



Laser SLAM Autonomous Pallet Truck

SFL-CBD20

2-Ton Load Capacity, Worry-free Battery Endurance



2 T Load Handling, AI Pallet Recognition

With a 2 tons high load capacity and a vehicle width of just 960 mm, making it perfect for narrow aisles. AI recognition algorithm supports recognition of multiple specifications, colors, wrapped films, damaged pallets, etc., and can adaptively recognize and fork with multiple angles and high accuracy.



3 Navigation Options, Positioning Accuracy up to ± 10 mm

Supports 3 navigation methods: SLAM, reflector, and NFL, covering navigation needs in various business scenarios, such as secondary positioning, high dynamic environments, non-modified environments, etc.; positioning accuracy up to ± 10 mm.



10 h Endurance, 3-min Fast Battery Swap

Equipped with 51.2 V / 106 Ah, up to 10 h long endurance, beginners can effortlessly replace the battery in 3 minutes.



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-inspection, our robot offers you unparalleled 4-layer safety protection.



Full Series High Configuration, Super Stability

The full series comes standard with dual spring shock absorbers on the driving wheels and enhanced hydraulic cylinders, avoiding slipping problems in various scenarios and ensuring the reliability and stability of the entire vehicle.

Parameter Specification

● Standard ○ Optional



Basic parameters

Product name	Laser SLAM Autonomous Pallet Truck
Operation type	Automatic navigation, by manual control device
Navigation type	Laser SLAM
Pallet type	Open pallet
Rated load capacity	2000 kg
Load center distance	600 mm
Weight (with battery)	600 kg
Standard lifting height	205±5 mm
Forklift dimensions: L x W x H	1720 x 960 x 2100 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)	2155 mm
Right-angle stacking aisle width, pallet 800×1200 (1200 placed along the fork)	2080 mm
Right-angle stacking aisle width, pallet 1000×1000 (1000 placed along the fork)	2080 mm
Minimum turning radius	1360 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	1.69 / 1.69 m/s
Passability (slope / step / gap)	<5% / 10 mm / 30 mm
Navigation position accuracy	±10 mm
Navigation angle accuracy	±1°

Battery parameters

Battery specifications	51.2 V / 106 Ah
Comprehensive battery life	10 h
Charging time (10% to 80%)	2 to 3 h
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	○
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)

