

MOBOT® TRANSPORTER U1 mobile robot

An autonomous mobile robot used to automate the transport and transport of small, light loads. It travels independently along the programmed route.

- ▶ Inexpensive and intuitive to use
- ▶ For quick, independent implementation
- ▶ Works safely with people while carrying your loads
- ▶ Increases process efficiency and reduces costs
- ▶ Degree of protection IP65 and the option of retreaded wheels allow for outdoor use
- ▶ ROI for one-shift work and replacement of 1 person is only 1 year
- ▶ You can quickly and conveniently configure the product via the website
- ▶ It gives the possibility to use almost any additional equipment. You can expand the robot with a wide spectrum of functionalities.



operating time up to 8 h
on single charge



payload up to 100 kg



Wi-Fi communication



dimensions
752,5 x 593/641 x 339 mm



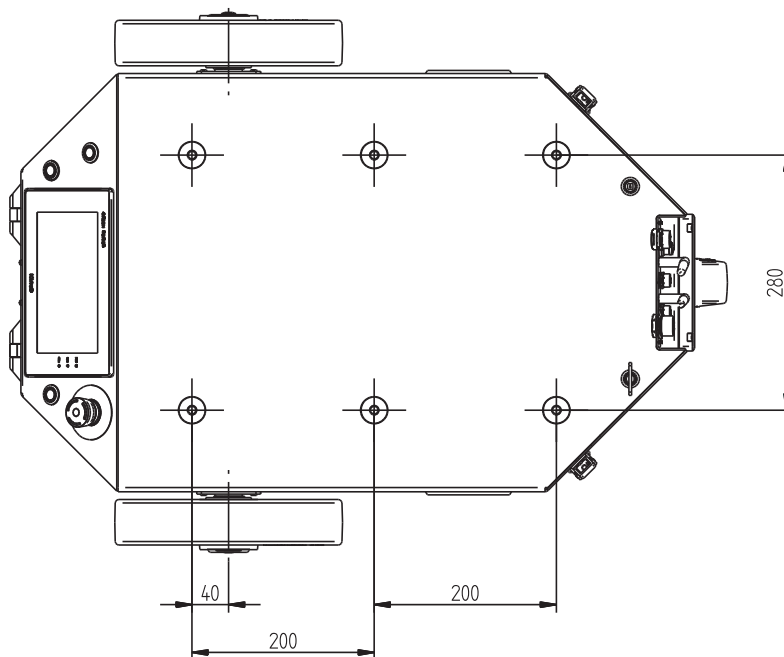
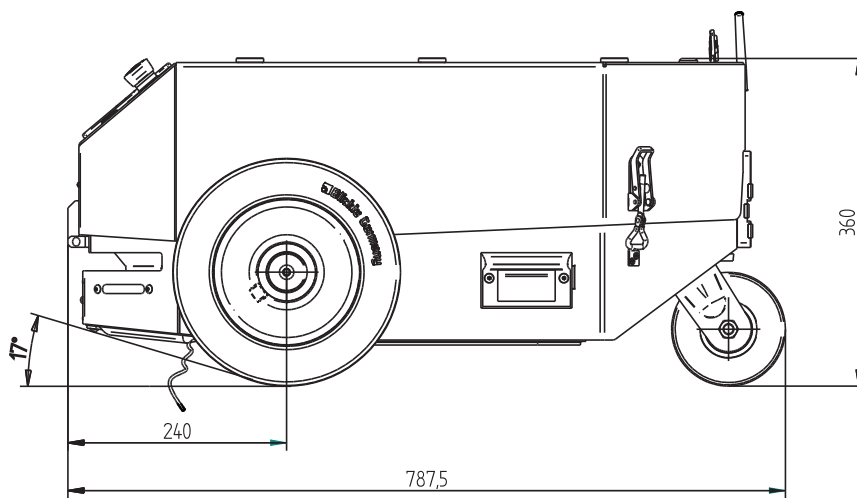
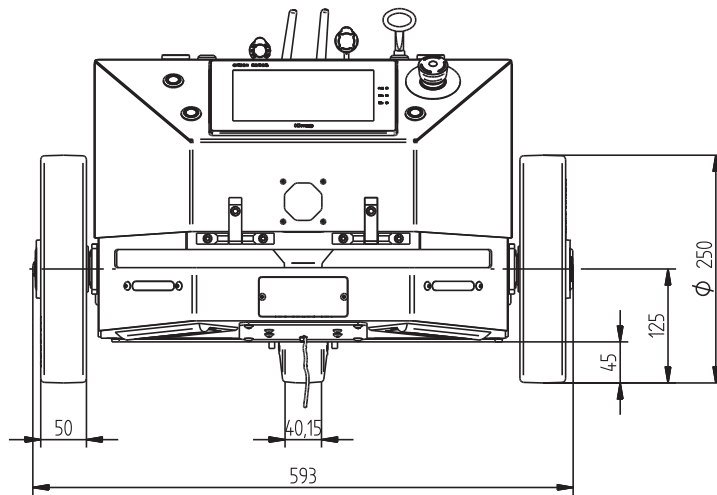
max speed
2,83 km/h or 5,65 km/h



