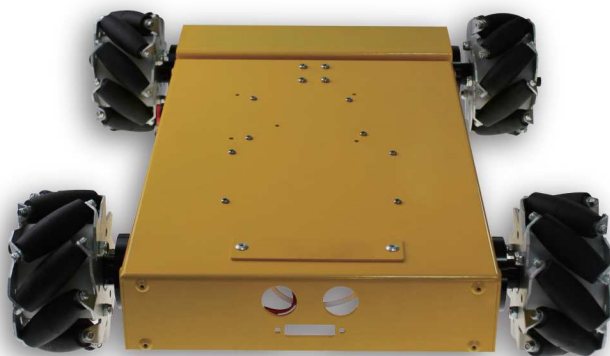


4WD 100mm Mecanum wheel robot kit 10011

This robot kit is based on a 4 wheels driving mecanum wheels chassis. the vehicle is stable and can be made to move in any direction and turn by varying the direction and speed of each wheel. Moving all four wheels in the same direction causes forward/backward movement, running left/right sides in opposite directions causes rotation, and running front and rear in opposite directions causes sideways movement. Combined motion is also possible. Its rear wheels are mounted in a particular way, this simple suspension structure ensures its four wheels can adhere to the ground even when the ground is uneven .This is very important for an mecanum wheels system. It also includes a microcontroller and motors with encoders.



Aluminum alloy frame



4 wheels drive



Mecanum wheel



Ultrasonic sensor



IR sensor



Encoder



Programmable



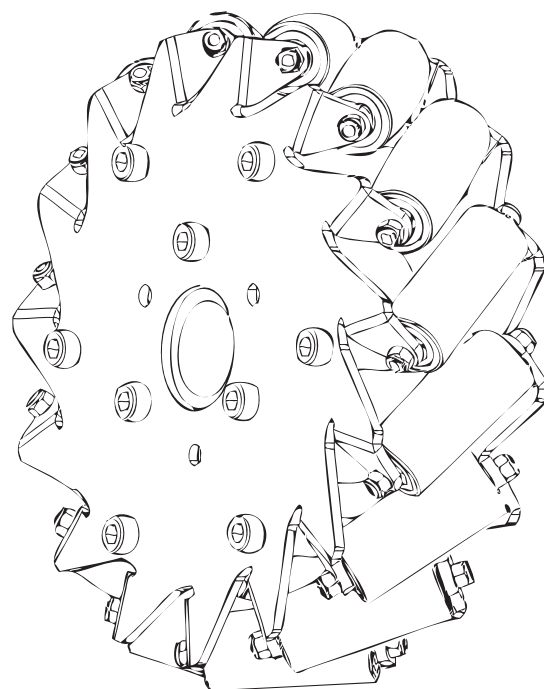
Easily expand

Features:

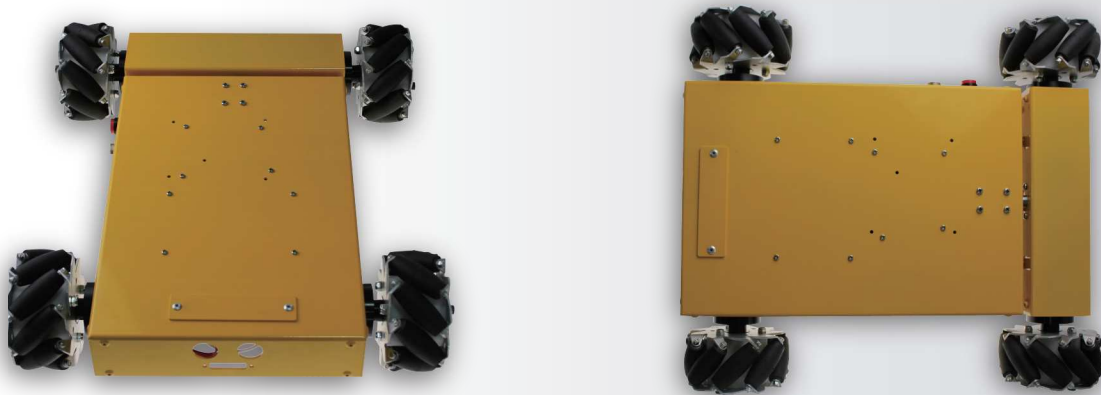
- 4 wheels drive
- Mecanum wheels
- Aluminum alloy body
- Suspension ensure 4 wheel adhere to ground
- Mounts reserve for Ultrasonic and Infrared sensor
- DC motors with encoders
- Includes Microcontroller and IO expansion board
- Capable of moving forward, backward, sideways, rotation

