

# Cagebot

## EXHIBIT CATALOG



## KUBOT-ROS Navigation AGV

Size: 40\*40\*15cm

### Introduction:

The unmanned van can be built using a multi-element system, from magnetic strips and ribbons to ultrasonic sensors, to radars for visual identification, to achieve unmanned vehicle tasks in different forms. The Cagebot AGV in front of you is to use optical radar to establish a map. Through the ROS system, the communication between the hosts is faster, and the response of the AGV is more sensitive and accurate. The unmanned handling system is the primary equipment currently introduced into Industry 4.0 and Smart Factory, and can be used to reduce 3K (dirty, dangerous, hard) through automated equipment. And this AGV assembled by the Cagebot industrial blocks, through the unique strength of the structure, allows the user to make a prototype of the machine to test, create a production line, and then put into production, which can be said to be a precursor of smart manufacturing equipment.

List Price: **USD 3400**



## KUBOT-Optical Guidance AGV

Size: 40\*40\*15cm

### Introduction:

The unmanned van can be built using a multi-element system, from magnetic strips and ribbons to ultrasonic sensors, to radars for visual identification, to achieve unmanned vehicle tasks in different forms. The Cagebot AGV in front of you is to use optical radar to establish a map. Through the ROS system, the communication between the hosts is faster, and the response of the AGV is more sensitive and accurate. The unmanned handling system is the primary equipment currently introduced into Industry 4.0 and Smart Factory, and can be used to reduce 3K (dirty, dangerous, hard) through automated equipment. And this AGV assembled by the Cagebot industrial blocks, through the unique strength of the structure, allows the user to make a prototype of the machine to test, create a production line, and then put into production, which can be said to be a precursor of smart manufacturing equipment.

List Price: **USD 2280**



## Catapult

Size: 24\*13\*12cm

### Introduction:

This bouncing thrower made up of Cagebot, the concept is an ancient catapult, but also derived from the ancient bow and arrow principle. In this work, the user can learn the scientific principles of leverage principle, elastic potential energy and parabola. The user can change the structure through the expansion and high degree of freedom of the Cagebot to explore the influence of the arm on the throwing distance. Or the distance affected by the angle at which the stone is thrown.



## Aircraft Catapult

Size: 10\*40\*10cm

Introduction:

Just like the principle of take-off of aircraft carriers on an aircraft carrier, the high-pressure steam catapult is replaced by a rubber band, and the aircraft is quickly ejected and lifted up through the elastic potential of the spring. At the same time, Newton's second law of motion is also applied. Through the catapult, the aircraft gets a lot of acceleration and reaches the speed that can be lifted in a short time.

List Price: **USD 88**



## Conveyor

Size: 30\*27\*38cm

### Introduction:

Large-scale logistics operators have an average of 27 million orders per day. It is difficult to cope with such a large amount of logistics by manpower alone. However, with the assistance of robots, it is not a problem to achieve millions of shipments per day. In addition to the identification of the robot arm and RFID, the point-to-point transportation system is also very important. Through the strong technical features of the technology treasure, the user can create a simulation production line for the conveyor belt, and then match the unmanned truck to complete the simulation. The warehousing and logistics system allows people in the past to find goods and transform them into goods. (Taking the Cagebot of large-scale production lines as an example)

List Price: **USD 88**



## Mechanical Arm

Size: 48\*48\*78cm

### Introduction:

Cagebot has a wide range of applications, and its rugged construction makes it suitable for use in line production. The front-end Cagebot robot arm is a prototype made by the original German factory to test the structural design of the robot arm. Users can assemble the prototypes of various robotic arms through the technology treasure, confirm the feasibility and then put into production to control the cost. When students create this multi-axis robotic arm, it is a big test for its assembly and programming. In addition, how to use the compiler to make the master control the angle of each axis more accurately is also a test. The ability of the user to come up with a complete solution.

