



SMART  
SOLUTIONS  
FOR YOUR  
SUCCESS

Autonomous mobile robots

# AMR Solutions

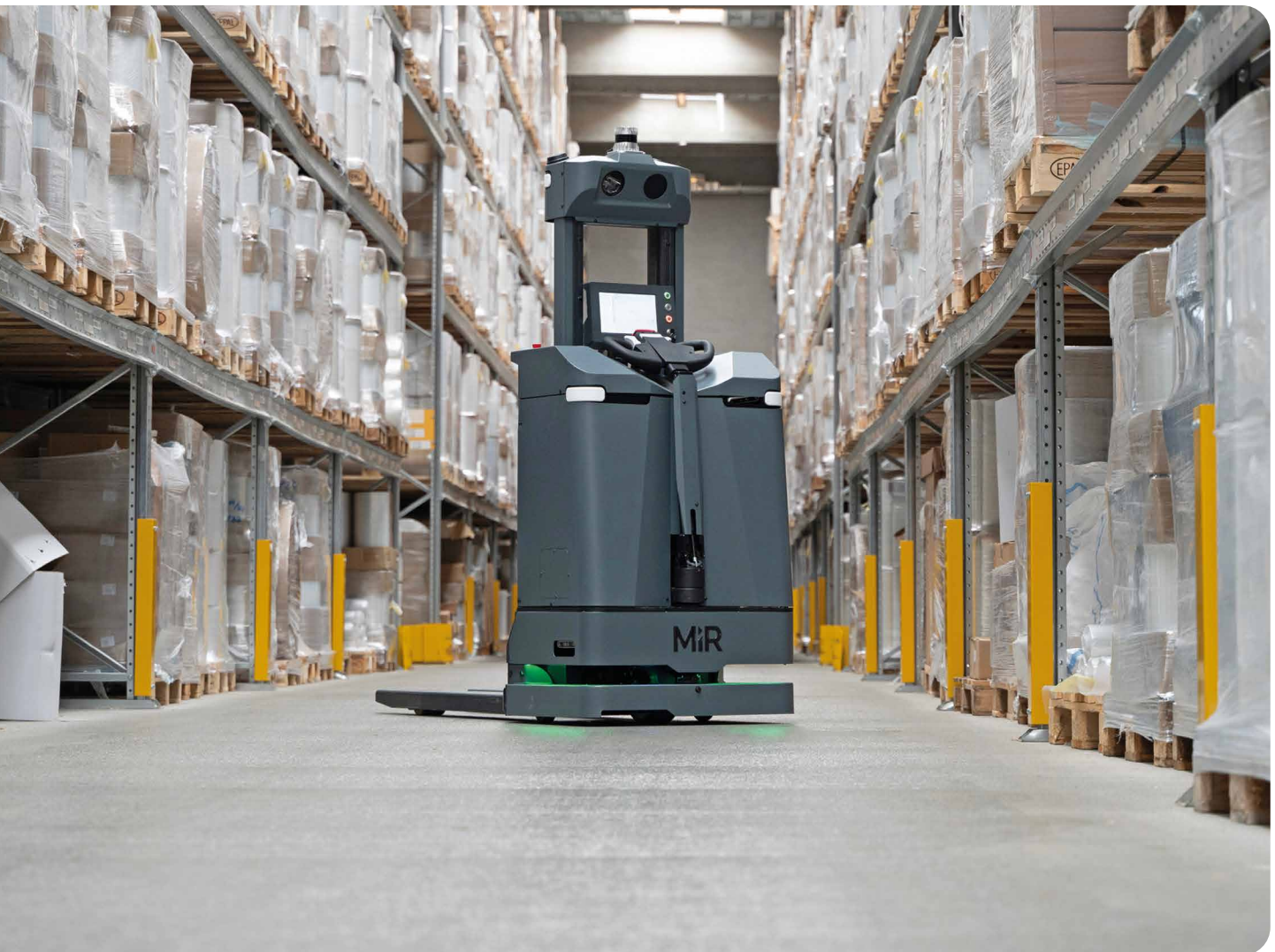


[log-robot.com](https://log-robot.com)

