



Load Type



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Laser SLAM Counterbalanced Autonomous Forklift

SFL-CPD15-T

Superb Load Capacity and Powerful Compatibility



Real Laser SLAM Navigation

Trackless path navigation without reflectors makes it really convenient to implement.



High-precision Recognition

Pallet identification, cage identification and precise goods forking—Both efficient and safe.



1.5 T Load Capacity

Goods carrying with a load of 1.5 T;
Repeat accuracy of the point: ± 10 mm, $\pm 0.5^\circ$.



Flexible Moving and Scheduling

Its slender design and small radius of gyration are suitable for narrow aisles.
Flexible scheduling—Seamless access to the scheduling system.



All Round Protection Makes it Really Safe

Obstacle detection laser, distance sensor, 3D camera plane 360° + headspace protection, and multi-dimensional protection.



Superb Applicability

Proficient in climbing, crossing ridges, crossing elevators, carrying and stacking.

Parameter Specification

● Standard ○ Optional



Basic parameters

Product name	Laser SLAM Counterbalanced Autonomous Forklift
Operation type	Automatic navigation, seated driving
Navigation type	Laser SLAM
Pallet type	Open pallet / closed pallet
Rated load capacity	1500 kg
Load center distance	500 mm
Weight (with battery)	2325 kg
Standard lifting height	3300 mm
Forklift dimensions: L x W x H	P+F / FREE: 2520 x 1187 x 2346 / 2520 x 1187 x 2326 mm
Fork dimensions: L x W x H	950 x 100 x 40 mm
Fork outer width	215 mm~750 mm
Right-angle stacking aisle width, pallet 1000×1200 (1200 placed along the fork)	2943+200 mm
Right-angle stacking aisle width, pallet 800×1200 (1200 placed along the fork)	2911+200 mm
Right-angle stacking aisle width, pallet 1000×1000 (1000 placed along the fork)	2477+200 mm
Minimum turning radius	1511+200 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	1.38 / 1.38 m/s
Passability (slope / step / gap)	< 5% / 10 mm / 30 mm
Navigation position accuracy	±10 mm
Navigation angle accuracy	±0.5°

Battery parameters

Battery specifications	24 V / 250 Ah (lithium iron phosphate)
Comprehensive battery life	10 h
Charging time (10% to 80%)	2.5 h
Charging method	Manual / Automatic

Function configurations

Lidar number	1 (P+F R2000 / FREE H1) +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	●

Certifications

EMC	●
UN38.3	●

Dimension

(mm)

