

MR-F4-2000-HI(CE)

Autonomous Mobile Robot



Key Feature

- Adopts narrow robot body design, transports in forklift mode, and supports mast customization and fork size customization.
- Adopts SLAM navigation to achieve accurate positioning.
- Supports smooth motion with max. running speed of 1.5 m/s.
- Adopts smart/independent power management, and supports auto-charging and self-returning after charging is completed, and maintenance-free battery for environmental friendliness.
- Supports multiple safety protections, such as laser/infrared obstacle avoidance, load detection, emergency stop button, and audible alarm.
- Supports carrying, lifting, and lowering goods up to 2,000 kg (4409.25 lb.) via standard pallets.
- Supports indicating device status via screen and status indicator.
- Supports Wi-Fi communication and seamless roaming in a network-covered area.

Typical Application

The mobile robot is applicable to e-commerce, electronics manufacturing, automobile, 3C, manufacturing, textiles, logistics, food and pharmaceutical industries.

Available Model

MR-F4-2000-HI(CE)

Accessory

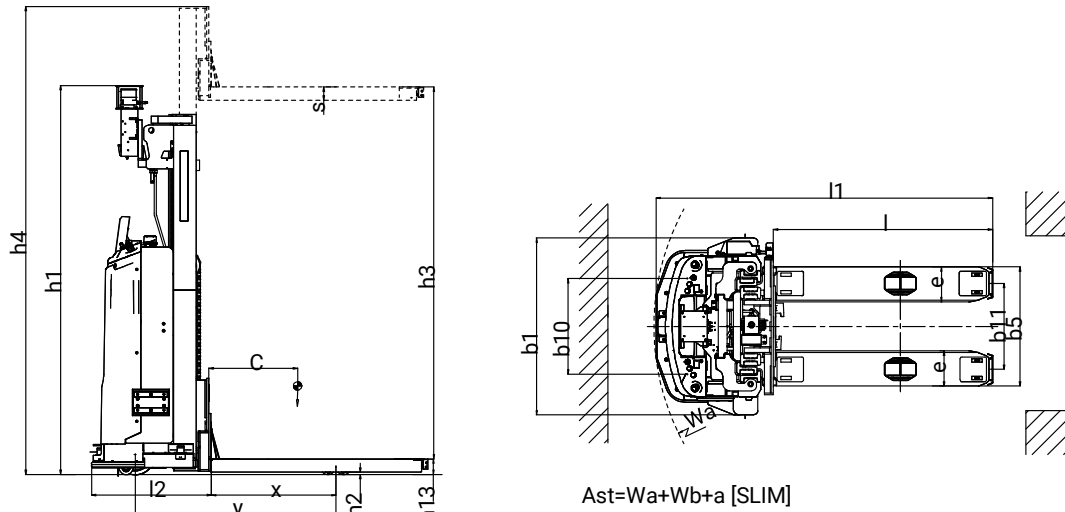
- Charging station: CH-48/60(CE)
- External debugging cable: 50 cm (19.69"), black



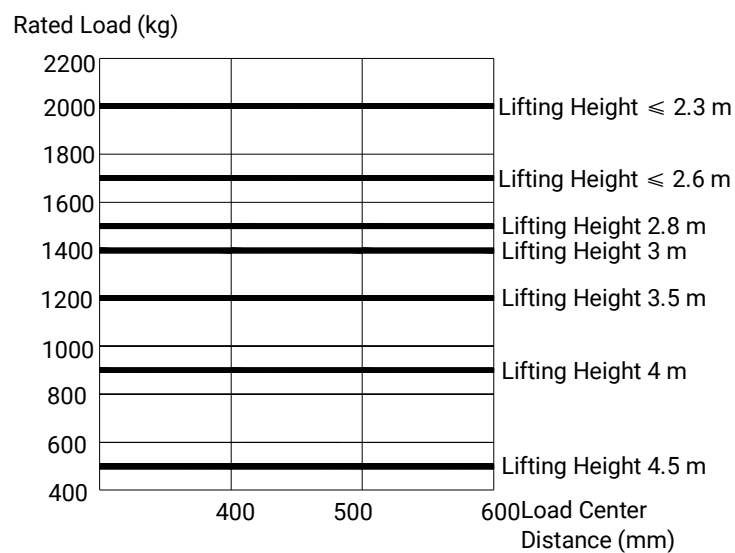
Specification

Model	MR-F4-2000-HI(CE)
Basic Parameter	
Dimension (l1*b1*h1)	1926 mm × 1009 mm × 2225 mm (75.83" × 39.72" × 87.60")
Weight (with Battery)	1110 kg (2447.13 lb.)
Rated Load (Q)	2000 kg (4409.25 lb.)
Load Center Distance (C)	600 mm (23.62")
Wheelbase (y)	1141 mm (44.92")
Lifting Height (h3+h13)	3017 mm (118.78")
Max. Mast Height (h4)	3490 mm (137.40")
Fork Above Ground After Lowering (h13)	87 mm (3.43")
Fork Height/Width/Length (s/e/l)	75 mm/200 mm/1200 mm (2.95"/7.87"/47.24")
Fork Distance (b5)	680 mm (26.77")
Min. Ground Clearance (m2)	14 mm (0.55")
Laser Scanning Height (h15)	2186 mm (86.06")
Min. Rotation Radius (Wa)	1437 mm (56.57")
Aisle Width (Ast)	2444 mm (96.22") (with pallet 1200 × 1000)
Motion Performance	
Running Speed (Full/Empty)	1200 mm/s / 1500 mm/s
Positioning Accuracy	± 10 mm (± 0.39")
Positioning Angle Accuracy	± 1°
Repeated Positioning Accuracy	± 5 mm (± 0.20")
Max. Gradeability (Full/Empty)	3%/5%
Lifting Fork Speed (Full/Empty)	110 mm/s / 140 mm/s
Lowering Fork Speed (Full/Empty)	160 mm/s / 120 mm/s
Motion Method	Steering wheel drive; support forward, backward, arc motion and rotation on site.
Battery Performance	
Rated Voltage	48 V
Capacity	125 Ah
Charging Cycle	1500 times (for fully charging and discharging)
Run Time	6 h to 8 h
Charging Time	≤ 3 h (for fully charging and discharging)
Charging Position	Side
Safety Protection	
Laser Obstacle Avoidance	Support
Recorder	Optional
Bumper Strip	Support
Pallet In-Position Detection	Support
Fork Collision Detection	Support
Emergency Stop Button	Support
Sound and Light Alarm	Support
Others	
Drive Method	Moving and steering motor drive; lifting hydraulic drive
Screen	Support
Navigation Mode	Laser SLAM
Manual Operation	Manual controller (optional)
Noise	< 95 dB

Dimension



Load Curve



Charging Station Deployment

