

MR-Q7-1000LE-DI(CE)

Autonomous Mobile Robot



Key Feature

- Self-localization navigation: adopts inertial, 2D barcode, laser and visual SLAM navigation methods to achieve accurate positioning.
- Supports smooth motions like forward, backward, and rotation via dual-wheel differential drive.
- Smart power management: supports multi-level electrical threshold, auto-charging, and self-returning after charging completed.
- Multi-safety protection includes front laser obstacle avoidance, rear infrared obstacle avoidance, side ultrasound obstacle avoidance, pneumatic bumper strip detection, emergency stop button, etc.
- Human-machine interaction: indicates the device status via LCD screen, sound and indicators.
- Supports carrying, rotating, lifting and lowering goods up to 1000 kg (2204.62 lb.).
- Wireless communication: supports Wi-Fi and seamless roaming in a network covered area.

Typical Application

E-commerce, consumer electronic, manufacturing, tobacco, medicine, etc.

Available Model

MR-Q7-1000LE-DI(CE)

MR-Q7-1000CE-DI(CE)

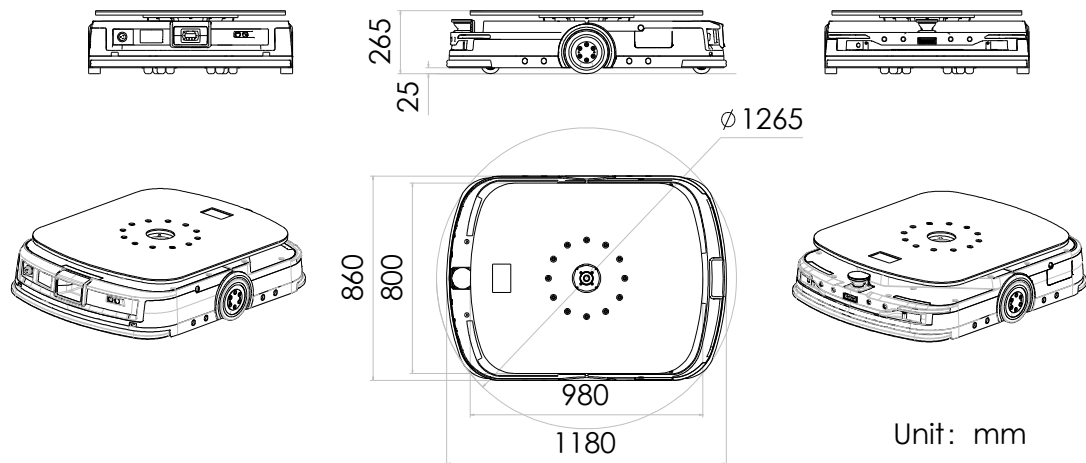
MR-Q7-1000VE-DI(CE)

Accessory

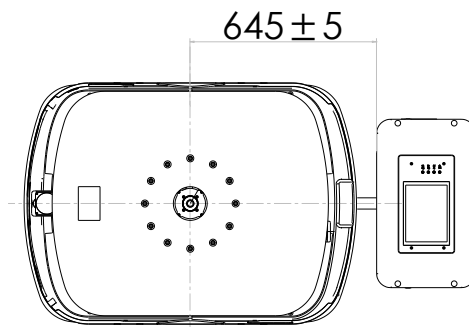
Charging station model: MR-RA-CH-48/30B-CI(CE)



Dimension



Charging Station Deployment



Specification

Model			MR-Q7-1000LE-DI(CE)	
Basic Parameter				
Dimension (L × W × H)			1180 mm × 860 mm × 265 mm (46.46" × 33.86" × 10.43")	
Rotation Diameter			1265 mm (49.80")	
Chassis Above Ground			25 mm (0.98")	
Lifting Platform Dimension			980 mm × 800 mm (38.58" × 31.50")	
Lifting Stroke			60 mm (2.36")	
Lifting Structure Type			Electric	
Weight			247 kg (544.54 lb.)	
Rated Load			1000 kg (2204.62 lb.)	
Navigation Mode			Laser SLAM/2D barcode/Visual SLAM(ground texture)	
Human-Machine Interaction			LCD screen	
Safety Protection				
Front	Laser Obstacle Avoidance	Installation Height	195 mm (7.68")	
		Scanning Angle	260°	
		Max. Detection Range	20000 mm (787.40")	
rear	Infrared Obstacle Avoidance	Sensor Quantity	2	
		Installation Height	82 mm (3.23")	
		Max. Detection Range	50 mm to 5000 mm (1.97" to 196.85")	
side	Ultrasound Obstacle Avoidance	Sensor Quantity	one each on left and right	
		Installation Height	193 mm (7.60")	
		Scanning Angle	horizontal 80°, vertical 34°	
		Max. Detection Range	200 mm to 1000 mm (7.87" to 39.37")	
Bumper Strip Position			Front/Rear	
Bumper Strip Type			Pneumatic	
Emergency Stop Button			Support	
Radium Indicator			Support	
Motion Performance				
Rated Running Speed (Empty)			1800 mm/s	
Rated Running Speed (Rated Load)			1500 mm/s	
Rated Acceleration (Empty)			1000 mm/s²	
Rated Acceleration (Rated Load)			500 mm/s²	
Rotation Speed (Empty)			180°/s	
Rotation Speed (Rated Load)			90°/s	
Gradeability			3°	
Location Angle Accuracy			± 1°	
Location Accuracy			± 10 mm (± 0.39")	
Battery Performance				
Battery Type			LiFePO4	
Rated Voltage			48 V	
Capacity			44 Ah	
Charging Cycle			1500 times (for fully charging and discharging) or 30 months	
Run Time			6 h to 8 h	
Charging Time			≤ 2 h (for fully charging and discharging)	