

MOBOT® eduRunner MW mobile robot

MOBOT® EduRunner is an educational platform designed for learning mobile robotics. The robot is programmed using MOBOT® RoutePlanner software. The software allows observing the status of the robot and the most important components of the system, configuring the drives and inputs/outputs of the main robot controller. It also enables manual control using the computer keyboard and adding characteristic points of the route in which some action is to be carried out.

The robot housing is equipped with mounting plates to which the user can attach some of their devices, e.g. additional sensors.



operating time up to 3 h
on a single charge



payload up to 10 kg



Wi-Fi communication



dimensions
740,2 x 540 x 220 mm

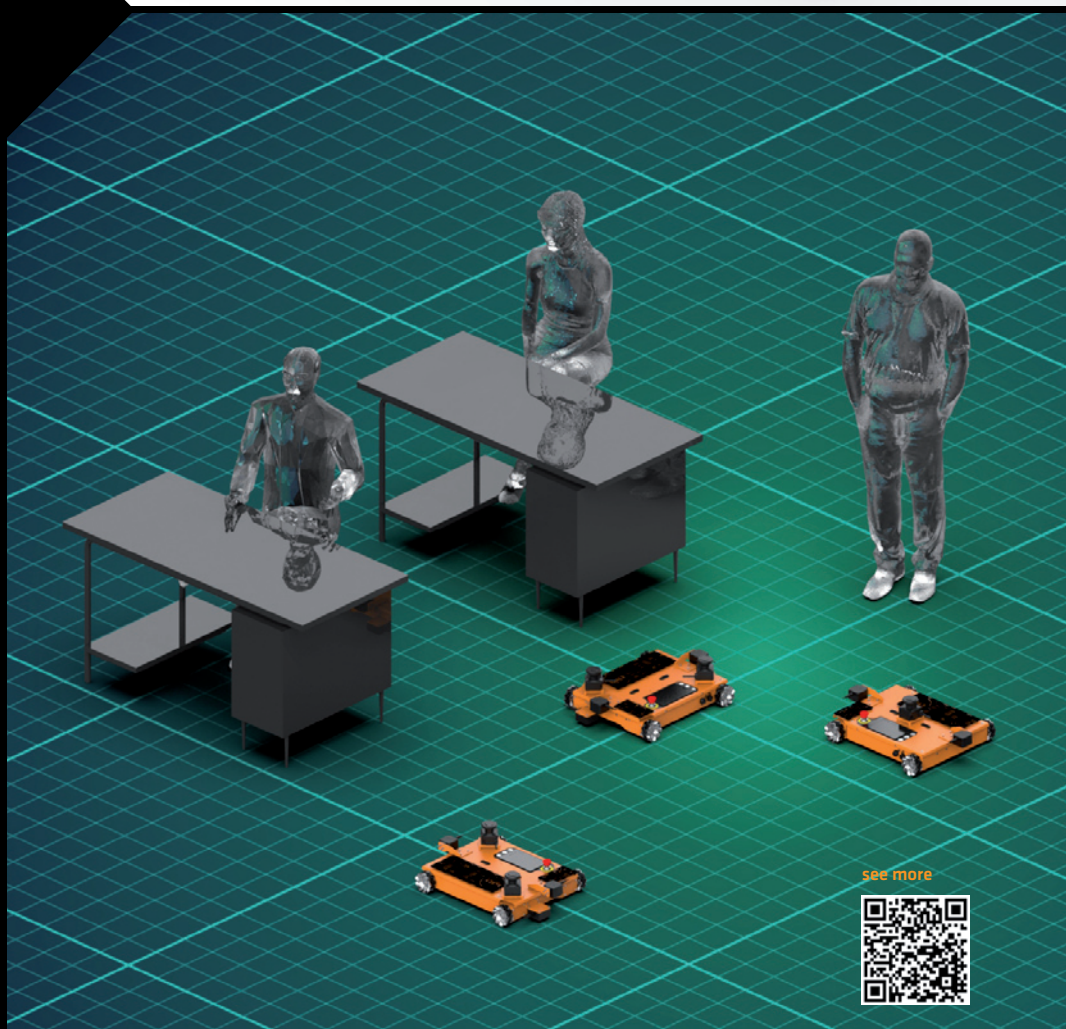


LMS navigation system



Mecanum wheels
-movement in any direction

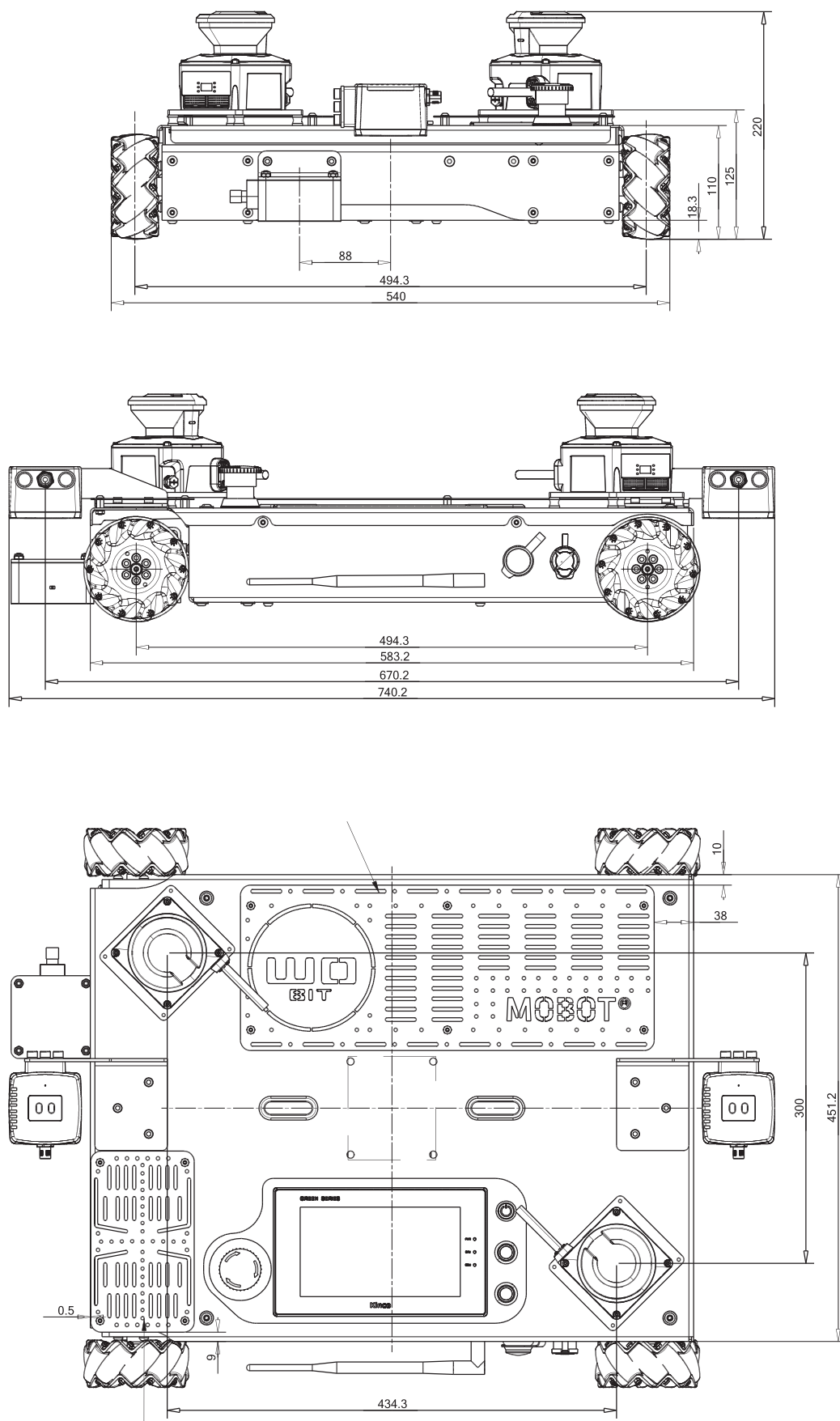
Intended use: education



see more



Robot type	MOBOT® eduRunner MW
Payload and transport method	
Transport method	Fastening the load on the upper surface of the robot using dedicated mounting plates
Permissible total weight of the cart with load	10 kg
Power supply	
Robot power supply	Li-On 14 Ah battery
Manual battery charging connector	TAK (24 V DC, max. 4 A)
Charger	Charger 4 A/ 24 V with manual plug-in
Operating time at full load	~ 3 h
Operating time in standby mode	~ 14 h
Battery charging time	3,5 h
Speed and performance	
Maximal speed	0,4 km/h
Nominal power	48 W
