MR-F4-1000-C(HI)

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 1.2 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 1,000 kg (2204.62 lb.) via standard pallets, with pallet recognition function.
- 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 automobile, 3C, manufacturing, logistics, food and pharmaceutical industries.

Available Model

MR-F4-1000-C(HI)

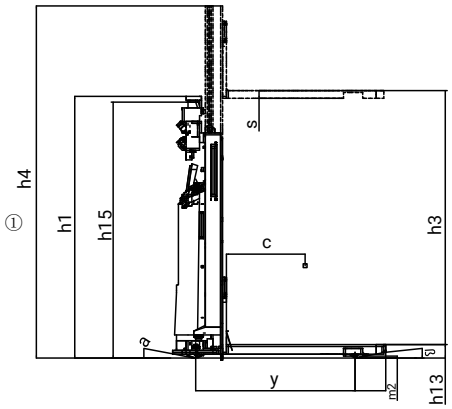
Accessory

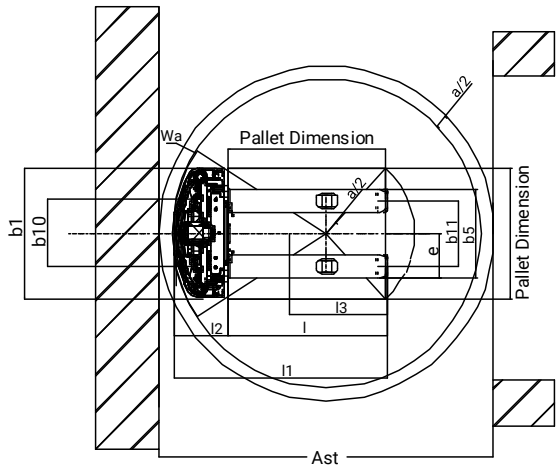
- Charging station: CH-48/30(CE)
- External debugging cable: 50 cm (19.69"), black

Specification

Model	MR-F4-1000-C(HI)
Basic Parameter	
Dimension (l1*b1*h1)	1746 mm × 1073 mm × 1915 mm (68.74" × 42.24" × 75.39")
Weight (with Battery)	746 kg (1644.65 lb.)
Rated Load (Q)	1000 kg (2204.62 lb.)
Load Center Distance (C)	600 mm (23.62")
Wheelbase (y)	990.3 mm (38.99")
Lifting Height (h3+h13)	2081 mm (81.93")
Max. Mast Height (h4)	2666 mm (104.96")
Fork Above Ground After Lowering (h13)	81 mm (3.19")
Fork Height/Width/Length (s/e/l)	65 mm/160 mm/1279 mm (2.56"/6.30"/50.35")
Fork Distance (b5)	630 mm (24.80")
Min. Ground Clearance (m2)	11 mm (0.43")
Laser Scanning Height (h15)	1896 mm (74.65")
Min. Rotation Radius (Wa)	1180 mm (46.46")
Aisle Width (Ast)	2120 mm (83.46") (with pallet 1200 × 800)
Motion Performance	
Running Speed (Full/Empty)	1000 mm/s / 1200 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)	100 mm/s / 135 mm/s
Lowering Fork Speed (Full/Empty)	130 mm/s / 100 mm/s
Motion Method	Steering wheel drive; support forward, backward, arc motion and rotation on site.
Battery Performance	
Rated Voltage	48 V
Capacity	70 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



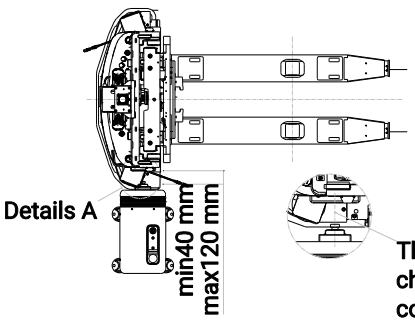


Ast=2Wa+a ②

(Omnidirectional)

Load Curve

Charging Station Deployment



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