



MOBOT® TRANSPORTER U1

is a universal, mobile transport robot.

E It is easy to use and prepared for quick self-installation.

E It was created to help you and your company in everyday work.

E It gives the possibility to use almost any additional equipment. You can upgrade the robot with a wide range of functionality.

E The robot has a very affordable price. Additionally, thanks to self-installation you save, avoiding expensive integration.

E **ROI** for one-shift work and replacement of 1 person is only **1 year**.

E You know immediately what the investment will be, without hidden surprises and costs.

E You can quickly and conveniently configure the product via the website.



MOBOT® TRANSPORTER U1 is the result of many years of work, the company WObit product development in the field of mobile robotics. It is the implementation of the idea, proclaimed under the Reach4Robotics project aimed at creating robots that will be easy to use and accessible to its users. Programming the robot is simplified to the small size of the application in the form of a tutorial.

From now almost every user will be able to start their robot themselves. Therefore, expensive and long-lasting installation of the device, implemented through a highly specialized integrator, becomes unnecessary.

Thanks to the quick, self-deployment, and low cost of the MOBOT® TRANSPORTER robot, you can get a fast return of investment, even when replacing the work of only one person in the single-shift mode.

For this reason, in almost every company, organization, institution, or facility, it pays to introduce MOBOT® TRANSPORTER U1 robots to carry out transport tasks.

MOBOT® TRANSPORTER U1
delivers
WHAT you want,
WHERE you want,
WHEN you want.



Mobile transport robot for every company.

Thanks to the mobile robot MOBOT® TRANSPORTER U1 gain many hours of valuable time - your or your employees. Instead of transporting loads, you can focus on other important activities. At this time, the robot will deliver what you want, where you want, when you want. Quiet, trouble-free and safe.

Where can MOBOT® TRANSPORTER U1 help you?

Wherever you need to carry loads.

E It is a perfect solution for **hotels** that will allow for the automatic delivery of bedding, meals.

E In **control and supervision** - equip the robot with sensors, which will allow e.g. verification of temperature or air quality.

E Transport of heavy documents, books - improve everyday work in **the office, archive**.

E **Hospital support** - in the transport of bedding, food or automatic disinfection.

E **In education** - an excellent tool for learning robotics for technical universities, technical high schools.

E **Airports** - it will facilitate the transport of passengers' luggage, it can control the temperature and also disinfect the surface.

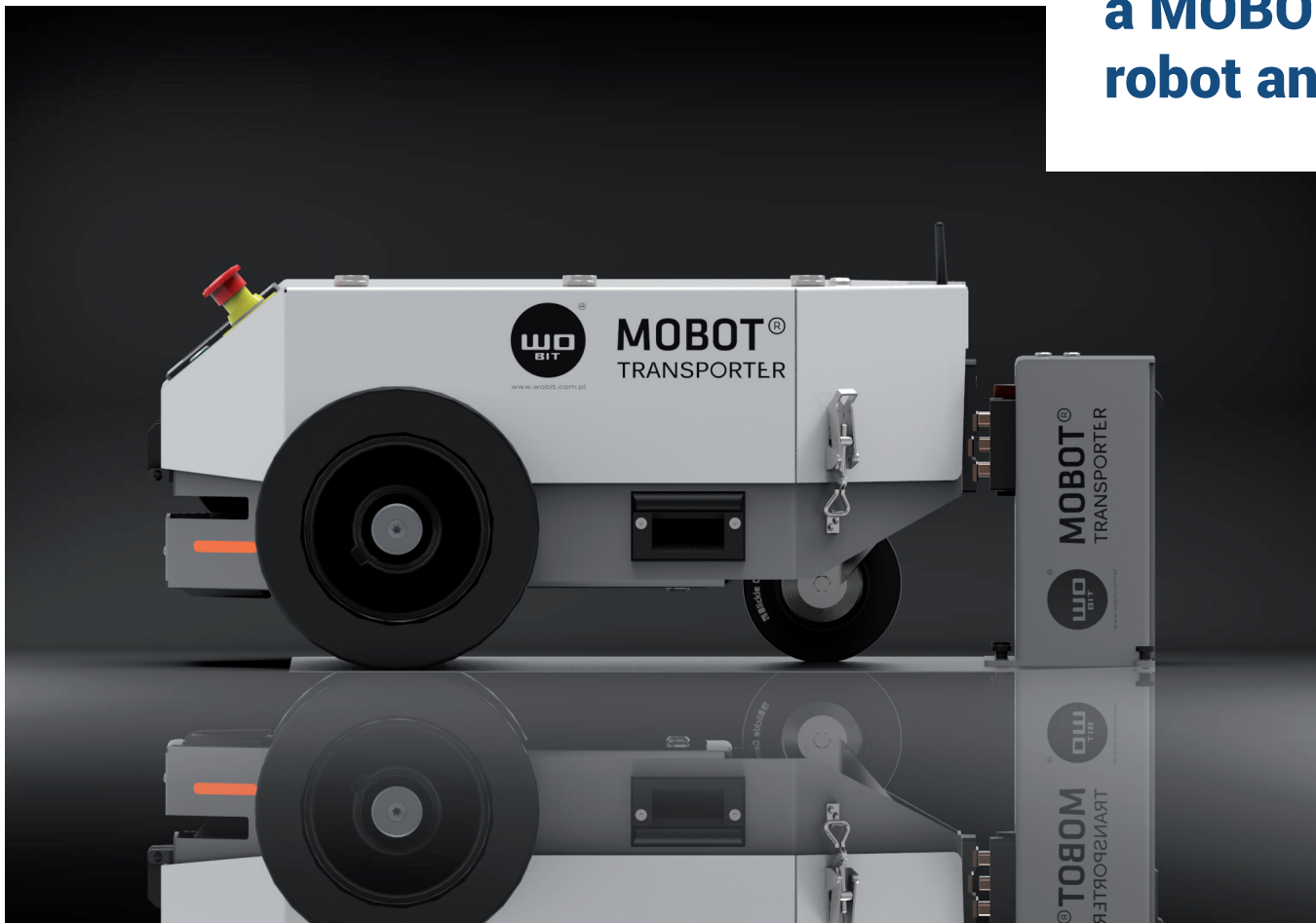
E **In another branch** - the range of options is wide, it is also, a place for your other applications



