

AI 01  
DEEP LEARNING  
VISUAL OBSTACLE  
AVOIDANCE  
LOW POWER & CONSUMPTION

# M2M

SOLUTIONS

## AUTONOMOUS MOBILE ROBOTS ROBOTIZATION

AMR ROBOT INTEGRATOR FOR SLOVAK AND CZECH REPUBLIC



## PRODUCTS



**CTU**  
CARTON TRANSFER UNIT

Transport or storage of containers and crates with flexible picking height up to 10m

Application: high density storage, distribution of goods to production lines or picking stations



**LMR**  
LATENT MOBILE ROBOT

Move racks and crates weighing up to 2000 kg to the picking bay using a lifting mechanism

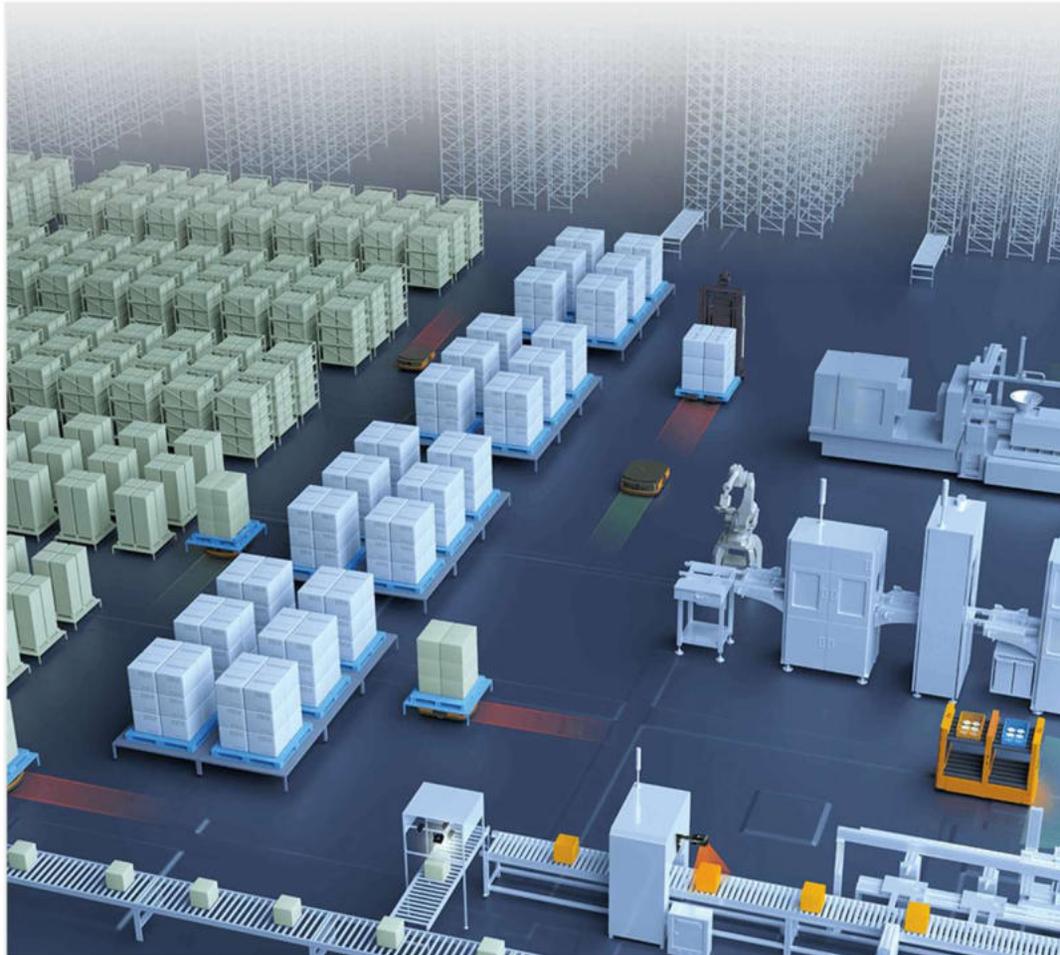
Application: Distribution of goods directly to the picking area, speeding up processes



**FMR**  
FORKLIFT MOBILE ROBOT

Automatic transport of standard trays and pallets with high-precision laser navigation

Application: Ideal solution for warehouses with diverse goods, customized solutions for non-standard pallet sizes



