log-robot

SMART SOLUTIONS FOR YOUR SUCCESS

Autonomous Mobile Robots

Fewer trips, cleaner floors



log-robot.com

What is log-robot?

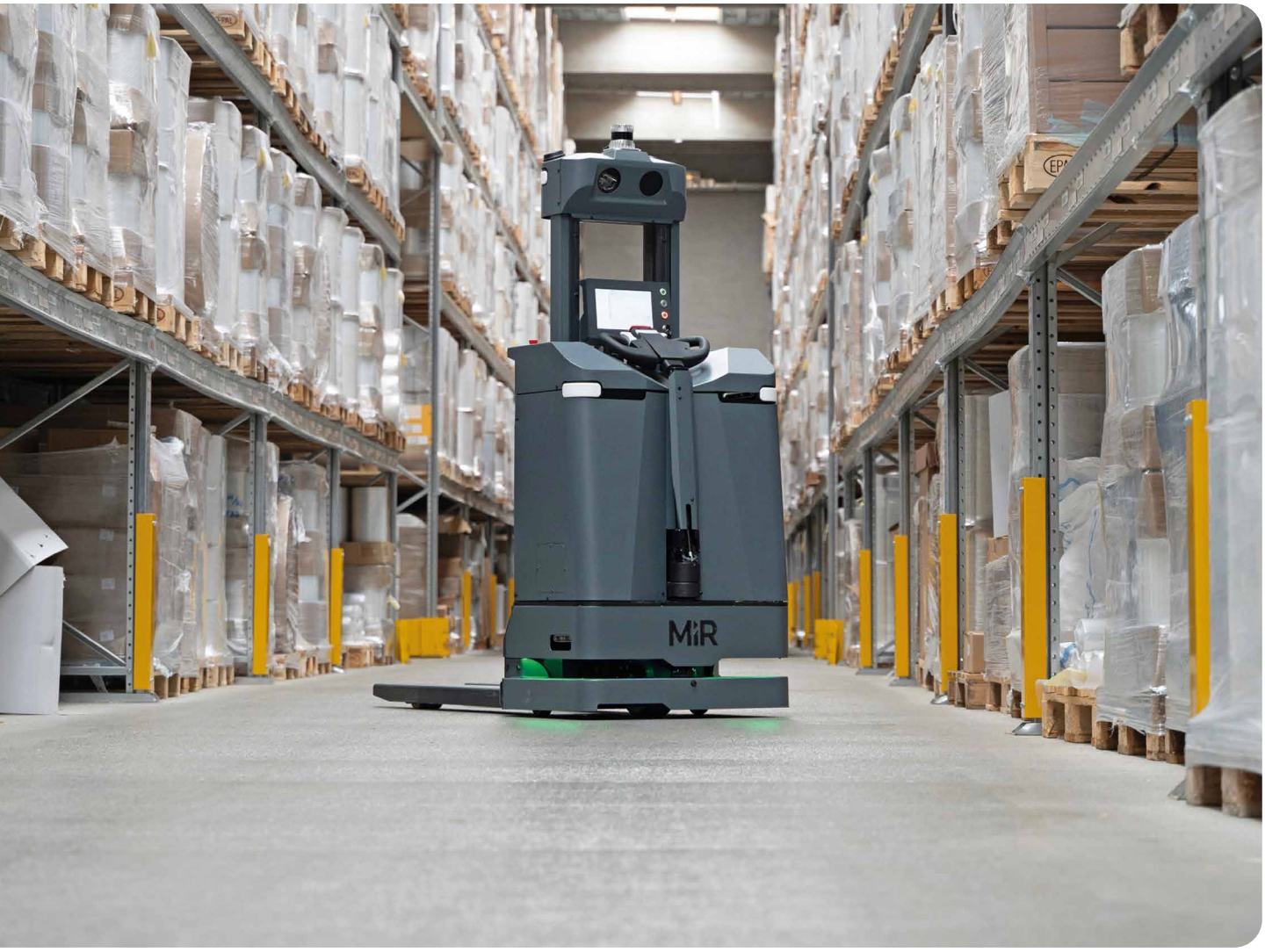
a brand of SK solutions

log-robot is your partner for autonomous mobile robots (AMRs) in **intralogistics, cleaning and outdoor environments**. We provide consultancy, integration and support: from needs analysis through to pilot projects and training, right through to on-site service in Germany, Austria and Switzerland.

