

MR-F3-1500-HI(CE)

Autonomous Mobile Robot



Key Feature

- Adopts narrow robot body design, transports in forklift mode, and supports fork size customization.
- Adopts laser SLAM navigation to achieve accurate positioning.
- Supports smooth motions 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.
- Adopts multiple safety protections like laser/infrared obstacle avoidance, load detection, emergency stop button, audible alarm, etc.
- Supports carrying goods up to 1,500 kg (3306.93 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, machinery manufacturing, textile, tobacco, and pharmaceutical industries.

Available Model

MR-F3-1500-HI(CE)

Accessory

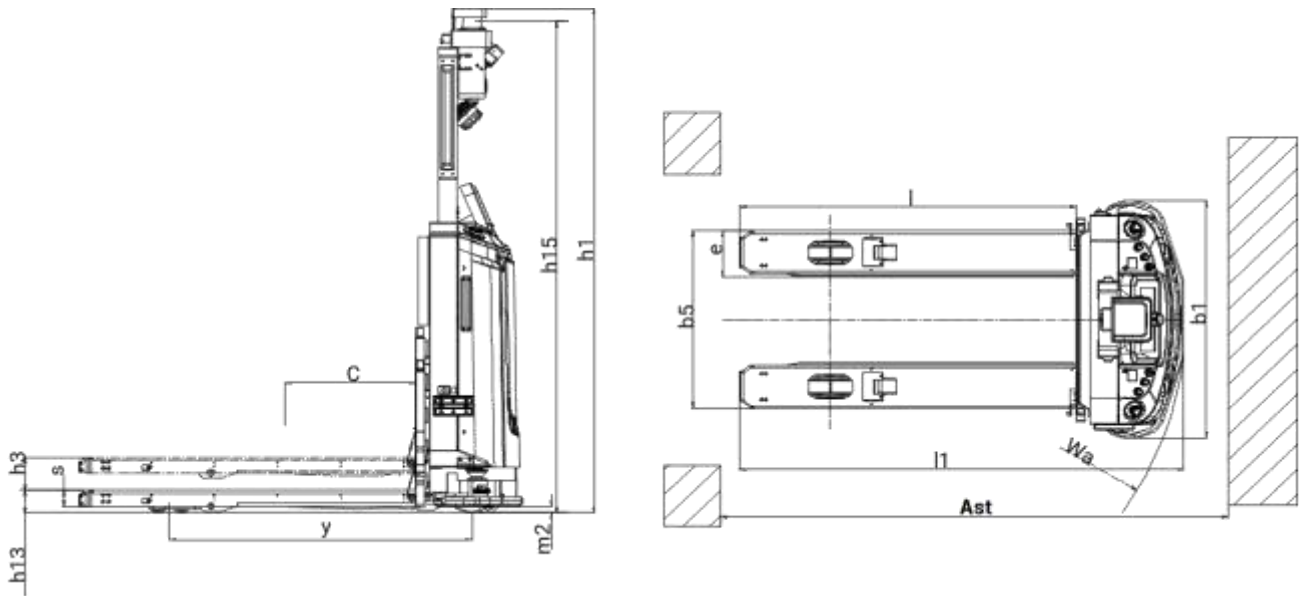
- Charging station: CH-48/30(CE)
- External debugging cable: 50 cm (19.69"), black



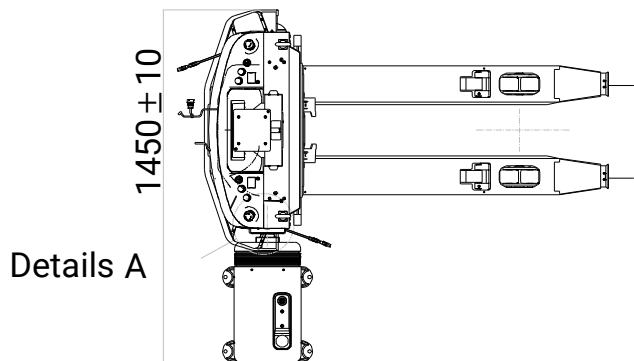
Specification

Model	MR-F3-1500-HI(CE)
Basic Parameter	
Dimension (l1*b1*h1)	1628 mm × 991 mm × 1917 mm (64.09" × 39.02" × 75.47")
Weight (with Battery)	452 kg (996.49 lb.)
Rated Load (Q)	1500 kg (3306.93 lb.)
Load Center Distance (C)	600 mm (23.62")
Wheelbase (y)	1102 mm (43.39")
Lifting Height (h3+h13)	200 mm (7.87")
Fork Above Ground After Lowering (h13)	85 mm (3.35")
Fork Height/Width/Length (s/e/l)	80 mm/160 mm/1182 mm (3.15"/6.30"/46.54")
Fork Distance (b5)	530 mm (20.87")
Min. Ground Clearance (m2)	5 mm (0.20")
Laser Scanning Height (h15)	1903 mm (74.92")
Min. Rotation Radius (Wa)	1305 mm (51.38")
Aisle Width (Ast)	2137 mm (84.13") (with pallet 1000 × 1200)
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	± 10 mm (0.39")
Max. Gradeability (Full/Empty)	3%/5%
Lifting Fork Speed (Full/Empty)	25 mm/s / 25 mm/s
Lowering Fork Speed (Full/Empty)	25 mm/s / 25 mm/s
Motion Method	Steering wheel drive; support forward, backward, arc motion and rotation on site.
Battery Performance	
Rated Voltage	48 V
Capacity	44 Ah
Charging Cycle	1500 times (for fully charging and discharging)
Run Time	6 h to 8 h
Charging Time	≤ 2 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	Front wheel drive and steering
Screen	Support
Navigation Mode	Laser SLAM
Manual Operation	Manual controller (optional)
Noise	< 75 dB

Dimension



Charging Station Deployment



The error between charging connector and brush plate should be ± 10 mm