## MAXIMUM EFFICIENCY BY COMBINING SOLUTIONS

Efficient warehouse processes are more than half of success. Switch to a combination of intelligent solutions and software that can save you time and money

We implement solutions that are a logistics revolution. By combining CTU and LMR racks with a managed warehouse system, you can efficiently reduce warehouse space while maximizing picking capacity



## CMR

### CONVEYER MOBILE ROBOTS

Highly flexible mobile conveyors with applications in various areas of warehousing and production



## KEY FEATURES

- Flexibility
- Security
- Precise navigation
- High accuracy
- Simple integration with third party services

# CTU



## STORE TO HEIGHT WITH CTU ROBOTIC RACKS

- Picking up to 10m height possible
- Scalability - can be adapted to different crate heights
- Handling of crates up to 50kg/box
- Customization
- Integration with conveyor system

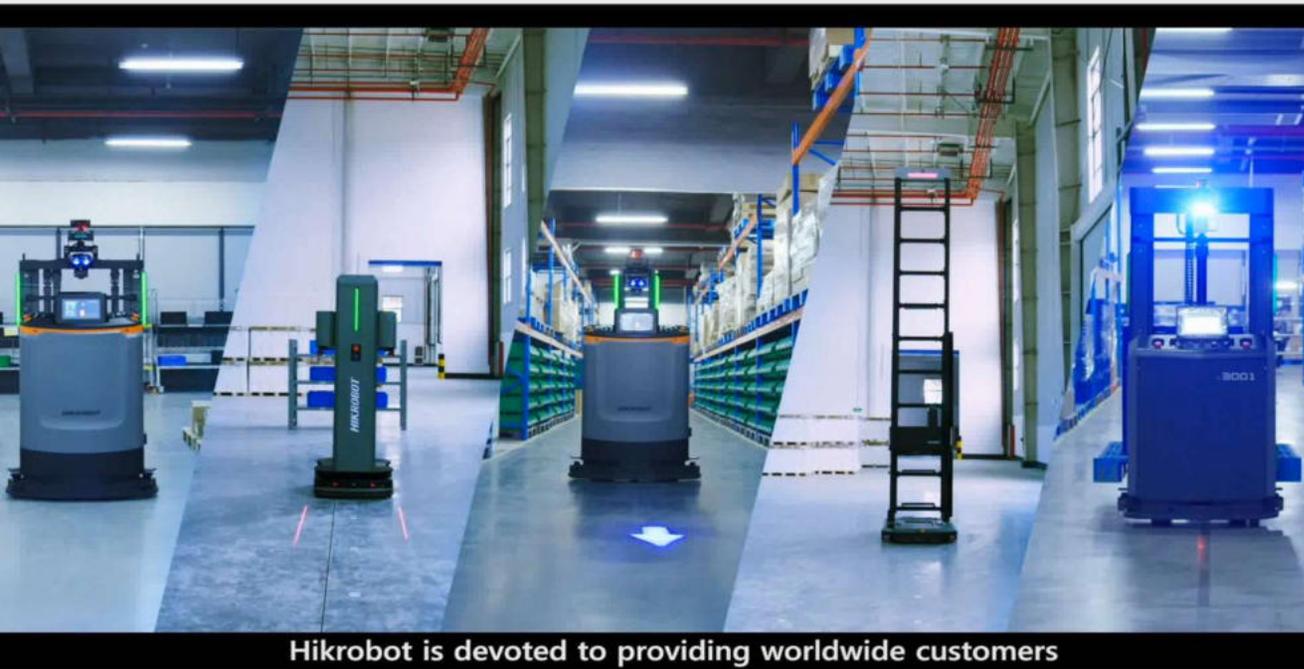
# LMR



## FLEXIBLE WORKPLACE WITH COMPACT LMR

- Quick and easy integration
- High transport speed
- Deployment flexibility
- Compact equipment dimensions
- Possibility to transport racks and pallets
- Maximum load capacity 2000 kg
- Low maintenance

# FMR



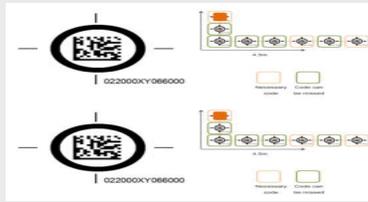
Hikrobot is devoted to providing worldwide customers

