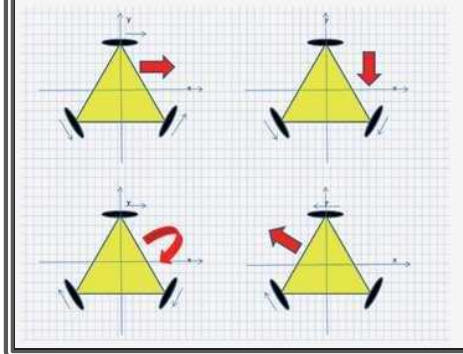


## 3WD 100mm omni wheel robot kit 10013



Working principle of omni wheel



A omni-wheel robot can instantaneously move in any direction. It does not need to do any complex motions to achieve a particular heading. This type of robot would have 2 degrees of freedom in that it can move in both the X and Y plane freely.

### Specifications:

<b>Chassis</b>	Appearance	Circule	<b>Motor</b>	Type	Faulhaber 12V DC Coreless Motor	<b>Microcontroller Specification</b>	Atmega 328
	Max Width	305mm		Power	17W		14 Channels Digital I/O
	Height	126mm		RPM	120rpm		6 PWM Channels (Pin11,Pin10,Pin9,Pin6,Pin5,Pin3)
	Chassis Height	19mm		Diameter	30mm		8 Channels 10-bit Analog I/O
	Radius	152mm		Length	42mm		USB interface
	Coupled Mode	Compaction		Total Length	85mm		Auto sensing/switching power input
	Material	Aluminium Alloy		Diameter of Shaft	6mm		ICSP header for direct program download
	Color	Yellow, Black		Length of Shaft	35mm		Serial Interface TTL Level
	Speed	0.6m/s		No Load Current	75m		Support AREF
	Drive Mode	3 wheels drive		Load Current	1400mA		Support Male and Female Pin Header
	Climbing Capacity	20degree		Gearbox Ratio	64:1		Integrated sockets for APC220 RF Module
	Load Capacity	15kg		Type	Optical		Five IIC Interface Pin Sets
	PC104 compatible	Yes		Encoder Phase	AB		Two way Motor Drive with 2A maximum current
				Encoder Resolution	12CPR		7 key inputs
<b>Wheel</b>	Type	90 degree Omni Wheel	<b>Battery and Charger</b>	Battery	12V Ni-Mh	<b>IO expansion board</b>	DC Supply:USB Powered or External 7V~12V DC
	Diameter	100mm or 123mm		Slow Charger	100~240V In, 24~12V Out		DC Output:5V /3.3V DC and External Power Output
	Thickness	38mm		Duration of Charge	2 hours		Dimension:90x80mm
	Material	Nylon or Aluminium Alloy		Running Time	0.5 hour		To support RS485 interface or dirve 4 motors
	Load Capacity	15kg					
	Material	Rubber or Nylon					
	Diameter of Roller	19mm					
	Length of Roller	19mm					
Coupled Mode	Brass Tube or bearings						