



WEEEMAKE

WEEEMAKE

Product Brochure

AI/IoT/STEAM/Robotics/Maker Space



A Turnkey Solution for Future Education

Build your own robots and
bring them to life with
Weemake!



Primary & Secondary



WeeeCore AIoT Handle



● SKU: 181061

WeeeCore is an AI x IoT handle as well as a robot controller. It is applicable to multiple teaching scenarios such as school classroom teaching, community teaching, online/offline training for STEAM, coding, robotics, AI, IoT education, etc.

- Gamepad-like AIOT development board
- Five LEDs, colorful LCD display, onboard microphone and speaker, offer audio-video interaction in STEAM education.
- Graphical programming and Python
- 32 story-line lessons, lead students programming with adventures in ocean and in outer space.

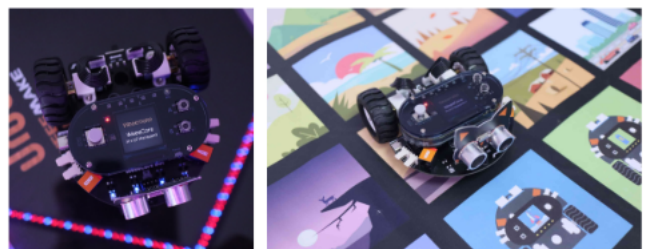
WeeeCore Bot is a cute beginner-friendly AI x IoT voice-coding robot.

- Cute and mini AIoT programming robot driven by WeeeCore, support offline voice command.
- Graphical & Python programming supported, with step-by-step AI curriculum.
- Equipped with quad line tracking sensor and encoder motors.
- Come with color pen, move and draw!
- Built-in rechargeable battery, convenient for classroom.

Video



WeeeCore Bot Voice-coding AI Robot



● SKU: 181066

WeeeBot mini V2.0



● SKU: 181008

WeeeBot mini STEAM Education Robot V2.0 is the classroom version of WeeeBot mini.

- Build-in rechargeable battery
- Light, sound and display interaction
- APP supported with rich play mode
- Open and play
- 5*14 LED Matrix Panel
- 10 Lessons

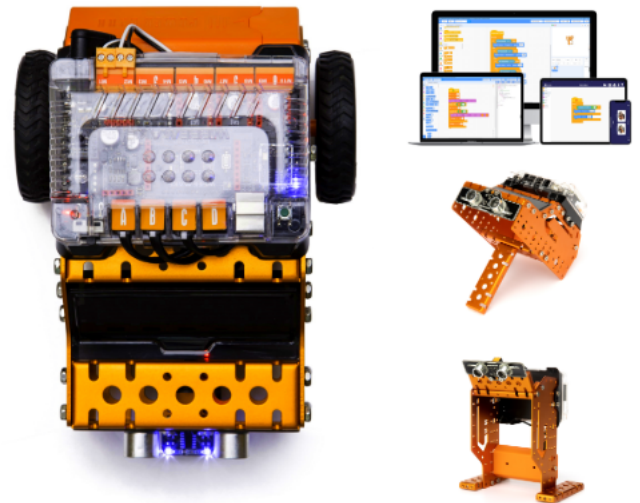
Video



WeeeBot 3 in 1/Jeep

WeeeBot 3 in 1 is a DIY metal STEAM robot kit with rich sensors, curriculum and competition solution. WeeeBot Jeep is the classroom version.

- 15-30 mins quick assembly
- Light, sound and display interaction
- APP supported with rich play mode
- 16 Lessons (90-180 mins)
- Multiple competition adaptable
- Expandable, support 2560, ESP32 chips.



● SKU: 181062
WeeeBot 3 in 1

Video



● SKU: 161061
WeeeBot Jeep

Video





Home Inventor Kit

Rich Sensor
7 in 1
Home Inventor
Robot Kit

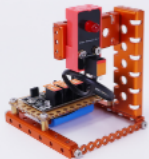


Magic Musician

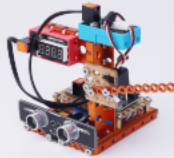
Home Inventor is a 7 in 1 desktop STEAM robot kit, students can create and explore life science with coding and robotics.

- 7 STEAM project, suitable for classroom
- Rich sensors and electronics
- Easy to assemble
- RJ11 wiring
- 16 Lesson (45 mins)
- Scratch and Arduino coding

