



Laser SLAM Autonomous Pallet Truck

SFL-CBD16-S

1.6-Ton Payload Capacity, Redefine Cost-effectiveness



1.6 T Load Capacity with Slim-profile, Enhanced Precision and Stability

With a 1.6 tons load capacity and a compact vehicle width of just 880 mm, it offers a minimum turning radius of 1329 mm, making it perfect for narrow aisles. Featuring standard servo drive and steering, dual-spring shock absorbers on the drive wheels, and enhanced hydraulic cylinders, it delivers superior stability and precision, eliminating slipping concerns.



3 Navigation Options, Accuracy up to ±10 mm

Harnessing the power of SLAM, reflector, and NFL navigation modes, offering a remarkable ±10 mm positioning accuracy, it effortlessly caters to diverse business navigation needs, including secondary positioning, high dynamic environments, and non-modified environments.



AI Deep Learning, Improved Recognition Ability

Based on AI deep learning, it boasts the capability to recognize pallets and racks in different colors and sizes with unparalleled precision and adaptability from multiple angles. Experience seamless and stable handling and transfer of goods.



Multiple Sensors, 360° Safety Protection

Equipped with dual obstacle avoidance lasers, photoelectric sensors in fork tips, and bumper strips as standard features. Optional 360° comprehensive safety protection lasers ensure the safety of human-machine interaction scenarios.



Rich Options, Tailored to Your Needs

Choose from a variety of laser navigations, pallet recognition, and 3D obstacle avoidance features. Tailor the fork width between 550 to 680 mm, and the fork length between 950 to 1500 mm. Personalize it with your own logo integration.

Parameter Specification

● Standard ○ Optional



Basic parameters

Product name	Laser SLAM Autonomous Pallet Truck
Operation type	Automatic navigation
Navigation type	Laser SLAM
Pallet type	Open pallet
Rated load capacity	1600 kg
Load center distance	600 mm
Weight (with battery)	405 kg
Standard lifting height	205±5 mm
Forklift dimensions: L x W x H	1681 x 880 x 1896 mm
Fork dimensions: L x W x H	1220 x 173 x 60 mm
Fork outer width	600 / 680 mm
Right-angle stacking aisle width, pallet 1000×1200 (1200 placed along the fork)	2200 mm
Right-angle stacking aisle width, pallet 800×1200 (1200 placed along the fork)	2150 mm
Right-angle stacking aisle width, pallet 1000×1000 (1000 placed along the fork)	2050 mm
Minimum turning radius	1329 mm
Ambient temperature and humidity range	TEMP: 0°C to 50°C / RH: 10% to 90%, no compression, no condensation

Battery parameters

Battery specifications	51.2 V / 40 Ah (lithium iron phosphate)
Comprehensive battery life	8 h
Charging time (10% to 80%)	1 h (Automatic charging)
Charging method	Manual / Automatic

Function configurations

Lidar number	1 (H1) +2 (C2) or 1 (P+F R2000) +2 (C2)
Wi-Fi roaming	●
3D obstacle avoidance	○
Pallet recognition	○
HMI display	●

Performance parameters

Driving speed: full load / no load	1.5 / 1.8 m/s
Passability (slope / step / gap)	<5% / 10 mm / 30 mm
Navigation position accuracy	±10 mm
Navigation angle accuracy	±1°

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)

