



AUTONOMOUS PALLET TRANSPORT MAX. 1.0 T

MiR

THE CUSTOMIZABLE INTRALOGISTICS PLATFORMS

HIGHLY EFFICIENT: MOBILE INDUSTRIAL ROBOTS MIR500 & MIR1000

Are you looking for autonomous and flexible internal transport solutions that act self-sufficiently to take over tedious and time-consuming tasks from your employees? With our driverless transport systems from Mobile Industrial Robots, we automate your internal transports without adjustments to your process management or production layouts. The AGV allow you to deploy personnel to higher value and more demanding work assignments elsewhere more efficiently.

With the robust MiR500 and MiR1000, loads up to 1 ton are picked up autonomously, transported safely and unloaded just in time at the target location. This avoids unnecessary interpersonal contact and significantly minimizes the risk of infections at the site. On request, we can flexibly equip the working base of the AMR platform with different add-on modules from the MiRGo accessories program. For example, we can add pallet forks and conveyors to your MiR500 or MiR1000, or equip it with a robot arm and other attachments for your individual application.

For use in industrial environments, both model types comply with ISO/EN 13849, can be used collaboratively in interaction with humans and meet industrial EMC standards. Use the MiR as a single robot or as a fleet and optionally fully integrated into an Industry 4.0 concept.

TYPICAL SECTORS & INDUSTRIES FOR MIR500 & MIR1000

• **Automotive** • **Logistics** • **Electronics** • **Consumer Goods** • **Medical Technology**



FEATURES, FACTS & BENEFITS

YOUR PRODUCT ADVANTAGES

- **Compact & agile**
navigation in dynamic settings
- **Collaborative & safe**
for interaction with people; rerouting of dynamic obstacles, alternative route finding if necessary
- **Contactless intralogistics**
across departments & the entire site
- **Flexible use**
no operational modifications required; easy adaptation in case of process changes; standard modules for individualization
- **Easy handling**
simple setup, fast deployment & intuitive programmability
- **Full transparency**
user-oriented real-time insights into missions via WIFI
- **Full system compatibility**
for integration with your ERP/GMS
- **Scalable & fleet ready**
integration of further AMR via MiR Fleet

TECHNICAL SPECIFICATIONS MOBILE INDUSTRIAL ROBOTS *

MIR500



| | |
|---------------------|-------------------------|
| Max. load capacity: | 500 kg |
| Empty weight: | 226 kg |
| Speed: | max. 7.2 km/h (2.0 m/s) |

MIR1000



| | |
|---------------------|-------------------------|
| Max. load capacity: | 1,000 kg |
| Empty weight: | 226 kg |
| Speed: | max. 4.3 km/h (1.2 m/s) |

MIR500 / MIR1000 COMMON PARAMETERS

| | | | |
|---------------------------|--|-------------------|--|
| Dimensions (LxWxH) | 1,350 x 920 x 320 mm | Load area/load: | 1,300 x 900 mm (LxW) for custom. setup; esp. suitable for standard EUR, industrial EUR |
| Turning radius: | 2,000 mm | | 1/2 pallets or similar |
| Position accuracy: | +/- 5 mm / angle +/-1° (from center) | Protection class: | IP21 |
| Battery & Power: | Li-NMC, 48V, 40Ah (lithium ion accumulator) | Safety: | CE conformity |
| Performance duration: | 8-15 hrs. (depending on application) | | 5 safety functions according to ISO 13849-1. Robot stops when a safety function is triggered. |
| Charging time: | 60 minutes automatic charging | Safety system | |
| Battery life | > 1,000 cycles | | 2x SICK microScan 3 safety laser scanners |
| Communication: | WIFI | | for 360° field of view up to 30 m in one plane at 200 mm height |
| Environmental conditions | | | 2x 3D camera with Intel RealSense D435 |
| Recommended track widths: | Passage min. 2,100 mm / Swiveling min. 2,600 mm / door min. 1,000 mm | | for object detection up to a height of 1,700 mm at a dist. of 950 mm in front of the robot, 114° horizontal view, total. |
| Floor: | smooth / dry (small water puddles) | | Ground view, minimum distance from robot: 250 mm |
| Uneven floor: | < 20 mm | | 8x proximity sensors |
| Temperature range: | 5 to 40 °C (storage: -10 to 60 °C) | | 4x emergency stop switch |
| Rel. humidity: | 10 to 95% (non-condensing) | | Acoustic & visual signaling |

* Specifications as provided by the manufacturer at the time of printing; subject to change & errors excepted.

OUR COMPREHENSIVE SERVICES AS AMR INTEGRATOR

 Test Installation

 Commissioning

 Fleet Management

 Maintenance & Service

 Safety & Consulting

 Education & Training

Find extensive accessories like pallet stations, pallet lift, pallet dispenser, loading station, control elements & software, sensors and much more online.



GET TO KNOW US

As the largest manufacturer-independent integrator of automated guided vehicles in Europe, we deliver the perfect solution for the automation of your intralogistics tasks in industry, service, trade & crafts.

Let us talk about your challenges and get your company's logistics future-ready with our strong team!

MOBILE ROBOTS
by DAHL ROBOTICS

Visit us at the EXPERIENCE.CENTER
SÜDWESTFALEN in Lüdenscheid!