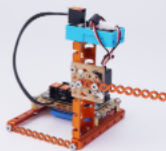
Video



Corridor Light



Parking Lot System



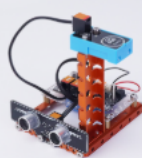
Obedient Gate



Smart Fan



Weather Station

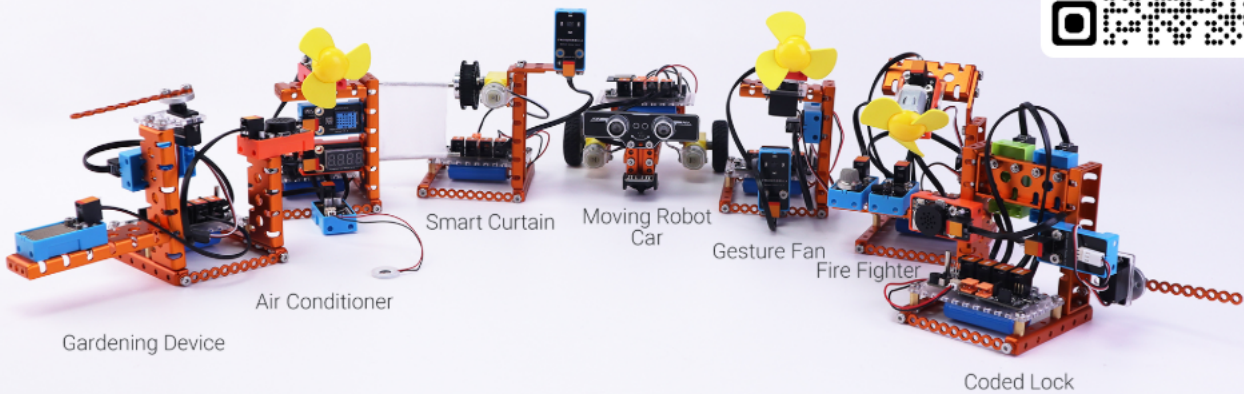


Rainbow Light

● SKU: 181002

Home Inventor Expansion Set

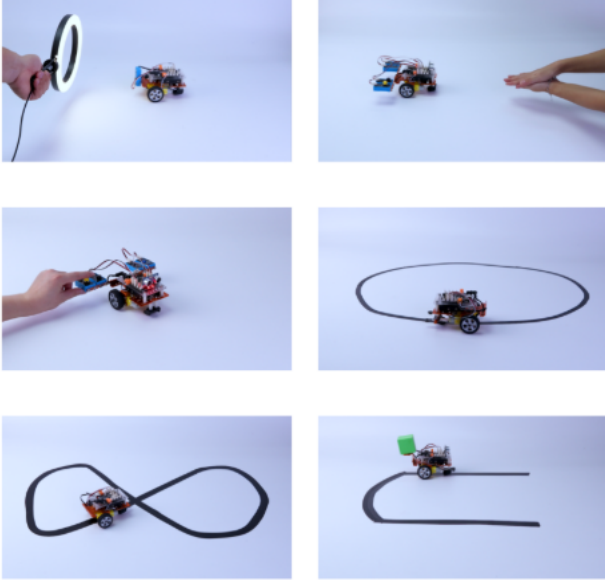
Video



- 7 more intelligent STEAM projects with 16 more lessons.

● SKU: 150511

Mars Rover Arduino Educational Robot Kit



● SKU: 181005

Mars Rover Arduino Educational Robot Kit is a high-quality open-source Arduino robot kit with 14 fun robot car projects.

- High quality Arduino system robot DIY kit.
- Easy-wiring KF2510 ports and metal structure.
- 14 fun robot car projects.
- Graphical programming.
- 24 lessons (45 mins)
- STEAM Education

Video



Our Green World Python Learning Kit

Our Green World - Python Learning Kit is an affordable STEAM education robot kit driven by ESP32 mainboard.

- 14 fun projects with energy-saving themes.
- Easy-wiring KF2510 ports and metal structure.
- Graphical programming
- Python programming
- 32 lessons (45 mins)

Video



● SKU: 181512



AI Starter Kit



● SKU: 181023

One student per kit, 16 lessons (45 mins)
Graphical programming starter kit

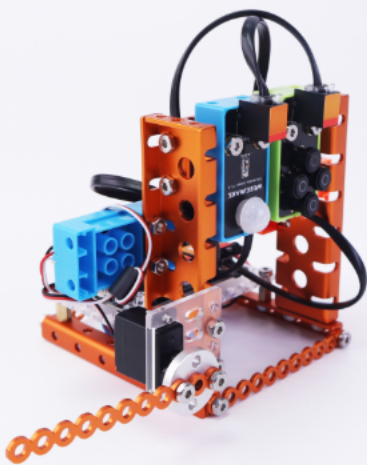
AI Advanced Kit



● SKU: 181024

One student per kit, 16 lessons (45 mins)
Graphical Programming AI Robot Starter Kit

15 in 1 Intelligent Home Training Kit



● SKU: 181513

15 in 1 Intelligent Home Training Kit, offers 15 fun desktop STEAM projects and 32 lessons.

- Rich sensors, 15 intelligent projects.
- Graphical programming, 32 lessons (45 mins)
- Intelligent sensors
- Easy RJ11 wiring

Video



6 in 1 WeeeBot Evolution STEAM Education Robot Kit



● SKU: 181017

WeeeBot Evolution is a 6 in 1 STEAM educational DIY robot kit.

