igus®

Mobile robots
ReBeLMove

Autonomous mobile robot (AMR) with a wide range of benefits
The ReBeLMove intralogistics system is ideal for transporting small load carriers (SLCs) in various applications and can be adapted to new tasks. Compared to similar AMRs, the ReBeLMove offers a cost advantage of around 40%.
The ReBeLMove can be set up quickly and easily with the user-friendly app. It enables seamless communication via virtual (REST API) and physical IoT devices, which ensures automated process control. The parameters of your process are monitored and the necessary transport requests started. For example, doors open automatically depending on the location and machines request refills via an IO module.

● Simple implementation thanks to intuitive app design
● Communication via virtual (REST API) and physical IoT devices
● Integrated fleet management
● 8 hours operating time
● 50kg load capacity, up to 100kg tensile weight possible

Applications

The ReBeLMove automates the following production processes, for example: supplying and emptying machines, supplying manual workstations, transporting empty containers, replenishing goods, transporting order picking trolleys, carrying out quality processes and providing tools to operatives.

Integrated fleet management

Would you like to transport pallets in addition to SLCs, for example, or do you already have other AMRs in use? The ReBeLMove can be easily controlled by other fleet managers. Fleet management is VDA5050-compatible and has already been integrated in the fleetexecuter, Kinexon and Naise from idealworks.

Intuitive app

The Coordinator is the central app for setup, customisation and operation. The intuitive user interface works on all operating systems: Android, iOS, Web, Windows and Linux.

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Product range

Part No.	Length* [mm]	Width* [mm]	Height* [mm]	Approx. load capacity [kg]	Speed [m/s]
REBEL-MOVE-KIT-01	710	410	270	100	1.2

Part No.	Weight [kg]	Nominal voltage [V]	CE [Level]	Ampere-hour [Ah]
REBEL-MOVE-KIT-01	35	25.8	CE/Performance Level D	24

*Dimensions of the mobile robot platform

Kit contents

- **ReBeLMove:** mobile robot platform
- **Charger:** reliable charger for constant machine readiness
- **Charging dock with frame:** makes charging easier and offers secure storage
- **Tablet with rugged cover:** robust tablet for demanding environments
- **Bluetooth controller:** simple and intuitive manual control system
- **One-year update and support service**

Sensor technology

By using the following sensors and components, the ReBeLMove fulfils the CE requirements and achieves Performance Level D:

- Laser scanner in the centre
- Two ToF sensors on the sides
- RealSense front camera
- Two-channel emergency stop

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Standard SLCs

Transport crates (SLCs) in the standard formats 300x400mm and 400x600mm can be transported. Numerous customisation options make it possible to adapt the ReBeLMove to specific transport packaging and find the optimum solution for different requirements.

Tilting protection

The tilting protection prevents boxes and products from tipping when they are stacked, which is particularly useful when picking parts in their original packaging. It increases safety and efficiency in storage and shipping processes and minimises the risk of damage.

Separator

The separator allows for the seamless change of SLC so that the machine can continue production without interruption. No human intervention is required.

Undercarriage

The ReBeLMove can pick up and put down trolleys in a flexible way. Customised superstructures such as order picking trolleys, tool trolleys and many more with loads of up to 100kg can be realised.

Stations

Profile station 600 and 300: for SLCs (400x600mm and 400x300mm) in material handling.
Container station 600 and 300: low design, e.g. for injection-moulding machines, can also be used as transfer stations.
Buffer stations: they can be expanded flexibly for storing empties and full SLCs, ideal for night shifts without human intervention.

IoT-based

Easy integration and communication with additional infrastructure such as doors and machines. Communication via virtual interfaces (REST API) and physical IoT devices.

Customised products

We offer customised adaptations of our standards to best suit your specific applications or existing machines.

The benefits at a glance

- Short ROI: 12 to 24 months
- Profitable from an AMR
- Quick setup
- Easy to adapt to frequently changing processes

- No lane markings or tracks
- Add further AMRs at any time
- Can be fully integrated thanks to various interfaces: IoT, VDA5050, REST, SAP, ERP