Versatility of applications

Configurable, intuitive navigation, advanced security features, compact design with the option of easily retrofitting an additional module for transporting various details on the robot allows for its use in many places.

Choose a MOBOT® TRANSPORTER U1 robot and earn



Work with us

Are you interested in cooperation in the use of your products with MOBOT® TRANSPORTER U1?

E Do you have equipment that would perfectly harmonize with the robot to create a reliable, functional set?

Contact us and show us your idea. We will share our experience and help you with the promotion.

E Do you need a solution but you don't have the equipment? Thanks to our collaboration with various companies gain a rich source of robotic equipment.

Ergonomic way of working

The operation and functions of the MOBOT® TRANSPORTER U1 mobile robot are designed to be as easy to use and user-friendly as possible. We have used the experience and solutions from the MOBOT® AGV industrial line and the latest technologies to provide you with an easy-to-use and reliable product.

LMS navigation and built-in sensors allow the robot to move smoothly and safely in your business environment. Tight construction and the option of choosing wheels will allow you to use the robot also outdoors.

Do you need to pack a robot in your car? Or move it to the room where entry is impossible? No problem. Find a helping hand, because MOBOT® TRANSPORTER U1 is equipped with ergonomic handles that will allow you to do so.





Safety first

MOBOT® TRANSPORTER U1 mobile robot, like the MOBOT® AGV industrial robot series, has been designed in a way to ensure a high level of safety.

The durable, sealed construction is equipped with a laser scanner with auto safety zones according to the speed of movement.

Functional lights as direction indicators and reversing lights, a loudspeaker, and a buzzer inform the environment about the tasks performed by the robot.