navigation
LMS system

Intended use: for hospitals, offices, labs, shops, airports, logistics

Robot type	MOBOT® TRANSPORTER U1
Payload and transport method	
Way of transporting cargo	Fastening the load on the upper surface of the robot with six M10 screws
Permissible total weight of the load	100 kg
Power supply	
Manual battery charging connector	YES (48V DC/ 44V DC, max. 20 A)* * - depends on the selected battery pack
Automatic battery charging connector	A contact connector mounted on the bottom of the robot enables automatic battery charging during operation
Robot power supply	<ul style="list-style-type: none"> - Standard battery pack Li-Ion 20 Ah/ 48 V - Optional battery pack Li-Ion 30 Ah/ 44 V - Optional battery pack Li-Ion 40 Ah/ 44 V
Charging	<ul style="list-style-type: none"> - 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	~ 8 h
Operating time in standby mode	~ 40 h
Battery charging time	<ul style="list-style-type: none"> - 20 Ah battery: ~ 4 h (5Ah charger), ~ 1 h (20 Ah charger) - 30 Ah battery: ~ 6 h (5Ah charger), ~ 1.5 h (20 Ah charger) - 40 Ah battery: ~ 8 h (5Ah charger), ~ 2 h (20 Ah charger)
Speed and performance	
Maximal speed	2,83 km/h or 5,65 km/h
Nominal speed	500 W
Movement directions	Forward movement (possibility of reversing in docking mode to the charger), rotation
Turning radius	Possibility of turning in place
Maximum surface slope	Restricted by the allowed approach angle of the robot
Navigation	
Navigation	<ul style="list-style-type: none"> - LMS laser, intelligent and autonomous navigation * - Vision system for precise positioning - Manual robot control from a PC or Android device <p>* LMS - laser navigation system</p>
Communication	
Communication	2.4 GHz Wi-Fi, optional 2.4 GHz industrial radio module (RS232)
Connector	<ul style="list-style-type: none"> - Ethernet M12 (4 pin) - communication with PC, MODBUS TCP / IP - I / O switch: 24 VDC supply output (max. 2 A) + 2 inputs + 2 out (max. 0.5A) + CAN * - Optional power connector: 24 VDC power supply output (max. 10A) + 2 power outputs (max. 10 A) - Optional external safety circuit connector <p>* option of connecting an optional I / O expansion module</p>
Drive and control	
Drive	2x servo motor (brushless), wheels with a diameter of 250 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 button - 1 x power switch - 1 x function button
Sensors	
Sensors	<ul style="list-style-type: none"> - 2D laser scanner for navigation with safety function - Camera for tag recognition and precise positioning
Signaling	<ul style="list-style-type: none"> - 1 x buzzer - 2 with loudspeaker (voice / music messages) - 2 x direction indicator in front of the robot - 1 x traffic light at the rear
Environment	
Operating temperature range	5 ÷ 45 °C
Humidity range	< 80 %, no condensation
Protection degree	IP65
The intensity of external light	< 1500 lx
Dimensions and weight	
Dimensions (L x W x H)	752,5 x 593/641 (depending on the drive wheels) x 339 mm
Total weight (with batteries)	~ 110 kg



All dimensions are approximate values and can change.

