

MOBOT® CubeRunner MW mobile robots

An autonomous mobile robot with which you will automate internal transport. Ideal for transporting medium-sized loads, e.g. litter trays or parcels. It travels independently along the programmed route.

- Fast implementation without changes in the workplace
- Easy to use
- Works safely with people while carrying your loads
- Increases production efficiency and reduces costs
- LMS navigation ensures the autonomy of operation and flexibility of applications
- The omnidirectional drive ensures freedom of maneuver and reduces the time it takes to complete tasks
- For hospitals, offices, laboratories, light electronic production



operating time up to 8 h
on a single charge



payload up to 200 kg



Wi-Fi communication



dimensions
800 x 550 x 453 mm



max speed
3,5 km/h

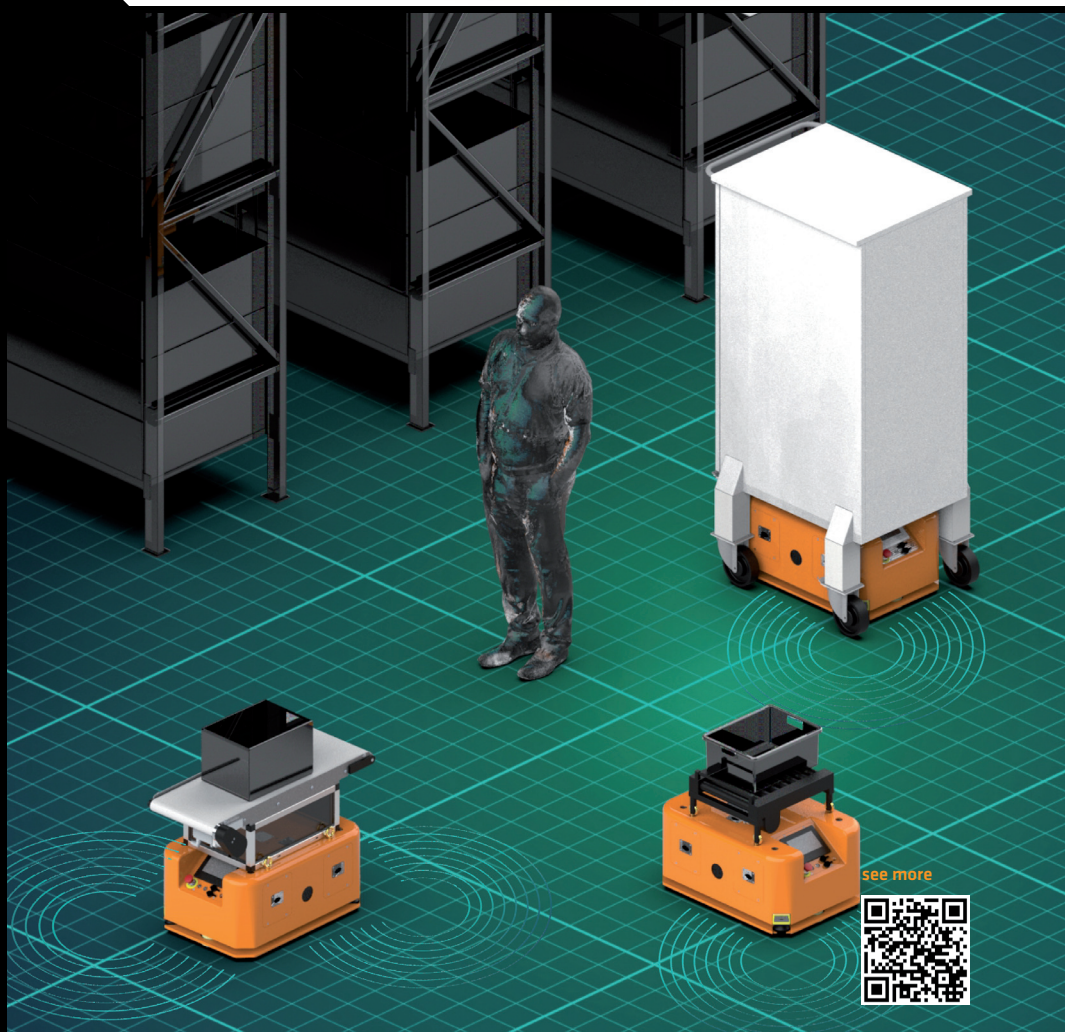


LMS system,
line navigation using the
vision system

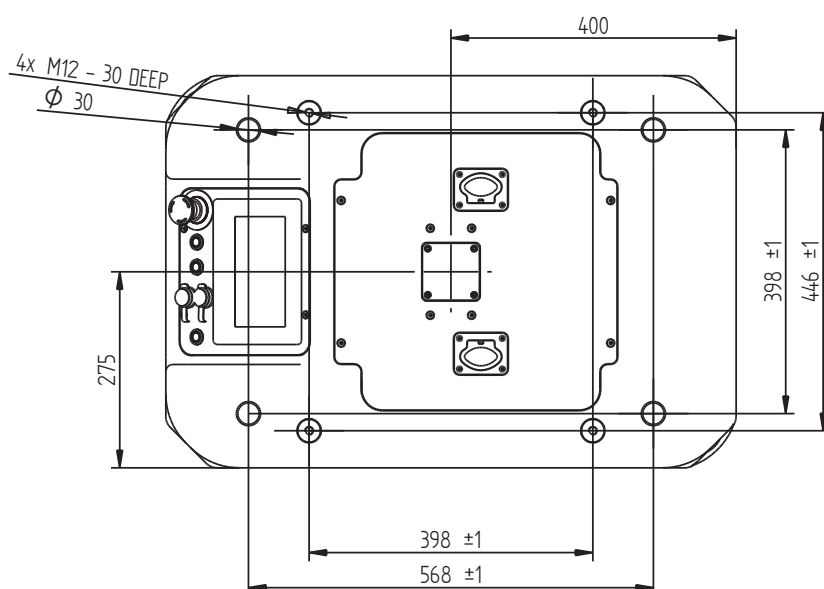
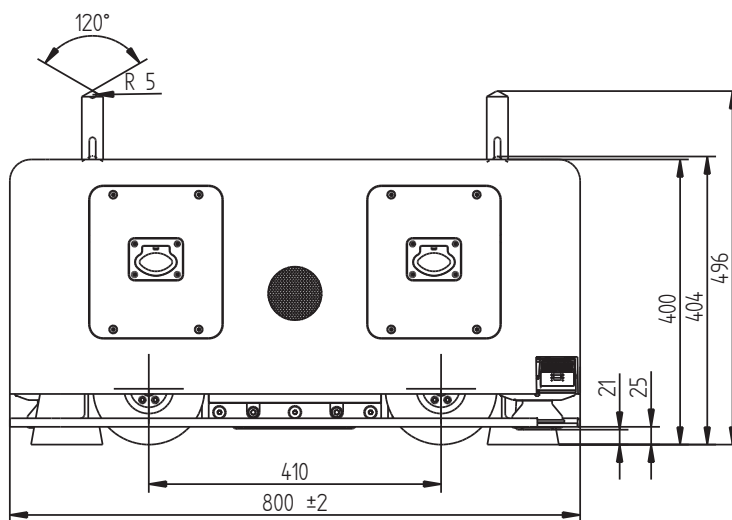
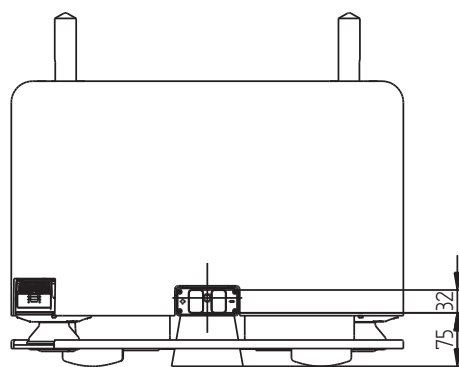
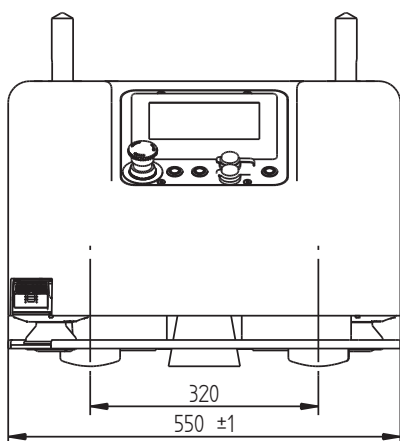


