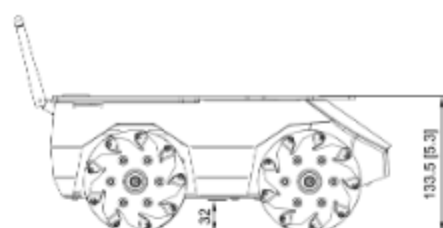
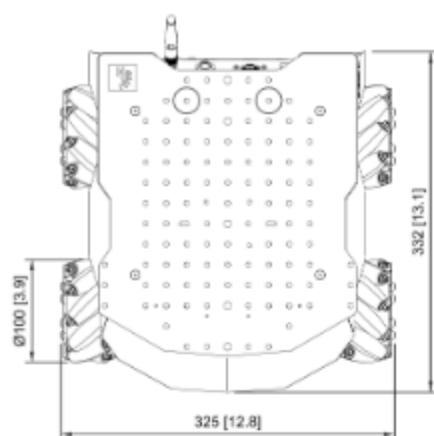




Specification

Component	Description
SBC	Default user computer: Raspberry Pi 4 (4GB RAM) . Can also be configured with NVIDIA Jetson Orin Nano (8GB RAM, 250GB SSD) or ASUS NUC (i3-1315U 16GB RAM 250GB SSD) .
Digital Board	Real-time controller based on STM32F407 microcontroller.
Power Board	USB-C Power Delivery input (12-20V) which supports simultaneous power delivery and battery charging.
DC motor	4 x Xinhe Motor XH-37D, 12VDC nominal, 10000rpm. Maximum mechanical power: 10W, no load speed at the output shaft: 200 rpm, stall torque at the output shaft: 21 kg*cm, stall current: 5.4A, gear ratio: 50
Encoder	4 x Magnetic, 64cpr, 16 poles
IMU sensor	Intelligent 9-axis absolute orientation sensor BNO055, more details
Li-Ion Batteries	11.1V 7800mAh 86Wh
Antenna	Connected directly to Wi-Fi module.
Speaker	Driven from Digital Board or from SBC (selectable source).
Accessories included	Wireless pad, USB-C charger (65W), two sets of wheels (4x regular and 4x mecanum), adjustable camera mount.



Dimensions in mm [inch]

Basic params	
max speed	0.8 m/s
weight	5.4 kg
operating temperature	-20°C to 50°C
charging temperature	0°C to 45°C
run time (typical case)	2 - 6 h
minimum ground clearance	32 mm

Traction	
maximum carrying capacity	10 kg
nominal shaft torque	0.75 Nm
maximum shaft torque	2 Nm
nominal total traction force	17 N
maximum total traction force	69 N