Innovative technologies and modern equipment

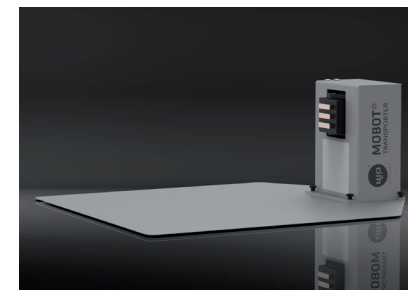
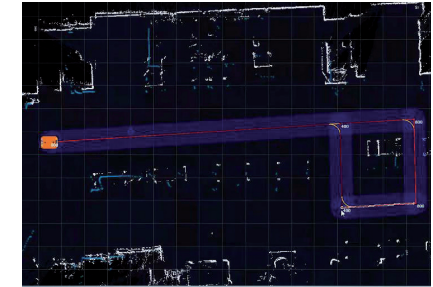
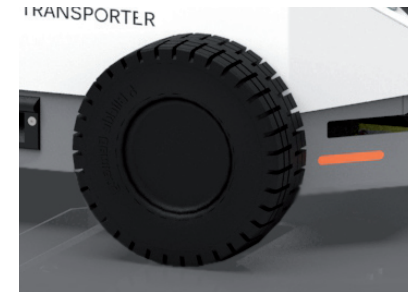
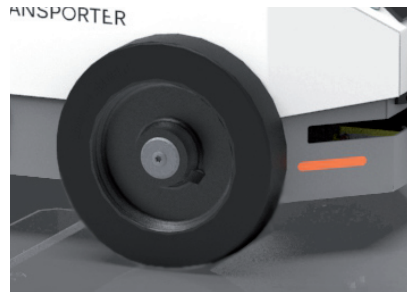
MOBOT® TRANSPORTER U1 is equipped with LMS laser navigation, utilizing natural terrain objects, allows the robot to quickly identify its surroundings and does not require any changes in your facility.

The robot can be programmed using a simple graphical interface that does not require controlling your robot using a laptop, Android tablet, or even an Android smartphone.

By configuring your MOBOT®, you choose which battery capacity will be optimal for you. As a standard, you get 20 Ah batteries. We provide a manual charger for charging, conveniently connected via a connector.

If you need a robot to work longer, or you want to use more accessories, you can choose batteries with a capacity of 30 Ah or 40 Ah and extend the time of operation of the robot.

As an option, we offer a fast manual charger or automatic charging joints on your robot along with a quick automatic charger. With this option, automate the operation of the robot and increase the convenience of everyday use.



I / O great possibilities

Using the Ethernet connector with the MODBUS TCP / IP protocol, you can easily connect to external devices such as a computer or PLC.

Digital inputs and outputs make it possible to connect additional accessories, e.g. a sensor or a relay.

You can adapt the robot to perform the inspection function - using a thermal imaging camera or another sensor. Optional connection of the 24 VDC supply with high capacity allows the connection of accessories with higher current consumption, e.g. motors or lamps.

Standard equipment

The standard version of the robot is the perfect solution for simple transport tasks at an affordable price.

You get a functional, cost-effective tool to support your business in everyday transport.

The basic package includes:

- E Tasteful, two-color, and at the same time universal robot coloring, made using a powder painting technique
- E 20 Ah, a battery pack.
- E A manual charger that allows you to conveniently connect your device using a connector.
- E Sealed construction with IP65 protection.
- E A set of smooth indoor wheels, enabling the smooth movement of the robot inside buildings.
- E Easy robot programming using the intuitive, graphical tutorial.
- E Intelligent, autonomous LMS laser navigation for independent robot operation after programming.
- E HMI panel in front of the robot constitutes an intuitive interface that communicates the status of the device.
- E The basic Wi-Fi communication package that will allow the robot to connect with other devices, e.g. a computer or smartphone with Android or another device with the MODBUS TCP / IP protocol.
- E Ethernet M12 connector (4 pins) with MODBUS TCP / IP protocol. It is used for communication with external devices, e.g. PC, PLC.
- E 2xDIN, 2xDOUT, 24 VDC connector + I / O expansion module (the expansion module is an optional device). Inputs and outputs make it possible to connect additional accessories, e.g. a sensor or a relay.
- E Two speed and torque options to choose from:
 - Speed 2.83 km / h for 250 mm wheels at 57.6 Nm
 - Speed 5.65 km / h for 250 mm wheels at 28.8 Nm
- E 2D safety scanner for the safe operation of the robot.
- E Manual control of the robot from a PC or Android device.
- E Camera in the front of the robot for observing the environment and precise docking with an automatic charger.
- E A basic Wi-Fi communication package that will connect the robot to other devices and automate your processes.
- E Automatic control of the scanner zones depending on the speed - thanks to this function, the robot adjusts its speed avoiding a potential collision.
- E Protection of the drive wheels utilizing a brake - to ensure safe and reliable stopping device.
- E Blinkers in front of the robot and the reversing light at the rear. The robot communicates the direction of movement in a readable way for the recipient.
- E Buzzer enabling the issuance of simple beeps.
- E A speaker for playing audio messages.
- E Handles for easy carrying arranged - positioned in the MOBOT® chassis.
- E Basic online training - our intuitive course will allow you to quickly familiarize yourself with the device and program the robot.

