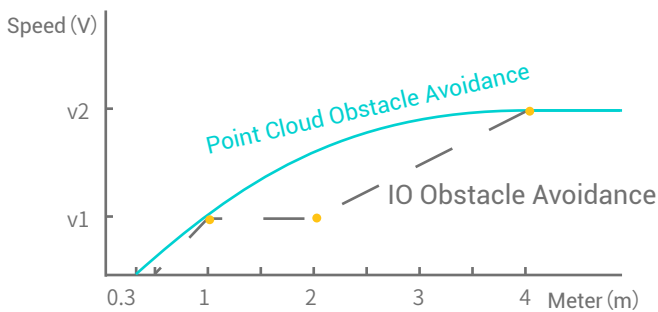
# Comprehensive safety protection:

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

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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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