# What is log-robot?

a brand of   
solutions

**log-robot** is your expert partner for innovative automation solutions. The focus is on **autonomous mobile robots (AMR)** that increase efficiency and precision in intralogistics and enable companies to respond more flexibly and agilely to the challenges of modern Industry 4.0. log-robot accompanies you on the path to automation and is reshaping the future of intralogistics. With many years of experience, we seamlessly integrate state-of-the-art technologies into operational processes. As a **distributor of the renowned brands** Zebra Robotics Automation, Mobile Industrial Robots (MiR), PUDU Robotics and Innok Robotics, we attach great importance to providing excellent advice and service in order to offer **tailor-made solutions for every specific requirement**, be it cleaning tasks, internal transport of goods, automation of recycling processes, picking assistance or demanding outdoor tasks. Under the umbrella brand S&K Solutions GmbH, log-robot offers **smart solutions for your success**.



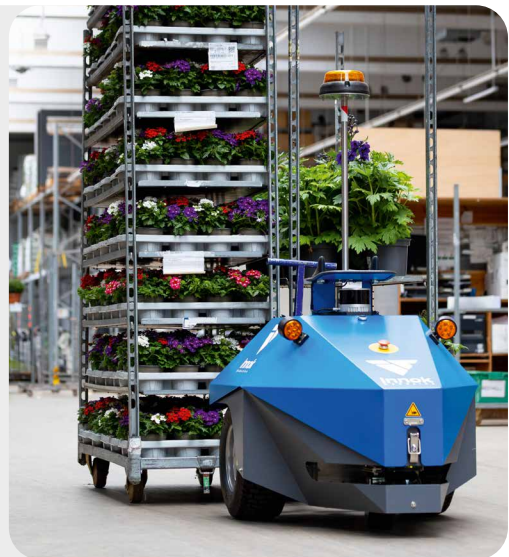
# = What are AMRs?

**Autonomous mobile robots (AMRs)** are intelligent, independently navigating systems that are used for a variety of tasks in logistics, production and cleaning. Unlike conventional, permanently installed transport solutions such as conveyor belts or driverless transport systems (DTS), AMRs move **flexibly and independently** through their environment. They use state-of-the-art sensor technology, cameras and algorithms to **detect obstacles**, dynamically plan routes and move safely during operation.



## ADVANTAGES OF AUTONOMOUS MOBILE ROBOTS

- **Increased efficiency** through the automation of repetitive and time-consuming transport tasks and a reduction in the workload for employees
- **Flexibility** through rapid adaptation of robots to changing requirements, such as during production peaks or restructuring
- **Reduction in operating costs** due to the elimination of investments in fixed infrastructure



## AMR MANUFACTURERS AT LOG-ROBOT

Zebra  
Robotics Automation™

MiR

Innok  
Robotics

PUDU

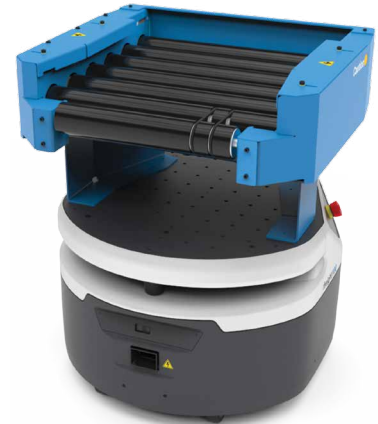


# Zebra Robotics Automation

## EXTENSIVE AMR PORTFOLIO

Zebra is a manufacturer of mobile computer technology and, since the acquisition of Fetch Robotics, also a producer of autonomous mobile robots. **Zebra stands out in the market** thanks to the **diversity of its product range**. By using a powerful base module, the robots can be **flexibly adapted** to many tasks – from the punctual delivery of production materials between workstations and support in picking processes to closing gaps between conveyor belt systems.