As a distributor for **MiR, PUDU Robotics and Innok Robotics**, we can find the right solution for every task, from pallet transport and floor cleaning to outdoor use.

Qualitätsmanagement ISO 9001
www.dekra-siegel.de
DEKRA zertifiziert

ISO 9001:2015 certified | On-site service in the DACH region | 20+ years



What are AMRs?

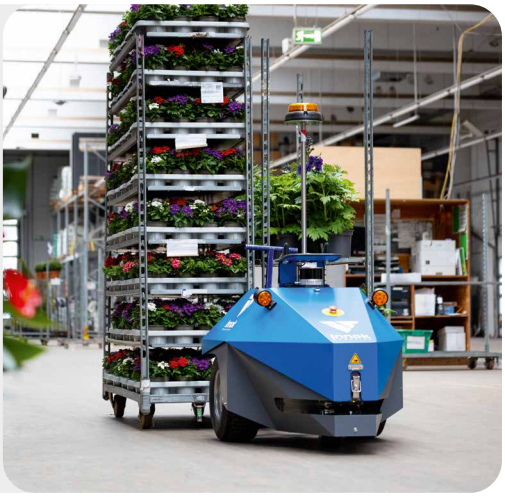
Autonomous mobile robots:

- navigate using sensors and cameras independently through your premises,
- detect obstacles and replan their routes,
- do not require fixed tracks, magnetic strips or structural alterations, unlike conveyor-belts or automated guided vehicles.



ADVANTAGES OF AUTONOMOUS MOBILE ROBOTS

- **Efficiency:** significantly reduced travel time for transport tasks; cleaner surfaces whilst requiring fewer staff for manual cleaning
- **Flexibility:** the robots can be installed and put into operation in a matter of days rather than weeks; routes can be modified via software
- **Save on investment:** no fixed infrastructure required; the fleet grows in line with demand



AMR MANUFACTURERS AT LOG-ROBOT

MiR

Innok Robotics

PUDU

PUDU Robotics

PUDU Robotics is a global high-tech company based in China that specialises in the development, production and sale of **cleaning and transport robots**.

Some of these fully automatic robots combine several labour-saving functions in a single device.

The **CC1 Pro** model (pictured right), for example, vacuums, mops, sweeps and scrubs – and, thanks to an optional docking station, even refills itself with fresh water whilst doing so.



A SELECTION FROM THE PUDU PORTFOLIO

- **CC1 Pro** Autonomous vacuum and mop robot
- **BG1 Pro** Large vacuum and mop robot (up to 2,000 m²/h)
- **ET1** Compact vacuum and mop robot (up to 720 m²/h)
- **MT1 Max** Automatic sweeping robot (pictured below)
- **T300/T600** Transport robots with a payload of up to 600 kg
- **MP2000** Fully autonomous pallet robot



LARGE AREAS

PUDU's cleaning robots are characterised by their **high performance**. The MT1 Max sweeper covers up to 2,200 square metres per hour in standard cleaning mode.

The CC1 vacuum and mop robot is suitable for a wide range of floor types and can be fitted with **specialised brushes and attachments** for various tasks – ensuring perfect cleanliness without interruption.

PUDU

FOLLOW ME MODE

The **PUDU T600** is an innovative transport and delivery robot for intralogistics. In **'Follow Me' mode**, the robot automatically follows the employee and stops precisely at their side. This makes order picking easier, as it leaves the employee's hands free and requires **no manual control**. Efficiency and ergonomics are improved, walking distances are minimised and productivity is increased. At the same time, this AMR can also be used as a **towing vehicle** and combined with trolleys and carts (fig. on the right).

Models are available for loads of 300 or 600 kg.



