# MiR200



The MiR200 is a safe, cost-effective mobile robot that quickly automates your internal transportation and logistics. The robot optimizes workflows, freeing staff resources so you can increase productivity and reduce costs.

## Designated use

**Autonomous Mobile Robot (AMR)**    For small- and medium-sized transport tasks within industry logistics and healthcare

## Dimensions

| | |
|---|---|
| **Length** | 890 mm / 35 in |
| **Width** | 580 mm / 22.8 in |
| **Height** | 352 mm / 13.9 in |
| **Weight (without load)** | 70 kg / 143 lbs |
| **Ground clearance** | 50 mm / 2 in |

| | |
|---|---|
| Cover material | Co-extruded plastics containing PS (Polystyren) and a semi-conductive layer (due to ESD performance) |
| Wheel diameter (drive wheel) | 125 mm / 4.9 in |
| Wheel diameter (caster wheel) | 125 mm / 4.9 in |

## Color

| | |
|---|---|
| RAL color | RAL 7011 / Iron Gray |

## Payload

| | |
|---|---|
| Maximum payload | 200 kg / 440 lbs (maximum 5% incline) |
| Towing capacity | 500 kg / 1100 lbs (see MiR200 Hook specifications) |
| Footprint of payload | Contact MiR if a bigger footprint is required. |

## Speed and performance

| | |
|---|---|
| Maximum speed (with maximum payload on a flat surface) | Forwards: 1.1 m/s (4km/h) / 3.6 ft/s (2.5 mph) Backwards: 0.3 m/s (1 km/h) / 1.0 ft/s (0.7 mph) |
| Positioning accuracy (in controlled conditions) | +/- 50 mm / 2 in to position, +/- 10 mm / 0.4 in to docking marker |
| Traversable gap and sill tolerance | 20 mm / 0.8 in |
| Minimum corridor width | Default footprint and SICK safety configuration 0.95 m / 38 in |
| Minimum corridor width for a U-turn | Default footprint and SICK safety configuration No load: 1.3 m / 52 in Full load: 1.2 m / 48 in Minimized footprint and SICK safety configuration No load: 1.2 m / 48 in Full load: 1.1 m / 44 in |
| Product design life | Five years or 20.000 hours, whichever comes first |
| Minimum distance between chargers | 100 mm |

## Power

| | |
|---|---|
| Battery type | Li-NMC |
| Battery capacity | 40 Ah |
| Active operation time with maximum payload | 10 hours |
| Charging options | MiRCharge 24V, Cable Charger |

## Environment

| | |
|---|---|
| Humidity | 10-95% non-condensing |
| IP class | IP 20 |
| Compliance | CE, EN1525, ANSI B56.5, ISO13849-1, EN61000-6-2 & EN61.000-6-4, Clean Room Certified (ISO Class 4) ESD Approved |
| Environment | For indoor use only |
| Noise level | 60-64 dBA (depending on surface) |
| Floor conditions | No water, no oil, no dirt |

## Safety

| | |
|---|---|
| Personnel detection safety function | Triggered by a human or other obstacle in the path of travel. |
| Emergency stop | Triggered by pressing the Emergency stop button. |

## Communication

| | |
|---|---|
| WiFi router | Dual-band a/b/g/n/ac |
| WiFi (internal PC) | Dual-band a/b/g/n/ac |
| I/O connections | USB and Ethernet |
| Communication protocol | REST, Modbus |

## Sensors

| | |
|---|---|
| SICK safety laser scanners (two pcs.) | S300 (front and back) 360° visual protection around robot |
| 3D camera (two pcs.) | 3D camera Intel RealSense™ Detection of objects ahead 50-1800 mm above floor |
| Ultrasound sensors | Fours pcs. |

## Top module

| | |
|---|---|
| Maximum height from floor to top | 1800 mm / 70.9 in |
| Center of gravity | < 900 mm / 35 in above the floor |
| Power for top modules | 24V / 3A (starts with robot), 24V / 10A (stops by emergency stop |