

Laser SLAM Counterbalanced Autonomous Forklift

SFL-CPD20-Y

Compact in Size, yet Capable of Carrying 2 T Load



Ultrasonic Detection, Safe Stacking

Ultrasonic technology detects the separation status between goods and forks in real-time, ensuring safe and secure stacking.



Adjust Fork Width for Different Carriers

Manually adjustable fork width ranges from 250 mm to 700 mm, making it suitable for multiple types of carriers. Our forklift can accurately recognize pallets, shelves and cages of different sizes and types.



1180 mm Narrow AMR Width, 2 T High Load Capacity

With the AMR width of only 1180 mm and a minimum turning radius of 1577 mm, our robot boasts a remarkable load capacity of 2 T. Standing at a standard height of 3 m, it can even be customized to 4 m.



40 m Detection Range, 4-layer Safety Protection

The 40 m detection range provides a broader vision and enhanced safety. Equipped with 3D obstacle avoidance laser, safety edge sensor, distance sensor and hardware self-checks, our robot offers you unparalleled 4-layer safety protection.



Battery Replacement in 2 Minutes, Fast Charging in 2 Hours

Empower beginners to effortlessly replace the battery in 2 minutes, ensuring worry-free endurance. Equipped with 24 V / 200 Ah battery, it guarantees an impressive 6-hour long endurance. Moreover, the 24 V fast charging station can fully charge the robot in just 2 hours.

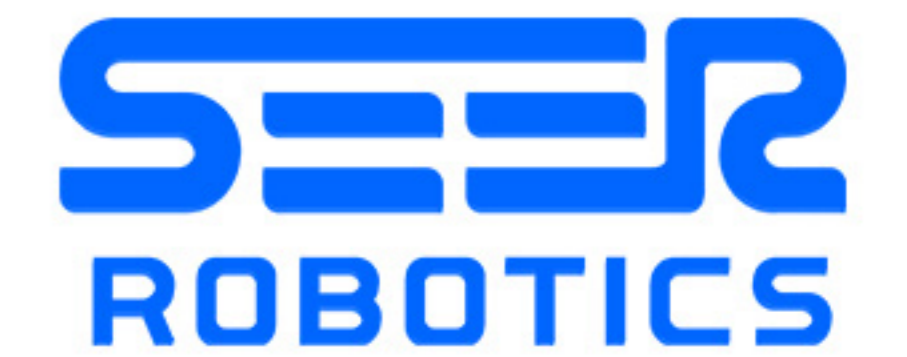


Flexible Customization with 4 Options

Supports customization of fork width, robot height, color and logo. Tailor-made to meet the diverse requirements of your unique business scenarios.

Parameter Specification

● Standard ○ Optional



Basic parameters

Product name	Laser SLAM Counterbalanced Autonomous Forklift
Operation type	Automatic navigation, by manual control device
Navigation type	Laser SLAM
Pallet type	Open pallet / closed pallet
Rated load capacity	2000 kg
Load center distance	500 mm
Weight (with battery)	2675 kg
Standard lifting height	3000 mm
Forklift dimensions: L x W x H	2767 x 1180 x 2235 mm
Fork dimensions: L x W x H	1070 x 122 x 40 mm
Fork outer width	250 mm~700 mm
Right-angle stacking aisle width, pallet 1000×1200 (1200 placed along the fork)	2850+200 mm
Right-angle stacking aisle width, pallet 800×1200 (1200 placed along the fork)	2957+300 mm
Right-angle stacking aisle width, pallet 1000×1000 (1000 placed along the fork)	2805+300 mm
Minimum turning radius	1577 mm
Ambient temperature and humidity range	TEMP: 0°C to 50°C / RH: 10% to 90%, no compression, no condensation

Performance parameters

Driving speed: full load / no load	1.5 m/s
Passability (slope / step / gap)	< 5% / 10 mm / 30 mm
Navigation position accuracy	±10 mm
Navigation angle accuracy	±1°

Battery parameters

Battery specifications	24 V / 200 Ah (lithium iron phosphate)
Comprehensive battery life	6 h
Charging time (10% to 80%)	2 h
Charging method	Manual / Automatic

Function configurations

Lidar number	1 (FREE H1 / P+F R2000) +3 (FREE C2)
Wi-Fi roaming	●
3D obstacle avoidance	○
Pallet recognition	●
Cage stack	○
High shelf pallet recognition	○
Pallet stack	○
HMI display	●

Safety configurations

E-stop button	●
Sound and light indicator	●
Braking distance: 1 m/s / 1.5 m/s	≤30 cm / ≤50 cm
360° laser protection	●
Bumper strip	●
Fork height protection	●

Dimension (mm)