The **Zebra Roller** model (fig. right), for example, automatically docks onto a **roller conveyor belt**, picks up the goods that have been brought to it, and then transports them **completely autonomously** through the warehouse, to the production line, or to the next conveyor belt connection.



## SELECTION FROM THE PORTFOLIO

- **Zebra Connect** Autonomous mobile racks (see image below)
- **Zebra Flex** Rolling helpers for picking
- **Zebra Roller** Transport of goods between Roller conveyor belts



## AUTOMATION? SURE!

State-of-the-art **sensor technology and 3D scanners** make the AMRs offered by log-robot safe work colleagues. They reliably avoid people and obstacles and find a new route to their destination.

Once a map has been created, the robot knows which areas it is allowed to travel in and where it must stop. When the battery is empty, the AMRs navigate to the nearest charging station.

Zebra  
**Robotics Automation™**

## ROLLING SHELF

The robot below is **a real champion** in the Zebra Robotics Automation **portfolio**: the Zebra Shelf. With a load capacity of up to 80 kg, it travels at a maximum speed of 1.75 metres per second to supply various workstations with replenishments in a timely manner. Or it independently transports goods ready for shipment to dispatch and loading – for up to 9 hours at a time on a single battery charge.



# Innok Robotics

## AMR FOR INDOORS AND OUTDOORS

Innok Robotics builds autonomous mobile robots that are specifically designed for working in harsh environments and outdoor use – and for moving heavy loads. Take **INDUROS** (pictured right), for example. This machine pulls trailers weighing up to 1,000 kg over uneven ground and slight inclines. With its automatic coupling, the AMR independently docks onto the trailers to be picked up and transports them safely to their destination. This makes transporting materials between different halls, even outdoors, much easier and more efficient.



## SELECTION FROM THE PORTFOLIO

- **INDUROS** Powerful transport robot
- **RAINOS** Fully automatic casting robot (fig. bottom left)
- **INSPECTOS** Monitors and controls pipelines and extensive grounds (fig. bottom right)



## SAFE ON THE GROUNDS

**The large wheels** are a special feature of Innok robots. The AMRs effortlessly overcome **kerbs, potholes and uneven terrain**. Even **fragile surfaces** are no problem. Depending on the area of application, you can choose between three- and four-wheel versions, as well as between normal or all-wheel drive. Tractor profiles for working on agricultural land are also available.





# Mobile Industrial Robots

## EXPANDABLE FOR EVERY JOB

**Mobile Industrial Robots** (MiR) manufactures autonomous mobile robots designed to optimise internal transport processes and material supply. Thanks to its modular design, the robot base can be supplemented with a variety of attachments and converted for special tasks.

The MiR Hook 250 attachment (fig. right) makes it possible to **continue using and automating an existing fleet** of trolleys with ease. With additional robot arms, the MiR250 can be transformed into a mobile production and assembly assistant.



## SELECTION FROM THE PORTFOLIO

- **MiR250**

An agile and fast AMR for loads up to 250 kg. Ideal for confined spaces and dynamic environments.

- **MiR600**

Transports pallets weighing up to 600 kg at speeds of up to 2 m/s.

- **MiR1200 Pallet Jack**

The powerful AMR is designed to be fully autonomous mobile forklift truck in operation, handling loads of up to 1,200 kg in warehouses and production facilities (fig. left).

## POWERFUL SOFTWARE

With MiR Fleet software, up to 100 robots can be controlled centrally via PC, tablet or smartphone. This enables full control of the AMRs used, both on site and remotely.

**MiR**

# PUDU Robotics

## CLEANING AND DELIVERY ROBOTS

**PUDU Robotics** is a global high-tech company based in China that specialises in the development, production and distribution of **service and cleaning robots**. With the aim of increasing efficiency in various industries, PUDU Robotics offers advanced solutions for the modern working world.

Some of these fully automatic robots offer several labour-saving functions in one device. The CC1 model (fig. right) vacuums, mops, sweeps and scrubs – and supplies itself with fresh water.