Mecanum wheels
-movement in any direction

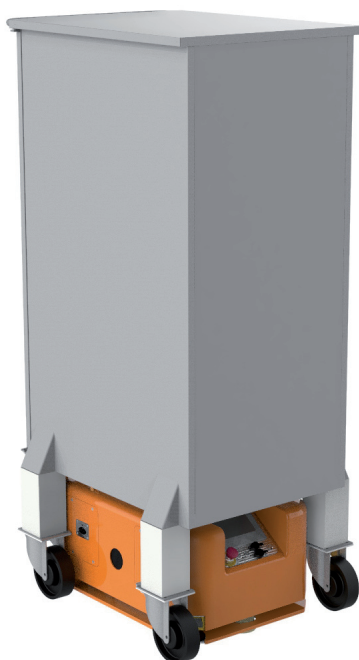
Intended use: transport of medium-sized loads in industry, logistics and hospitals



Robot type	MOBOT®AGV CubeRunner MW
Payload and transport method	
Transport method	Fastening the load on the upper surface of the robot with 4 M8 screws or using the load lifting system * Lifting loads to a height of 70 mm (to lift the load reaching over the substrate scanners navigation and safety)
Permissible total weight of the load	200 kg
Power supply	
Manual battery charging connector	YES (44 V DC, max. 20 A)
Automatic battery charging connector	A contact connector mounted on the bottom of the robot enables automatic battery charging during operation
Robot power supply	30 Ah Li-Ion battery / 44 V
Charger	- Standard 5A charger, connected manually with a connector - Optional 20A quick charger connected manually via connector - Optional contact module for automatic charging
Operating time at full load	~ 12 h
Operating time in standby mode	~ 40 h
Battery charging time	~ 6 h (5Ah charger), ~ 1.5 h (30 Ah charger)
Speed and performance	
Maximal speed	3,5 km/h
Nominal power	1000 W
Movement directions	Possibility of riding in all directions thanks to Mecanum wheels
Turning radius	Possibility of turning in place
Maximum surface slope	Restricted by the allowed approach angle of the robot
Navigation	
Navigation	Natural and intelligent navigation using the LMS * Navigating the line using a vision system * LMS - laser navigation system
Communication	
Communication	2.4 GHz Wi-Fi, optional 2.4 GHz industrial radio module (RS232)
Connector	- Ethernet RJ45 - communication with PC, MODBUS TCP / IP - I / O switch: 24 VDC supply output (max. 2 A) + 2 inputs + 2 out (max. 0.5A) + CAN
Drive and control	
Drive	4x servo motor (brushless), wheels diameter 156,5 mm
Control and steering	- 1 x 7 "touch operator panel - 1 x emergency stop - 1 x emergency stop reset confirmation buttons - 1 x power switch - 1 x function button - 1 x USB connector - 1 x Ethernet connector
Sensors	
Sensors	- 2 x vision system for tracking the line - 2 x 2D laser scanner with security function
Signaling	- 1 x buzzer - 1 x speaker (voice / music messages) - 4 x signal lighting
Environment	
Operating temperature range	5 ÷ 45 °C
Humidity range	< 80 %, no condensation
Protection degree	IP30
The intensity of external light	< 1500 lx
Dimensions and weight	
Dimensions (L x W x H)	800 x 550 x 453 mm
Total weight (with batteries)	~150 kg



All dimensions are approximate values and can change.



Accessories

Adapter with automatic rollers

Designed for transporting various types of containers, packages. The system consists of an automatic roller feeder attached to an AGV robot using a special adapter. The rollers are driven by motors powered by robot batteries and ensure a fast and smooth flow of goods.

This solution maximizes efficiency, optimizes material flow, and allows better use of available space.

Adapter with belt conveyor

Designed for transporting various types of containers, packages. The system consists of an automatic belt conveyor powered by robot batteries. An excellent solution to improve the flow of goods between different stages of the production process.

Adapter with rack

Special adapter with a rack suitable for transporting small items such as PCBs, electronic components, cardboard boxes, etc. The rack has retractable shelves placed at the appropriate height and position, providing the user with ergonomic access. This solution maximizes efficiency, optimizes material flow, and allows better use of available space.