



Safety Full-omnidirectional Single Fork Autonomous Forklift

SOF-OMNI 300EU

Safe Lightweight Handling, Omnidirectional Narrow-Area Navigation



CE Certification, Safety Assurance

The Robot is CE certified (ISO 3691-4:2023) and meets other relevant safety standards, ensuring more secure operation.



Omnidirectional Movement, Unobstructed Operation

Capable of omnidirectional travel with AI-powered flexible path planning, enabling effortless navigation in narrow passages.



Compact Design, 300 KG Load Capacity

Dimensions of 1281 x 500 x 1683 mm (L x W x H) with a fork lift height of 140 mm and a load capacity of 300 kg, suitable for various lightweight handling scenarios.



Optimal Lightweight Handling Solution

Specifically designed to reduce costs, improve efficiency, and enable smart transformation in handling carts and racks within hospitals, food and electronics plants, and other lightweight, narrow spaces.



Goods safety, Anti-side overturning

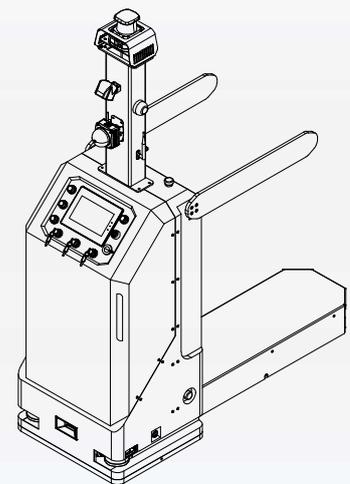
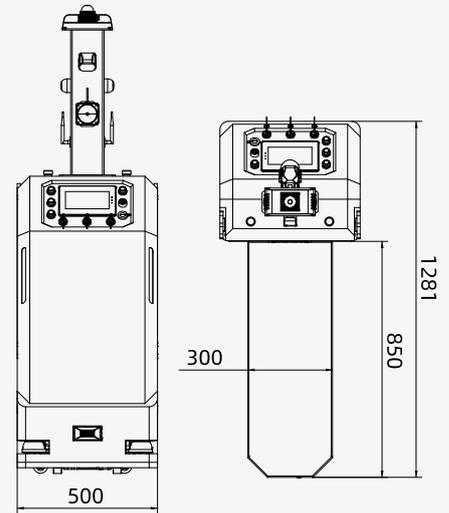
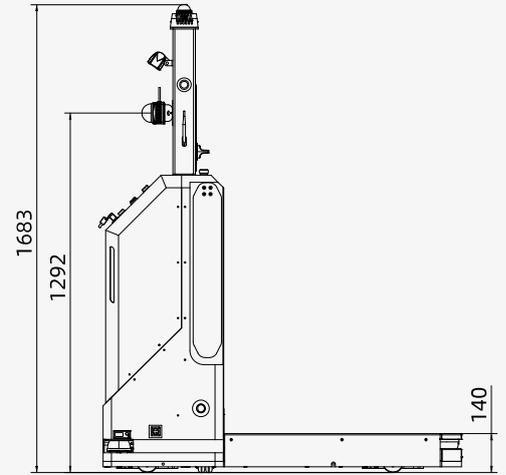
Automatic lifting protective arms are added on both sides of the robot for protection. The position is determined by using CE safety proximity switches.



Extended Battery Life

1 hour of charging provides up to 8 hours of continuous operation.

● standard ○ optional



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|-------------------------|-------------------------------------|---|
| Product model | | SOF-OMNI300EU |
| Certifications | | CE |
| Basic parameters | Powering method | Electromagnetic brake |
| | Operation type | Servo control |
| | Navigation type | Laser SLAM |
| | Rated load capacity | 300 kg |
| | Pallet type | Tote dolly/shelf |
| | Weight (with battery) | 300 kg |
| | Standard lifting height | 70 mm |
| | Navigation laser scanning height | 1683 mm |
| | Forklift dimensions: L x W x H | 1281 x 500 x 1683 mm |
| | Fork dimensions: L x W x H | 850 x 300 x 140 mm |
| Fork outer width | 300 mm | |
| Minimum turning radius | 700 mm | |
| Performance parameters | Driving speed: full load / no load | 0.8 / 1.2 m/s |
| | Lifting speed: full load / no load | 8 mm/s |
| | Lowering speed: full load / no load | 8 mm/s |
| | Passability (slope / step / gap) | < 5% / 5 mm / 30mm |
| | Navigation position accuracy | ±10 mm |
| Battery parameters | Navigation angle accuracy | ±1° |
| | Battery specifications | 24 V / 45 Ah *2 |
| | Comprehensive battery life | 8 h |
| | Charging time (10% to 80%) | 1.5 h |
| Function configurations | Charging method | Manual / Automatic |
| | Lidar number | 1 (mid-360-asm) +3 (SICK Nano) + 1 (LDS-M300-E) |
| | Wi-Fi roaming | ● |
| | 3D obstacle avoidance | ○ |
| | Pallet recognition | ○ |
| | Pallet abrasion detection | ○ |
| | Remote emergency stop | ○ |
| HMI display | ● | |
| Safety configurations | E-stop button | ● |
| | Sound and light indicator | ● |
| | Braking distance: 1 m/s / 1.5 m/s | ≤30 cm / ≤50 cm |
| | Vehicle hardware fault detection | ● |
| | 360° laser protection | ● |
| | Bumper strip | ○ |
| Fork height protection | ● | |