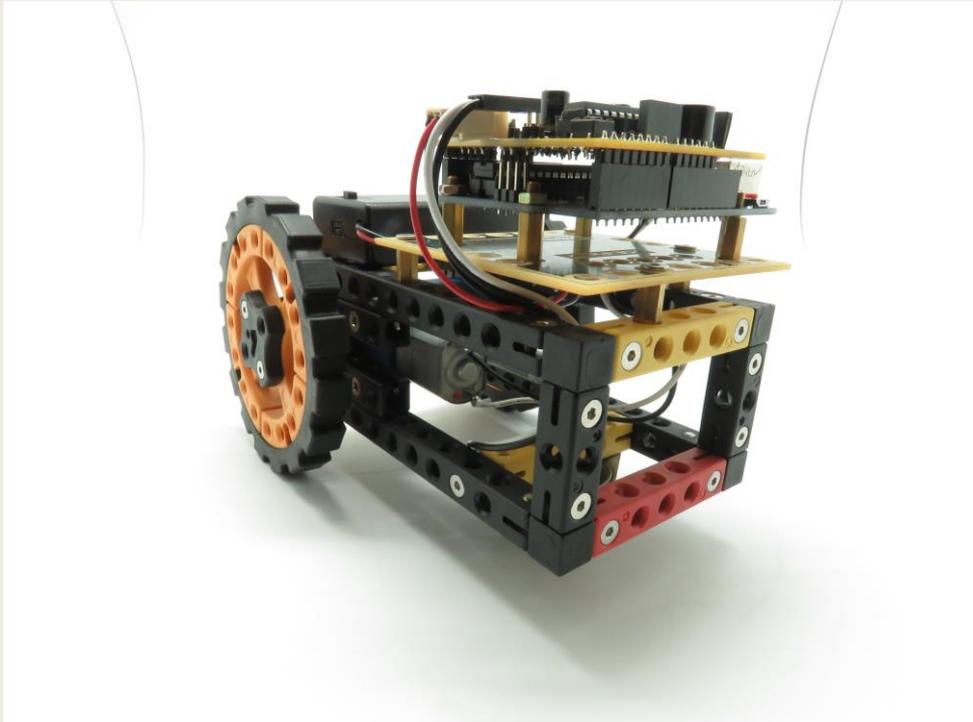


## Visual Recognition Vehicle

Size: 34\*34\*30cm

Introduction:

Auxiliary driving is bound to be the mainstream of the future. Discerning lanes through visual identification, and then distinguishing distances through sensors such as light and ultrasonic. The intelligent unmanned vehicles made up of the building blocks of science and technology, through the assembly of the building blocks, students are no longer limited by the volume, skeleton (such as: sheet metal), you can assemble a strong, durable body as you like. Through the strips of the blocks, students can adjust the height of the lens at will, even in the unmanned car race, when there is an additional installation of lamps, there is a high degree of freedom.