## FMR FOR EFFICIENT HANDLING

- Automatic transport of bins and pallets
- Wide range of handling products
- High precision laser and visual navigation SLAM
- Lifting heights up to 4,5 m
- Low lift transport up to 3000 kg
- Empty pallet stacking capability

## ROBOT NAVIGATION

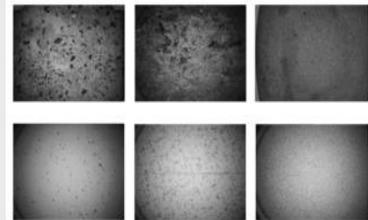
- Possibility of combining several types of navigation



QR CODE LABELS ON THE FLOOR

### QR

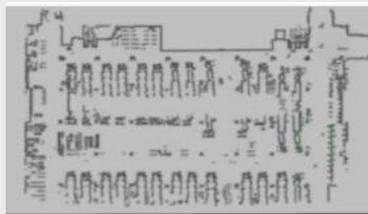
Reading of QR codes by the bottom camera, placed at least every 4.5m, 75% of the codes need to be read to work



PATTERN DETECTION ON THE FLOOR

### V-SLAM

Visual detection of floor patterns using the robot's bottom camera with an accuracy of 5mm. For use on clean floors with non-repeating patterns only



LASER AUTONOMOUS NAVIGATION

### L-SLAM

Scanning the area with a laser sensor and comparing it with the map, calculating the current position in space. For proper functioning it is necessary to have good quality reference points marked with a reflective sticker

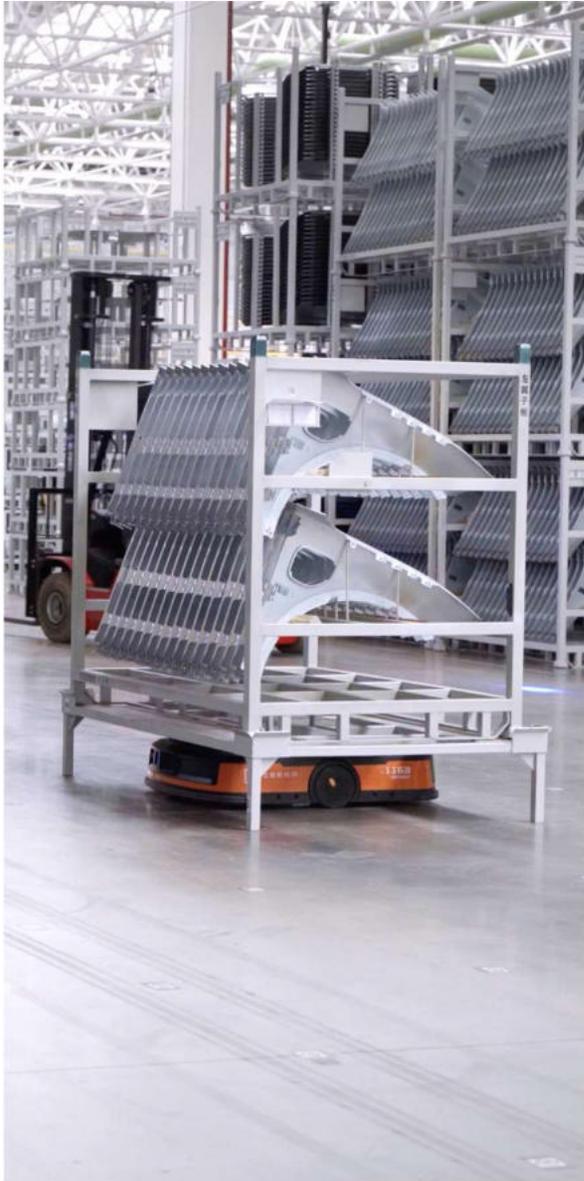


## WHY AUTONOMOUS MOBILE ROBOTS?

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An intelligent robotic system can simplify your internal logistics, reduce costs and streamline the entire logistics process

- Autonomous solution with accuracy up to 5mm
- Motion accuracy is ensured by several types of sensors - laser, ultrasonic, collision, L-Slam,...
- Early hazard risk assessment and collision avoidance
- Maximum movement speed of 2m/s
- CE safety certificate



SMART SOLUTIONS FOR YOUR  
WAREHOUSE

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