Optional equipment

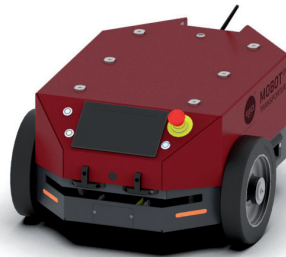
We have prepared for you a wide range of additional features. You know best what is most important to you, that's why we give you many options to choose the perfect, dream product.

You can choose:

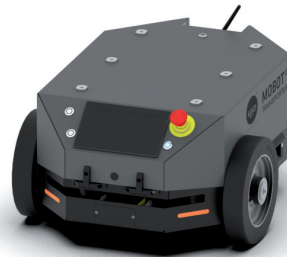
E Premium color - high-quality varnish in attractive colors, tailored to your business, additionally protected with an anti-corrosion coating.
Optional:



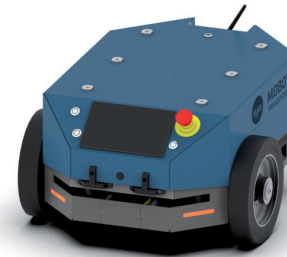
juicy orange
RAL 2004
graphite
RAL 7024



fiery red
RAL 3003
graphite
RAL 7024



dark gray
RAL 9023
deep black
RAL 9005



brilliant blue
RAL 5007
gray aluminum
RAL 9007



grassy green
RAL 6018
dark turquoise
RAL 6033

E Individual color - it's rather your design because you can personalize the appearance of the robot: for your pattern, texture, or velvety colored soft-touch varnish. You can also choose antibacterial varnish for special tasks.

Send your project in the form of a 2D / 3D drawing, or write and contact us to determine what else we can do for you.

Optional equipment

- E Optional 30 Ah battery pack
- E Optional 40 Ah battery pack
- E A fast manual charger that will allow you to use your robot more efficiently.
- E A quick automatic charger with automatic charging pins on the robot. With this option, you will automate the operation of the robot, which will drive itself to the charger when the charge level drops. It's a great convenience in everyday operation.
- E A set of 250 mm and 140 mm retreaded wheels allows the robot to travel in rough terrain e.g. outdoors. Increase the versatility of your robot applications and instead of smooth wheels choose those that will work in variable terrain.
- E 24 VDC power supply + 2 power outputs. 24 VDC power supply with increased load output (one permanent and two controlled), giving the possibility of connecting additional accessories with higher power consumption, e.g. motors or lamps.
- E Siemens communication package. This Wi-Fi router, instead of the usual one, will be perfect when using other Siemens devices. It provides compatibility and effective communication.
- E Phoenix Contact communication package. The device allows creating an additional communication channel in addition to the basic Wi-Fi connection. The solution functions very effectively in an industrial environment and allows for the transmission of MODBUS RTU signals over a distance.
- E Possibility of extending the emergency stop circuit, an option that will further increase the safety of the device by using an additional module that you mount on it.
- E Extended training at the headquarters of WObit - will allow you to gain in-depth knowledge. This option is especially recommended for customers who choose advanced programming and communication options