Movement directions	Possibility of riding in all directions thanks to Mecanum wheels
Turning radius	Possibility of turning in place
Maximum surface slope	Robot designed for driving on a flat surface
Navigation	
Navigation	Natural and intelligent navigation using the LMS * * LMS - laser navigation system
Communication	
Communication	Wi-Fi 2,4 GHz
Connector	Ethernet RJ45 - PC communication, MODBUS TCP/IP
Drive and control	
Drive	4 x DC motor, wheels with a diameter of 101,6 mm
Control and steering	<ul style="list-style-type: none"> - 1 x 7 "touch operator panel - 1 x emergency stop - 1 x emergency stop reset confirmation buttons - 1 x main power switch - 1 x START button - 1 x RJconnector
Sensors	
Sensors	<ul style="list-style-type: none"> - Optionally 2 x vision system for tracking the line - 1 2D laser scanner with safety function (optionally x2)
Signaling	4x light signaling devices
Environment	
Operating temperature range	5 ÷ 45 °C
Humidity range	10...80 %
Protection degree	IP30
The intensity of external light	< 1500 lx
Dimensions and weight	
Dimensions (L x W x H)	740,2 x 540 x 220 mm
Total weight (with batteries)	~30 kg



All dimensions are approximate values and can change.

Accessories



Vision system for line tracking

MOBOT® eduRunner can be retrofitted with an additional system for precise positioning using a vision system.

2D laser scanner

Possibility of equipment with additional 2D laser scanners with safety function for scanning the environment in a 360-degree radius.

Dedicated charger

