

## MR-Q7-1000LE-E(HI)

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, side ultrasonic obstacle avoidance, pneumatic bumper strip detection, emergency stop button, etc.
- Human-machine interaction: indicates the device status via touchscreen, 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

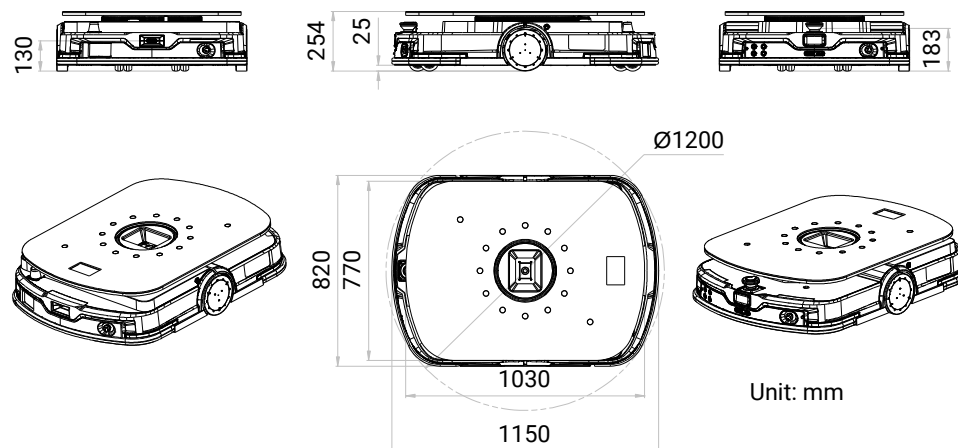
MR-Q7-1000LE-E(HI)

### Accessory

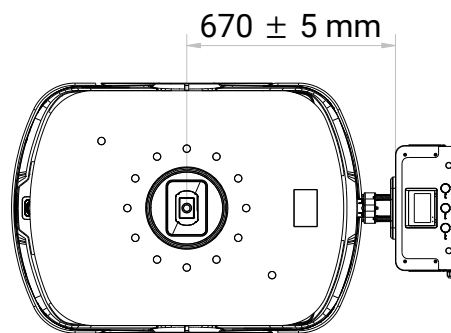
Charging station model: MR-RA-CH-48/30B-CI(CE)



## Dimension



## Charging Station Deployment



## Specification

|                                  |                          |                      |                                                   |  |  |
|----------------------------------|--------------------------|----------------------|---------------------------------------------------|--|--|
| Model                            |                          |                      | MR-Q7-1000LE-E(HI)                                |  |  |
| Basic Parameter                  |                          |                      |                                                   |  |  |
| Dimension (L × W × H)            |                          |                      | 1150 mm × 820 mm × 254 mm (45.28" × 32.28" × 10") |  |  |
| Rotation Diameter                |                          |                      | 1200 mm (47.24")                                  |  |  |
| Chassis Above Ground             |                          |                      | 25 mm (0.98")                                     |  |  |
| Lifting Platform Dimension       |                          |                      | 1030 mm × 770 mm (40.55" × 30.31")                |  |  |
| Lifting Stroke                   |                          |                      | 60 mm (2.36")                                     |  |  |
| Lifting Structure Type           |                          |                      | Electric                                          |  |  |
| Weight                           |                          |                      | 185 kg (407.86 lb.)                               |  |  |
| Rated Load                       |                          |                      | 1000 kg (2204.62 lb.)                             |  |  |
| Navigation Mode                  |                          |                      | Laser SLAM/2D barcode/Visual SLAM(ground texture) |  |  |
| Human-Machine Interaction        |                          |                      | Touchscreen                                       |  |  |
| Safety Protection                |                          |                      |                                                   |  |  |
| Front                            | Laser Obstacle Avoidance | Installation Height  | 182 mm (7.17")                                    |  |  |
|                                  |                          | Scanning Angle       | 260°                                              |  |  |
|                                  |                          | Max. Detection Range | 25 m (984.25")                                    |  |  |
| Bumper Strip Type                |                          |                      | Pneumatic                                         |  |  |
| Bumper Strip Position            |                          |                      | Front/Rear                                        |  |  |
| Emergency Stop Button            |                          |                      | Support                                           |  |  |
| Motion Performance               |                          |                      |                                                   |  |  |
| Rated Running Speed (Empty)      |                          |                      | 2000 mm/s                                         |  |  |
| Rated Running Speed (Rated Load) |                          |                      | 1800 mm/s                                         |  |  |
| Rated Acceleration (Empty)       |                          |                      | 1000 mm/s²                                        |  |  |
| Rated Acceleration (Rated Load)  |                          |                      | 600 mm/s²                                         |  |  |
| Rotation Speed (Empty)           |                          |                      | 200°/s                                            |  |  |
| Rotation Speed (Rated Load)      |                          |                      | 70°/s                                             |  |  |
| Gradeability                     |                          |                      | 4°                                                |  |  |
| Positioning Angle Accuracy       |                          |                      | ± 1°                                              |  |  |
| Positioning Accuracy             |                          |                      | ± 10 mm (± 0.39")                                 |  |  |
| Battery Performance              |                          |                      |                                                   |  |  |
| Battery Type                     |                          |                      | LiFePO4                                           |  |  |
| Rated Voltage                    |                          |                      | 48 V                                              |  |  |
| Charging Cycle                   |                          |                      | 1500 times (for fully charging and discharging)   |  |  |
| Run Time                         |                          |                      | 6 h to 8 h                                        |  |  |
| Charging Time                    |                          |                      | ≤ 1.5 h (for fully charging and discharging)      |  |  |