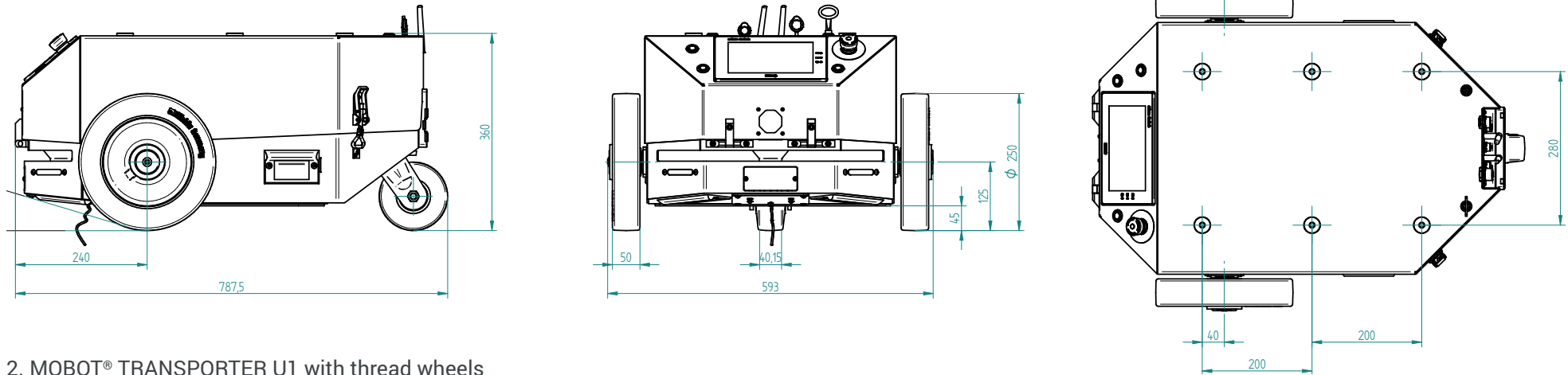
Description	Value	
Type	MOBOT® TRANSPORTER U1	
Robot power supply	Lithium Ion Batteries	
	Basic package: 48 V / 20 Ah	Optional package: - 48 V / 30 Ah, - 48 V / 40 Ah.
Charging	230 V / 50 Hz	
	Basic package: Charger connected manually with a cable	Optional package: Fast charger (20 A charging current), manual or automatic, adapted for self-docking of the robot
Charging	2 x DC 200 W servo motors	
Wheels	A set of smooth, non-marking indoor wheels (250 mm drive wheels 60 mm width, at the front and 140 mm support wheels at the rear).	Retreaded wheel set (250 mm drive wheels 85 mm width, at the front and 125 mm support wheels at the rear).
Indication	<ul style="list-style-type: none"> - 2 direction indicators at the front of the robot, - reversing lamp on the back of the robot, - buzzer, - loudspeaker (audio message player) 	
Sensor	Laser scanner with safety function	
Control and steering	<ul style="list-style-type: none"> - navigation using the LMS system (navigation using natural terrain objects) - remote control of the robot from a PC or Android device - 7 "operator panel - IN / OUT connectors, - robot program 	
Way of programming	Using the tutorial. Easy programming with graphical environment.	
Connectors	<ol style="list-style-type: none"> 1. charger connector 2. M12 Ethernet connector (4 pin) 3. 24 VDC power supply, 2 x DC IN / 2 x DC OUT, space for connecting an additional digital I / O module 	Optional package <ol style="list-style-type: none"> 1. 24 VDC power supply, 2 x DC OUT power 2. Additional E-Stop circuit connector

Description	Value	
Safety	Safety circuit consisting of: - 2D safety scanner on the front of the robot - speed control with encoders mounted in the drive wheel axles - safety controller - E-Stop safety switch - Emergency stop reset confirmation button	Optional: possibility of connecting an additional E-Stop circuit via connector
Communication	Wi-Fi with Modbus TCP / IP protocol	Optional: Trusted Wireless Phoenix Contact
Maximal speed	- 2.83 km / h for 250 mm wheels at 57.6 Nm - 5.65 km / h for 250 mm wheels at 28.8 Nm	
Turning radius for line tracking	turning back in place	
Working time at full load	8 h*	
Maximum permissible load	100 kg	
Operating temperature range	+5 ... 45 oC	
Humidity range	10 ... 80 %	
Total weight (with batteries)	50 kg	
Degree of protection	IP65	
Nominal power of engines	400 W	

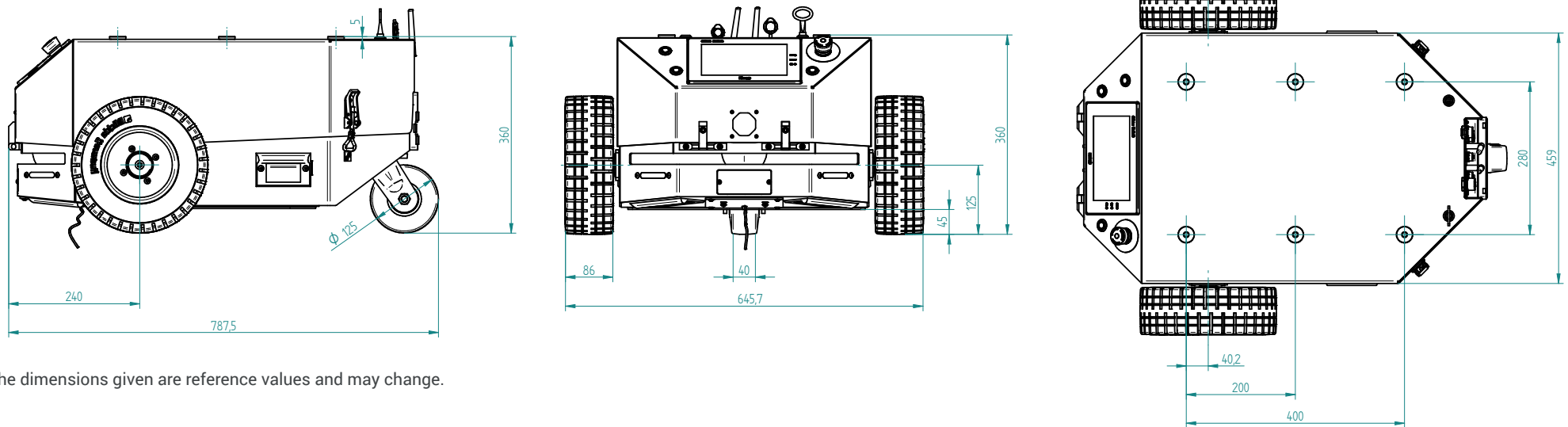
* depends on the load and programmed speed, as well as the equipment used