SERVICE ROBOTS FOR RESTAURANTS

They glide **silently from table to table**, delivering food and drinks. In many restaurants and hotels, PUDU's service robots are hard at work as **reliable helpers**. The **BellaBot Pro** (pictured right), with its large colour display, also serves as an advertising medium, for example for daily set menus and specials.

Alternatively, waiting staff often use the robot to **clear tables more quickly**. The BellaBot automatically takes the crockery to be washed.

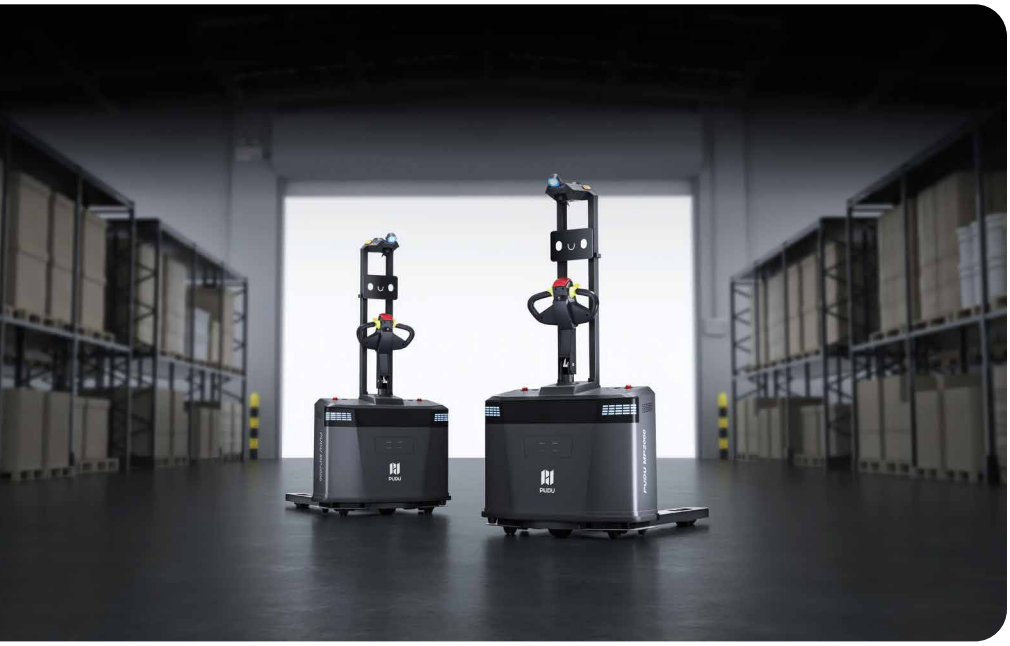


MANOEUVRABILITY AND AUTONOMY

Thanks to their **compact footprint**, the T-Series robots navigate effortlessly through narrow aisles. They require minimal space to turn round. Even in narrow warehouse areas, the transport robots remain **efficient and flexible**. Their intelligent control system enables them to avoid obstacles, **open gates and call lifts**. This optimises the flow of goods – entirely without manual intervention. The battery life is up to 12 hours when unloaded. When the battery level is low, the units automatically head for the nearest charging station, which enables round-the-clock operation.



The future of logistics...



AUTONOMOUS PALLET ROBOT

Fork entry within 20 seconds and autonomous sensor navigation: the PUDU MP2000 ensures an always tidy warehouse. Travelling at 1.2 m/s (when loaded), it effortlessly transports loads of up to two tonnes. Pallets of components are picked up at the entrance and taken directly to the production line. This saves time and money.

MOPPING LARGE AND SMALL SURFACES

Sweeping, mopping and scrubbing in a single pass – that's what the **PUDU BG1 cleaning robot** specialises in. Thanks to its extendable side brushes, it reaches every edge during operation. With a long battery life and a fresh water capacity of up to 75 litres, **24/7 operation** is also possible with an optional charging and refilling station. Floors that are always clean, with no sick leave and at manageable costs: the investment usually delivers a return on investment within 12–18 months.