## SELECTION FROM THE PORTFOLIO

- **PUDU CC1** Autonomous cleaning robot
- **PUDU MT1** Automatic sweeping robot (fig. below)
- **PUDU T300** Transport/delivery robot with a payload of up to 300 kg



## LARGE AREAS

PUDU cleaning robots are characterised by their **high performance**.

In standard cleaning mode, the MT1 sweeper can cover up to 1,800 square metres per hour. The CC1 mopping and vacuuming robot can handle **many different types of flooring** and can be equipped with special brushes and attachments for various tasks – for perfect cleanliness without interruption.





## FOLLOW ME MODE

The **PUDU T300** is an innovative transport and delivery robot that optimises processes in warehouses and logistics. In **"Follow Me" mode**, the robot automatically follows the employee and stops precisely at his side. This makes order picking much easier, as both hands remain free and **no manual control is required**. Efficiency and ergonomics are improved, walking distances are minimised and productivity is increased – ideal for modern warehouse processes. At the same time, this AMR can also be used **as a tractor** and combined with trolleys and carts (fig. right).



## MANOEUVRABILITY AND AUTONOMY

Thanks to its **compact footprint**, the PUDU T300 navigates effortlessly through narrow aisles and requires very little space to turn. It remains **efficient and flexible** even in narrow storage areas. Its intelligent control system enables it to avoid obstacles and even **open doors and call lifts**, allowing it to change floors independently.

This optimises material flow and increases efficiency – without any manual intervention. The maximum payload is up to 300 kg with a battery life of up to 12 hours. When the charge level is low, it heads for the nearest charging station.

## USE IN PUBLIC PLACES

Cleaning robots from PUDU Robotics are designed for **continuous operation** and high efficiency to ensure **consistent cleanliness** even in busy locations. Supermarkets use the cleaning robots during normal business hours, as they reliably avoid collisions with people. The robots have been successfully tested in airport terminals, shopping centres and factories for electronic components, where a **particularly dust-free environment** is essential.



# Best Practices

## LOG-ROBOT SHOWROOM

Scan the **QR code** to enter our **digital showroom**.  
Discover exciting **best practice videos** featuring our autonomous mobile robots!  
You can find a few examples listed here.

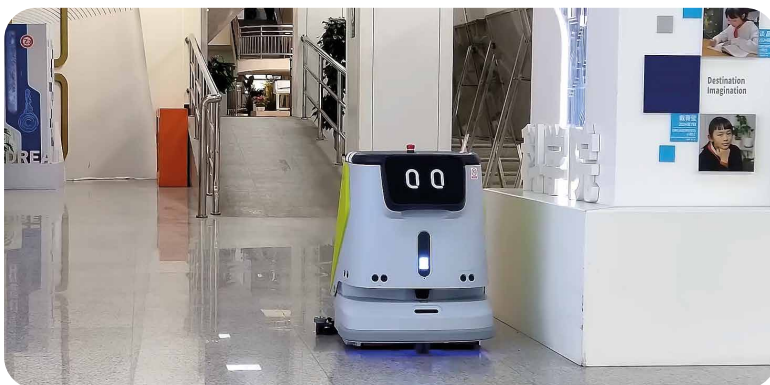
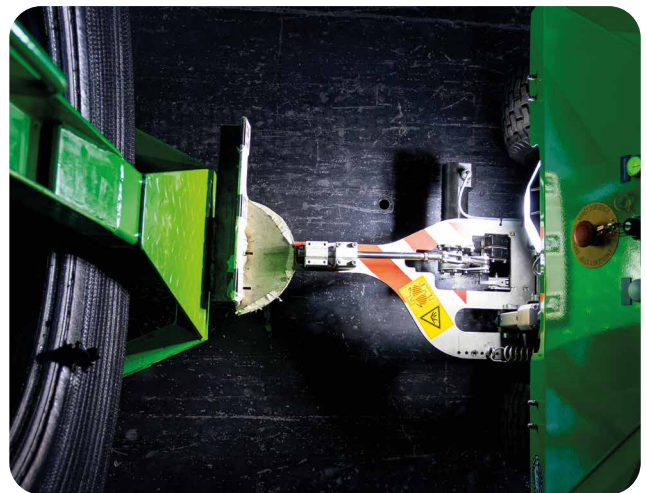


