



Load Type



Scan to Follow



in LinkedIn



YouTube

Laser SLAM Small Stacker Autonomous Forklift

SFL-CDD14-CE

Security Updates, Free Even in Narrow Aisles



CE Safety Certified, Outstanding Performance & Excellent Safety Standard by Design

Obtain CE certification (ISO 3691-4:2020) and other certifications.



Natural Feature Navigation, Accurate yet Flexible

SLAM navigation with an accuracy of ± 10 mm, and without reflectors.



Flexible Fleet Management, Makes It Really Intelligent

The fleet management system can be accessed seamlessly to make carrying smarter and simpler.



All Around Detection, 360° Safety

With 3D obstacle detection and other sensors for all-round security protection, security is greatly guaranteed.



Pallet Recognition, Precise and Efficient

High-precision navigation & recognition, which delivers accurate forking, ensuring carrying efficiency.



1.4 T Payload Capacity, Large Weight Compatibility yet Smooth Handling

With rated load capacity of 1.4 T, the load capacity can be more powerful in case of narrow aisles carrying.

Parameter Specification

● Standard ○ Optional



Basic parameters

Product name	Laser SLAM Small Stacker Autonomous Forklift
Operation type	Automatic navigation, by manual control device
Navigation type	Laser SLAM
Pallet type	Open pallet
Rated load capacity	1400 kg
Load center distance	600 mm
Weight (with battery)	680 / 740 kg
Standard lifting height	1600 / 3000 mm
Forklift dimensions: L x W x H	P+F: 1722 x 951 x 2064 / 1722 x 951 x 2234 mm SICK: 1722 x 951 x 2042 / 1722 x 951 x 2234 mm
Fork dimensions: L x W x H	1220 x 180 x 70 mm
Fork outer width	555 / 570 / 680 mm
Right-angle stacking aisle width, pallet 1000x1200 (1200 placed along the fork)	1966+200 mm
Right-angle stacking aisle width, pallet 800x1200 (1200 placed along the fork)	1911+200 / 1914+200 / 1936+200 mm
Right-angle stacking aisle width, pallet 1000x1000 (1000 placed along the fork)	1911+200 / 1914+200 / 1936+200 mm
Minimum turning radius	1206+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	1.2 / 1.5 m/s
Passability (slope / step / gap)	< 5% / 5 mm / 15 mm
Navigation position accuracy	±10 mm
Navigation angle accuracy	±0.5°

Battery parameters

Battery specifications	24 V / 210 Ah (lithium iron phosphate)
Comprehensive battery life	10 h
Charging time (10% to 80%)	2 h
Charging method	Manual / Automatic

Function configurations

Lidar number	1 (SICK nanoScan3 Core/ P+ F OMD25M-R2000-B23-V1V1D-SD-1L) + 3 (2(SICK nanoScan3 Core) + 1 (FREE C214))
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	●
Fork height protection	●

Certifications

ISO 3691-4	●
EMC	●
UN38.3	●

Dimension

(mm) 3-meter lifting height for example