Image on the next page:
The compact **PUDU ET1** vacuum mop in action. It mops with water heated to up to 85 °C, thoroughly removing **grease and sticky stains**. At just 580 mm high, it can even reach areas under desks. Drying in a single pass **prevents the risk of slipping**.



PUDU

…and cleaning.



Innok Robotics

AMRs FOR INDOOR AND OUTDOOR USE



Innok Robotics builds autonomous mobile robots specifically designed for work in harsh environments and outdoor use – and for moving heavy loads. The **INDUROS 1300** (pictured right) can pull trailers weighing up to 1,300 kg even over uneven ground and gentle inclines.

Using its **automatic coupling system**, the AMR autonomously docks with the trailers to be collected and transports them safely to their destination. This makes the transport of materials between different halls – **including outdoors** – significantly easier and more efficient.

A SELECTION FROM THE INNOK PORTFOLIO

- **INDUROS** high-performance transport robots
- **RAINOS** fully automatic casting robot (fig. bottom left)
- **INSPECTOS** monitors and inspects cables and extensive grounds (fig. bottom right)





STAYING SAFE OFF-ROAD

The **large wheels** are a distinctive feature of Innok robots. The AMRs effortlessly negotiate **kerbs, potholes and uneven terrain,** or surfaces with **loose ground**.
Depending on the application, you can choose between three- and four-wheel versions, as well as between standard and all-wheel drive. Tractor-style tyres for working on agricultural land are even available.

Innok Robotics

log-robot

Mobile Industrial Robots

EXPANDABLE FOR ANY JOB

Mobile Industrial Robots (MiR) manufactures autonomous mobile robots designed to optimise internal transport processes and for material handling. Thanks to its **modular design**, the robot base can be fitted with a wide range of attachments and adapted for specialised tasks.

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





A SELECTION FROM THE MiR PORTFOLIO

- **MiR250**
  An agile and fast AMR for loads of 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 high-performance AMR operates as a fully autonomous forklift truck, handling loads of up to 1,200 kg in warehouses and production facilities. With AI-powered pallet recognition.

POWERFUL SOFTWARE

The MiR Fleet software allows up to 100 robots to be controlled centrally and remotely. The open interface enables full integration with existing ERP, WMS and MES systems.

MiR

Best Practices

LOG-ROBOT CASE STUDIES AS SHORT VIDEOS

Scan the **QR code** to access our case studies and digital showroom at log-robot.com. Discover exciting **best-practice videos** featuring our autonomous mobile robots! You'll find a few examples listed here.