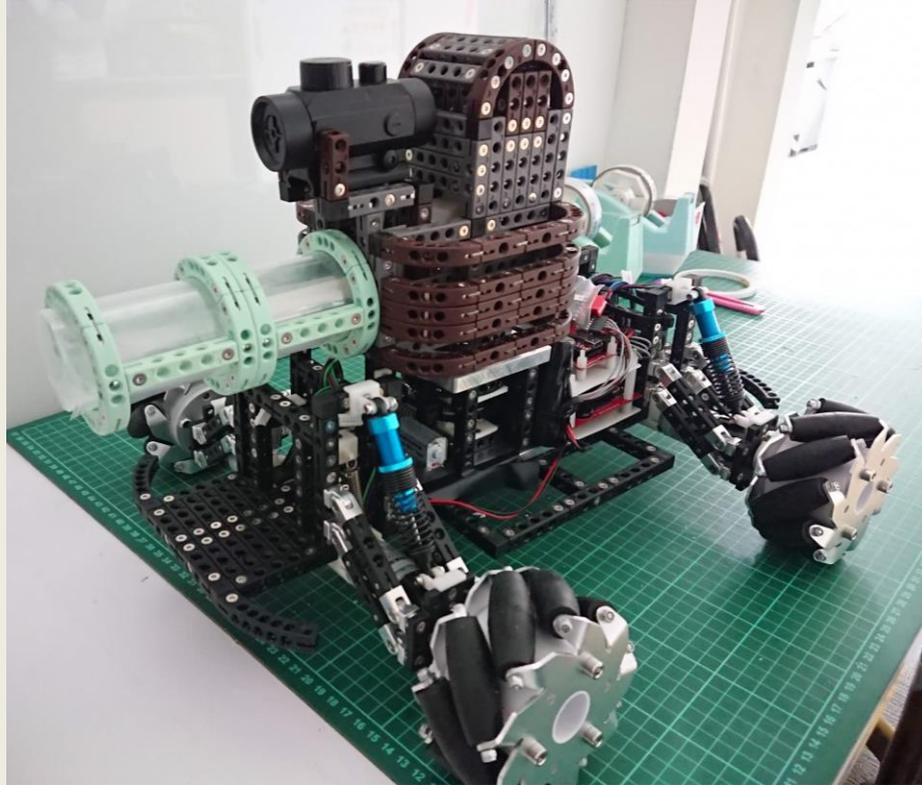
## RUNNING- Automatic Mobile Vehicle

Size: 22\*12\*11cm

### Introduction:

The Science and Technology Running Self-propelled Vehicle is a key package that guides you into the field of unmanned vehicles. Students can use this kit to get into the transmission design from the organization to learn the programming language and increase the learning history. In this self-propelled car, students must assemble the car body, install the motor, and write programs for infrared tracking and remote remote control of the Bluetooth. The high compatibility of the Cagebot also allows students to choose their own familiar language, control panel, such as arduino, micro:bit can be used in the Running self-propelled car.

List Price: **USD 150**



## CGB Light Tank

Size: 45\*45\*45cm

### Introduction:

Combined with the Cagebot bricks, Mecanum wheel, Xiangyi homemade gear box motor, the Cagebot small chariot has a very high sensitivity and speed, but also has a more tolerant than the tank assembled by the general building blocks. Through modular assembly, users can build a wide variety of tanks according to their own preferences. The Science and Cagebot Chariot uses a physical bomb, and the side of the body is equipped with a pressure plate. You can enjoy a thrilling competition at home through the remote control. Can discuss tactics with teammates, with car body collision, double-team, sweeping, the sturdy and durable Cagebot small chariot can challenge different tasks.



## Automatic Mobile Vehicle

Size: 15\*12\*12cm

### Introduction:

This power self-propelled car leads the first step in the field of robotics. Learn the robot mechanism through simple building blocks, and use the battery box to learn the influence of current direction and voltage on the DC motor. Create your own hurricane knight with a wheeled robot that is easy to get started with.

Key projects: institutional assembly, dynamics, electricity

List Price: **USD 40**



## Biped Robot

Size: 18\*15\*12cm

### Introduction:

The biped robot has created the first-level course in the field of robots. It is different from the Cagebot self-propelled car. In addition to the organization, electrical and dynamics, students still have to learn and study the design of the humanoid robot's feet. After the feet, drive them to walk. Follow-up students can continue to expand and build into the upper body to create their own humanoid robots.

Key projects: institutional assembly, dynamics, electricity

List Price: **USD 40**



## Production Line

Size: 100\*200\*60cm

### Introduction:

Large-scale logistics operators have an average of 27 million orders per day. It is difficult to cope with such a large amount of logistics by manpower alone. However, with the assistance of robots, it is not a problem to achieve millions of shipments per day. In addition to the identification of the robot arm and RFID, the point-to-point transportation system is also very important. Through the strong technical features of the technology treasure, the user can create a simulation production line for the conveyor belt, and then match the unmanned truck to complete the simulation. The warehousing and logistics system allows people in the past to find goods and transform them into goods. (Taking the Cagebot of large-scale production lines as an example)