## SAVE - EVEN IN LOW LIGHT

The PUDU MT1 Max (fig. left) also performs well in poorly lit environments. Here, the sweeping **robot cleans** a dark car park **fully automatically** and navigates around obstacles with ease.

## STRONGLY COUPLED

INDUROS from Innok Robotics can pull **up to a tonne of weight** independently across terrain – **both indoors and outdoors**. The AMR couples one trolley after another and uncouples them again at their destination. This makes the robot suitable for heavy tasks in the workplace and **noticeably reduces employees' workload**. In the video, you can see INDUROS in action at a tyre retreading company. The AMR manoeuvres effortlessly to the other end of the premises for further processing, even overcoming uneven floors and thresholds.



## CLEANING UP AT SCHOOL

The PUDU CC1 is **ideal for use in public spaces and locations**. In the video on the left, it glides effortlessly through corridors and common areas of a school, tirelessly removing dust and dirt. For a **spotless and hygienic learning environment** for pupils and teachers.

## PICKING PROCESSES

**Most errors occur** when compiling orders, customers return parcels, and costs are incurred. With the support of autonomous mobile robots, sources of error are eliminated. Watch the video (QR code) to see how the **Flex Guide robot** (fig. right) navigates employees through the warehouse to get to the required storage locations as quickly as possible. **Light signals on the shelves and robots** indicate where products are to be picked. The screen always shows the status of the packing list, **thus increasing accuracy** in the picking process.



## ZEBRA SYMMETRY FULFILMENT

The combination of modern robots, **portable data capture devices** and AI-powered data analysis **maximise efficiency** when using **Zebra Connect AMR**. The robots do not have to wait until a trolley is completely loaded with new goods. Instead, the control software ensures that the autonomous mobile robots disconnect themselves and drive to their next task **while the picking process is still in progress**.











Only when requested does an AMR come to collect the filled shelf. This reduces the number of robots required in the warehouse.

## PALLET TRANSPORT

Transporting heavy loads in warehouse and production environments is **dangerous** and places a heavy strain on people. Heavy-duty robots **reliably** transport pallets weighing **up to 1,350 kg** to their destination. The **MiR600** (fig. right) handles lighter loads of up to 600 kg. A **fully automatic load lifter** is mounted on the robot base as a module when required.





Properties				
 Payload	depending on the model 52 to 250 kg	depending on the model 250 to 1,350 kg	depending on the model 70 to 1,000 kg	up to 300 kg (Model T300)
 Applications	<ul style="list-style-type: none"> <li>• Picking assistance</li> <li>• Material handling</li> <li>• Trolley movement</li> </ul>	<ul style="list-style-type: none"> <li>• Pallet transport</li> <li>• Car transport</li> <li>• Forklift</li> </ul>	<ul style="list-style-type: none"> <li>• Pulling heavy loads</li> <li>• driving on cracked floors</li> </ul>	<ul style="list-style-type: none"> <li>• Swipe</li> <li>• Sweeping</li> <li>• Vacuuming</li> <li>• Material transport</li> </ul>
 Speed	1.75 m/s	1.2 to 2 m/s	0.9 to 1.8 m/s	up to 1.2 m/s adjustable
 Battery life	up to 9 hours	8 to 17 hours	up to 16 hours	up to 12 hours
 Modularity	Roller conveyor attachment, various shelf sizes usable	Robot arms, hooks for individual car transport	Attachment of tools, e.g. snow plough, broom, etc Inspection camera	additional Water tanks, extendable steering handles
 Surroundings	Indoor	Indoor	In- and outdoor	Indoor

### Smart Solutions for your Success.

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