Parts included:

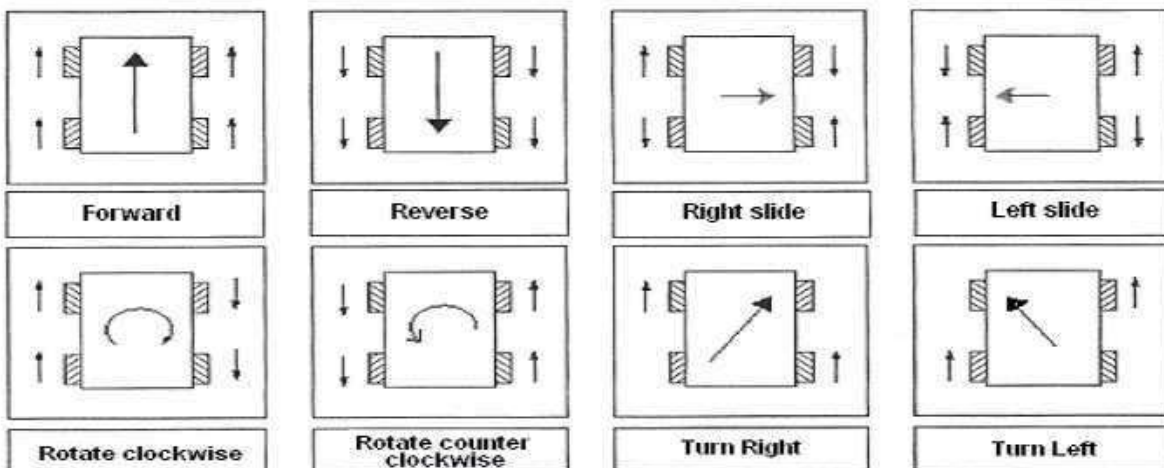
- 4 100mm Aluminum Mecanum Wheels
- Faulhaber 12V DC Coreless Motor
- Arduino 328 Controller
- Arduino IO Expansion V1.1
- 2 12V Ni-Mh Battery
- 12V Charger
- 4 100mm Aluminum Mecanum Wheels
- 4 Faulhaber 12V DC Coreless Motor
- Arduino 328 Controller
- Arduino IO Expansion V1.1
- 2 12V Ni-Mh Battery
- 12V Charger



4WD 100mm Mecanum wheel robot kit 10011



Co-effect of 4 Mecanum wheels:



Specifications:

Chassis	Appearance	Rectangle
	Length	400mm
	Max Width	360mm
	Height	100mm
	Chassis Height	22mm
	Wheel Base	300mm
	Wheel span	300mm
	Material	Aluminium
	Max Speed	0.6m/s
	Drive Mode	4 wheel drive
	Climbing Capacity	20 degree
	Load Capacity	20kg
	min-ITX Compatible	Yes
Wheel	Type	45 degree Mecanum Wheel
	Diameter	100mm
	Thickness	50mm
	Material	Aluminum Alloy and Rubber
	Load Capacity	15kg
	Roller Material	Rubber
	Diameter of Roller	29mm
	Length of Roller	47mm
	Coupled Mode	2 x 684ZZ bearings

Motor	Type	Faulhaber 12V DC Coreless Motor
	Power	17W
	RPM	120rpm
	Diameter	30mm
	Length	42mm
	Total Length	85mm
	Diameter of Shaft	6mm
	Length of Shaft	35mm
	No Load Current	75m
	Load Current	1400mA
	Gearbox Ratio	64:1
Encoder	Type	Optical
	Encoder Phase	AB
	Encoder Resolution	12CPR
Battery and Charger	Battery	12V Ni-Mh
	Slow Charger	100~240V In, 2.4~12V Out
	Duration of Charge	2 hours
	Running Time	0.5 hour

Microcontroller Specification	Atmega 328
	14 Channels Digital I/O
	6 PWM Channels (Pin11,Pin10,Pin9,Pin6,Pin5,Pin3)
	8 Channels 10-bit Analog I/O
	USB interface
	Auto sensing/switching power input
	ICSP header for direct program download
	Serial Interface TTL Level
	Support AREF
	Support Male and Female Pin Header
	Integrated sockets for APC220 RF Module
	Five IIC Interface Pin Sets
	Two way Motor Drive with 2A maximum current
	7 key inputs
IO expansion board	DC Supply:USB Powered or External 7V~12V DC
	DC Output:5V /3.3V DC and External Power Output
	Dimension:90x80mm
	To support RS485 interface or drive 4 motors