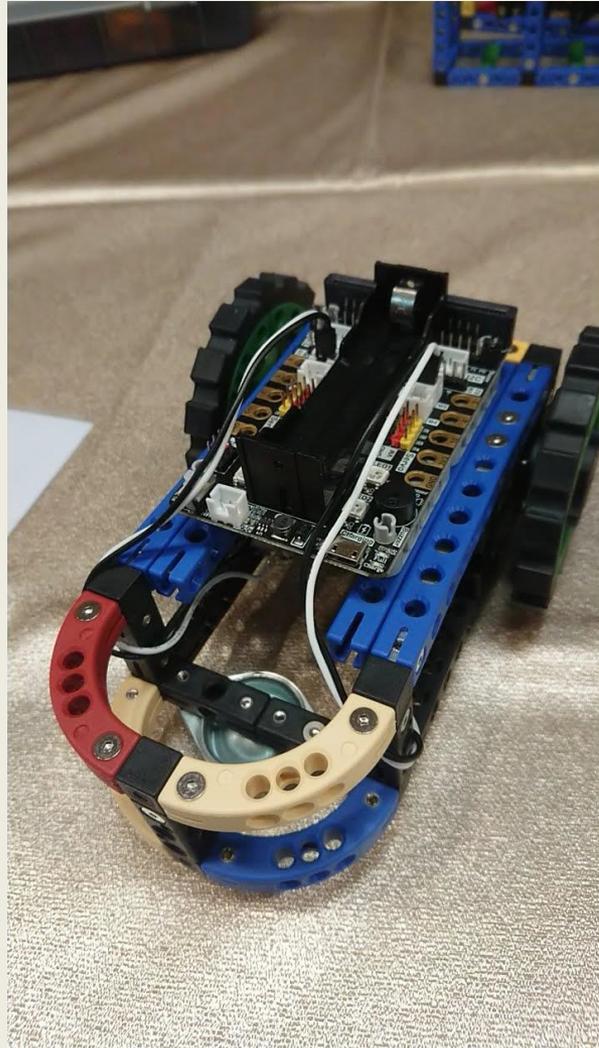
## Creation Power Box

Size: 32\*15\*10cm

### Introduction:

The newly launched Cagebot eight-in-one creative power combination, added to the transmission kit, can freely create its own transmission Cagebot device through simple electrical and dynamic integration through the mechanism, and then can be combined with programming to control the transmission. Whether it's a self-propelled car, a smart city, or a smart logistics system, Cagebot can satisfy your unlimited creative imagination.

List Price: **USD 165**



## Automatic Mobile Vehicle-MicroBit

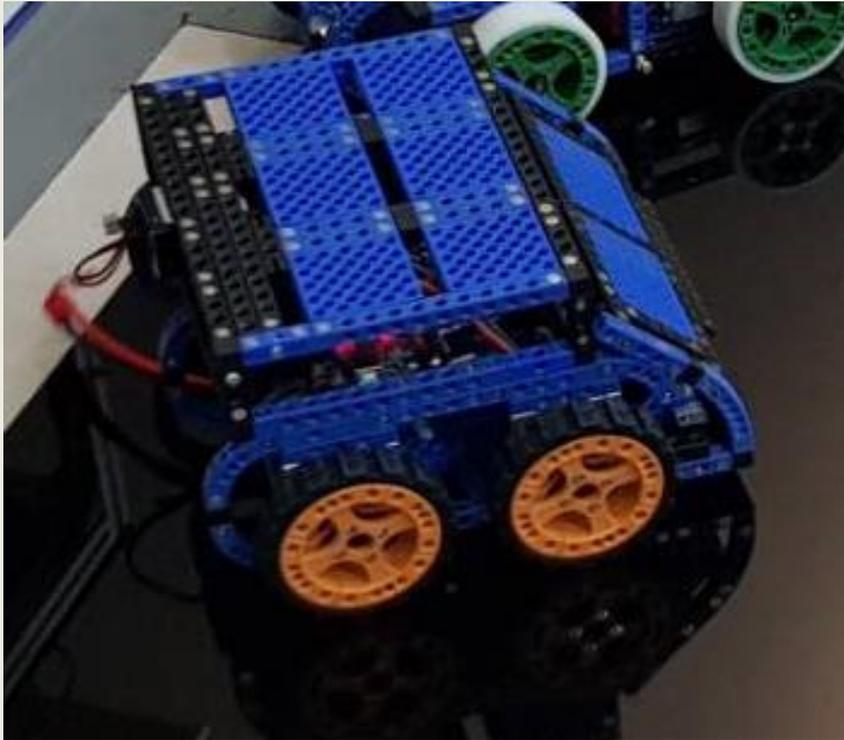
Size: 18\*12\*8cm

### Introduction:

The Science and Technology Running Self-propelled Vehicle is a key package that guides you into the field of unmanned vehicles. Students can use this kit to get into the transmission design from the organization to learn the programming language and increase the learning history. In this self-propelled car, students must assemble the car body, install the motor, and write programs for infrared tracking and remote remote control of the Bluetooth. The high compatibility of the Cagebot also allows students to choose their own familiar language, control panel, such as arduino, micro:bit can be used in the Running self-propelled car.

Key projects: organization, transmission, routing, communication, tracking, compatibility

List Price: **USD 168**



## Auto Sumo Robot

Size: 25\*22\*15cm

### Introduction:

This wheeled robot competition, innovatively utilizing the tough and strong characteristics of the technology building blocks, breaks the traditional system type, students will be able to integrate unlimited creativity in the organization integration to create a unique robot shape.