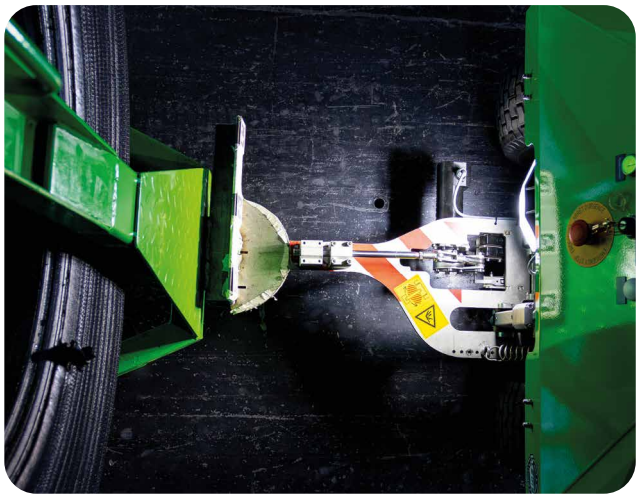


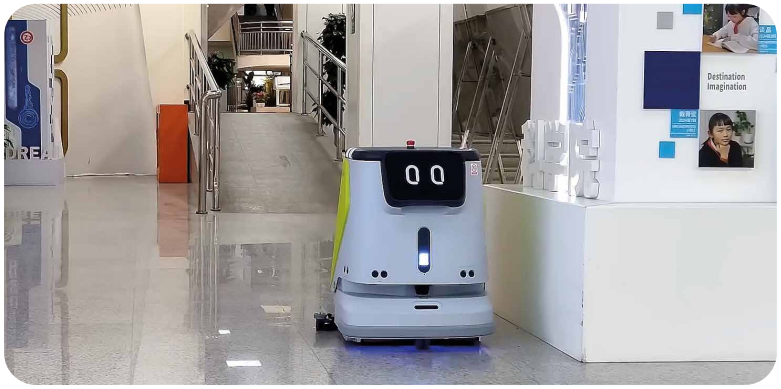
SAFE – EVEN IN LOW LIGHT

The PUDU MT1 Max (pictured left) performs well even in poorly lit environments. Here, the robotic sweeper **cleans a dark car park fully automatically** and navigates around obstacles with ease..

WELL-CONNECTED

The INDUROS from Innok Robotics can autonomously haul **loads of up to 1,300 kg** across the site – both **indoors and outdoors**. To do this, the AMR couples one transport trolley after another and then uncouples them again. This makes the robot ideal for heavy-duty tasks on site and significantly **reduces the workload on staff**. In the video, you can see INDUROS (pictured right) in action at tyre retreader Rigdon. It manoeuvres the tyres seemingly effortlessly to the other end of the site for further processing, whilst negotiating uneven ground and thresholds.





KEEPING THE SCHOOL TIDY

The PUDU CC1 (pictured left) is **ideal for use in public spaces and venues**. In the video, it glides through the corridors and communal areas of a school, tirelessly removing dust and dirt.
Ensuring a **spotless and hygienic learning environment** for pupils and teachers.

POWER VERSUS POPCORN

A **large bag of popcorn** is a must when watching a film at the cinema. But things often go wrong, and this causes cinema operators problems again and again. The use of the PUDU CC1 at the Cineplex in Passau proves that this vacuum and mop robot can even cope with **popcorn scraps stuck to the floor**. No blocked nozzles or hoses, and excellent cleaning results on both carpet and laminate flooring have proved its worth here.
Thanks to its sensors, the robot navigates automatically and **reliably avoids obstacles**. This means the CC1 can cope with foot traffic whilst moving around to mop up spilled cola.





SERVICE WITH A SMILE

The friendly cat's face on the **BellaBot service robot** interacts with guests. It serves ice-cream sundaes, drinks and cakes to the tables non-stop. This takes the pressure off the waiting staff and helps **cope with peak times**. Sensors detect whether a plate has already been taken away or whether the ordered dish is still on one of the trays being transported. **Clearing away is also made easier** when BellaBot transports the crockery from several tables to the wash-up area in a single trip. On the linked video page, you can watch the service robot at work.

PALLET TRANSPORT

Transporting heavy loads in warehouse and production environments **involves risks** and places a heavy strain on workers. Heavy-duty robots reliably deliver pallets weighing **up to 1,350 kg** to their destination. Lighter loads are handled by the **MiR600** (pictured right), which can carry loads of up to 600 kg. A **fully automatic load lifter** (Pallet Lift Module) is mounted on the robot base for this purpose as required.



Features	MiR	Innok Robotics	PUDU
Payload	250 to 1,350 kg (pallets with a lift up to 1,250 kg)	1,300 kg Towing capacity	T-Series 300 / 600 kg, MP2000 up to 2,000 kg
Applications	• Pallets • Trolleys • autonomous pallet trucks	• Hauling heavy loads • Operation on cracked and uneven floors	• Mopping/Scrubbing • Sweeping • Vacuuming • Materials handling • Service robots
Speed	1.2 to 2 m/s	0.9 to 1.8 m/s	up to 1.2 m/s adjustable
Battery life	8 to 13 hours	up to 16 hours	Transport: up to 12 hours (unloaded), cleaning 2.5 to 10 hours
Modularity	Robotic arms, hooks, lift, roller module	Tools: Snow plough, broom, inspection camera	Racks, shelves, pull module, conveyor belt attachment
Surroundings	Indoors	Outdoors and indoors	Indoors, partly semi-outdoor (MT1 Max)

Smart Solutions for your Success.

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