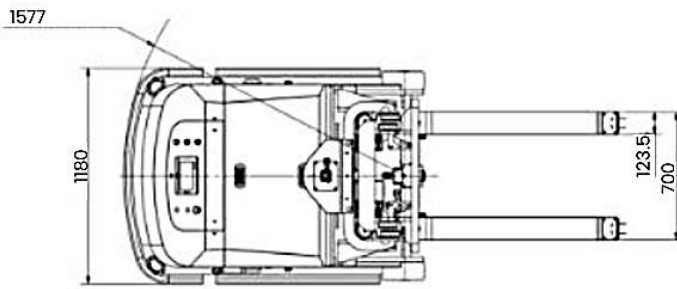
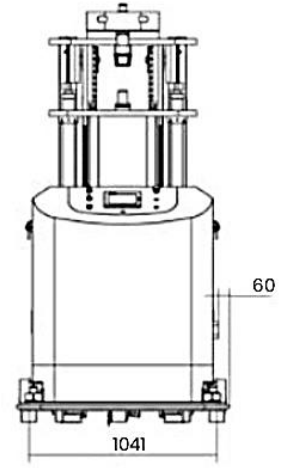
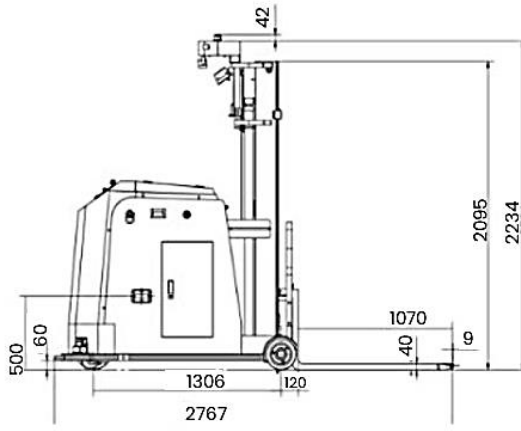


Autonomous Forklift-R2000F-CBH30

LiDAR SLAM Navigation+2000KG Payload



Dimension



Specification	
Basic parameters	
Name	Autonomous Forklift-R2000F-CBH30
Powering method	Electric
Operation type	Automatic navigation, by manual control device
Navigation type	Laser SLAM
Pallet type	Open Pallet / Closed Pallet
Rated load capacity	2000 kg
Load center distance	500 mm
Wheelbase	1305 mm
Weight (with battery)	2675 kg
Standard lifting height	3000 mm
Extended mast height	3965 mm
Fork thickness	40 mm
Navigation laser scanning height	2235 mm
Forklift dimensions (L x W x H) (without fork tip)	2767 x 1180 x 2235 mm
Fork dimensions (L x W x H) (without fork tip)	1070 x 122 x 40 mm
Fork outer width	250-700 mm
Right-angle stacking aisle width, pallet 1000×1200 (1200 placed along the fork)	2850+200 mm
Right-angle stacking aisle width, pallet 800×1200 (1200 placed along the fork)	2957+300 mm
Right-angle stacking aisle width, pallet 1000×1000 (1000 placed along the fork)	2805+300 mm
Minimum turning radius	1577 mm
Braking method	Electromagnetic brake
Drive control mode	Servo control
Performance Parameters	
Driving speed (full load / no load)	1.5 m/s
Lifting speed (full load / no load)	12/13 mm/s
Lowering speed (full load / no load)	14/11 mm/s
Possibility (slope / step / gap) [1]	≤5% /10 mm /30 mm
Navigation position accuracy [2]	±10 mm/s
Navigation angle accuracy [2]	±1°
Fork in-position accuracy [2]	±5
Drive motor power (S2, 60 min)	3 kw
Lifting motor power (S3, 15%)	3kw
Steering motor power (S2, 10 min)	0.75 kw
Map area (single frame)	≤400000 m ²
Wheel Parameters	
Tire type (driving wheel / bearing wheel)	Polyurethane
Tire dimensions (driving wheel)	254 x 105 mm
Tire dimensions (bearing wheel)	210 x 85 mm
Wheel number (driving wheel / balance wheel / bearing wheel)	1/2/2
Wheel track (bearing side)	1040 mm
Battery Parameters	
Battery specifications	DC24V / 200Ah (lithium iron phosphate)
Battery weight	90 Kg
Comprehensive battery life	6 hr.
Charging parameters	24V / 200A
Charging time (10% to 80%)	2 hr.
Charging method	Manual/Automatic
Battery cycle life (times)	>2000

Specification	
Safety Parameters	
E-stop button	✓
Sound and light indicator	✓
Braking distance 1 m/s / 1.5 m/s	≤30 / ≤50
Vehicle hardware fault detection	✓
360° laser protection	✓
Bumper strip	✓
Fork height protection	✓
Functions	
Lidar number	1(HI+3(C2))
Wi-Fi roaming	✓
3D obstacle avoidance [3]	Optional
Pallet recognition [3]	✓
Cage stack [3]	Optional
High shelf pallet recognition [3]	Optional
Pallet abrasion detection [3]	Optional
Remote emergency stop [4]	Optional
Pallet stack [5]	Optional
HMI display	✓
Fork distance sensor	✓
Cargo and fork separation test	✓
Cargo overload detection	x
Others	
Network	4G / 5G / Wi-Fi 802.11 a/b/g/n/ac
Ground flatness	±5 mm/m ²
Ambient temperature and humidity range	TEMP: 0°C to 50°C / RH: 10% to 90%, no compression, no condensation
Scenario requirements	Only suitable for indoor, light intensity ≤40 kl x (IEC 61496-3), ground without water and oil and other scenes
IP rating	IP20
Noise near the driver's ear according to EN12053	≤70 dB(A)

- [1] The ground surface should be even, clean and without obvious ups and downs. The ramp slope is not more than 5% = arctan (0.05) ≈ 2.8°. The robot cannot stop or turn at the ramps, steps, or gaps, it can only pass quickly perpendicular to them.
- [2] Positioning accuracy usually refers to the repeated accuracy of the robot navigating to the target site. Under the condition that the environment scanned by the robot laser radar is relatively stable, the repeated positioning accuracy of the robot navigating from a fixed direction to the target site can reach the expected value. When the robot runs along the planned path, it will try to fit the path as much as possible, but repeatability is not guaranteed. That is, the robot can guarantee the accuracy of the point position, but not the fitting accuracy of the path. The minimum site spacing supported by robot is 1 cm. Therefore, the robot should not be used as a linear guide.
- [3] It needs to assemble the recognition camera and get the algorithm authorization
- [4] It needs to be used with the Fleet Management System.
- [5] It needs to be used with the Fleet Management System.