Dimensional drawing

1. MOBOT® TRANSPORTER U1 with smooth indoor wheels



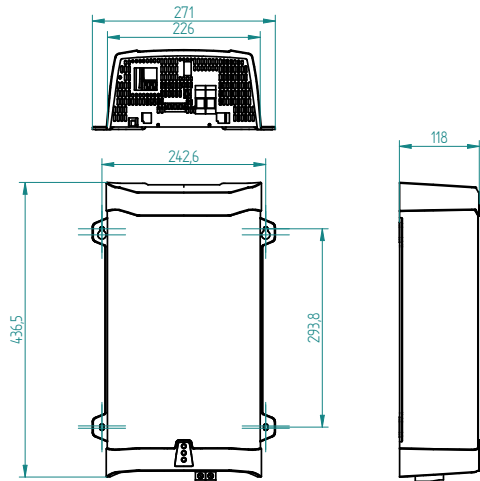
2. MOBOT® TRANSPORTER U1 with thread wheels



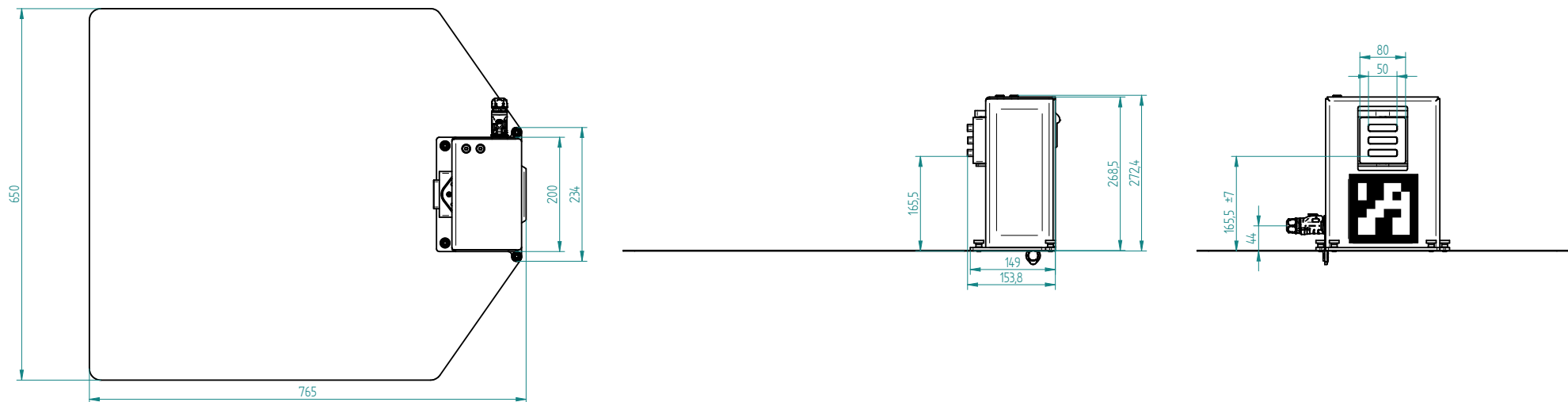
The dimensions given are reference values and may change.

3. The automatic charging station - consists of a wall-mounted charger and a ground station in which the robot docks.

Charger dimensions:



Charging station dimensions:



Configure MOBOT® TRANSPORTER U1
visit:

www.wobit.com.pl/mobot-transporter/konfigurator

and configure your robot



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