- Rich assemble robot forms
- APP supported with rich play mode
- Graphical and Arduino coding
- Robot competition compatible
- 18 Lessons (90-180 mins)

Video

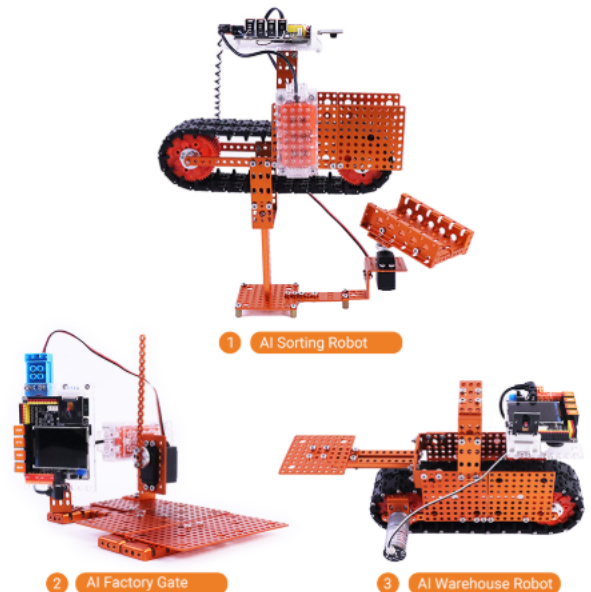


AI Factory Robot Kit

AI Factory Robot Kit is a project-based demonstration robot kit for AI image recognition education.

- 3 STEAM robot forms for AI factory.
- Driven by AI mainboard ELF AIOT K210.
- Graphical and microPython coding.
- Edge computing
- Model training
- 14 lessons (45 mins)

Video



● SKU: 160556



Starter MakerSpace Kit

Starter MakerSpace Kit
Age 7-10



20+Projects | Classroom Kit

● SKU: 181010

Starter Maker Space Kit can build more than 20 different level structure. Each structure is in smart design, comply to Science and Physics subjects. This kit will teach and practice students with below abilities:

- Spatial visualization
- Hands-on ability
- Mechanical structure recognition
- Knowledge on physical world and daily life
- Observation, sensing and habit of work
- Teamwork and share

Video



Advanced Maker Space Kit is theme-oriented kit, students will learn the theory, usage, codes, and application with mechanical structures for over 40 different electronic modules in three theme projects step by step. Comply to Science, Physics, and computer science subjects.

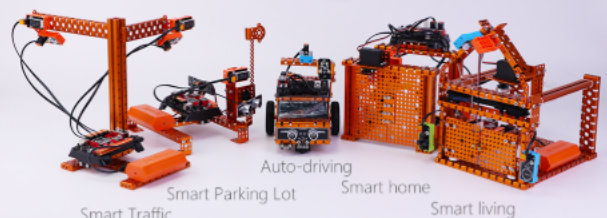
- Logical thinking and analysis
- Programming knowledge
- Appliance of sensors and output modules
- Analyze and solve problem
- Teamwork and share
- 18 Lessons (90 mins)

Video



Advanced MakerSpace Kit

Advanced MakerSpace Kit
PBL Education



32 Chapter Lessons | Graphical Programming | For Classroom

● SKU: 181011

AI Interactive Display Solution



● Pack A

Pack A offers a series of AI projects which students can play and interactive with, is tailored for educational environments with easy hands-on experience.

- AI Face Detection Gate
- Temperature Measurement
- Smart Home Assistant
- Smart Weather Station
- Holographic Projection
- Gesture-control Sokoban Game
- Racing Seesaw

Video



Pack B offers a series of AI interaction and STEAM robot structure projects.

- Holographic Projection
- Voice Interactive Robotic Gripper
- Crank Rocker Mechanism
- Crank-slider Mechanism
- Rocker-slider Mechanism
- Magnetic Induction Generator
- Track Drive Mechanism

Video



● Pack B

Pack C is emphasizing the exploration of AI in various forms and applications

- AI Human Posture Recognition
- AI Palm Recognition and Interaction
- Holographic Projection
- Super Air Piano
- Voice-Interactive Music Box
- Voice Interactive Smart Map
- Voice-Control Mecanum Chassis

Video



● Pack C



AI Smart Home Learning Kit



● SKU: 161808

The AI Smart Home Learning Kit is an educational solution for smart homes, dedicated to providing a comprehensive AI smart home experience for schools and STEM educational training institutions for young learners. It enables control and interactive experiences of various AI smart home functions. This kit allows makers, teachers, and students to quickly and intuitively understand and learn about artificial intelligence and smart home-related knowledge.

Video

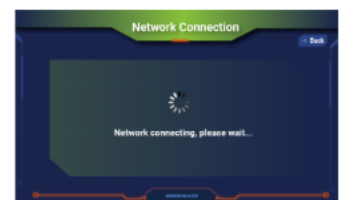


It is an advanced agricultural technology demonstration solution designed to provide schools and STEM institutions for younger students with a comprehensive smart agriculture experience. This kit integrates a speech sensor, speech synthesis module, color display, CO2 sensor, soil moisture sensor, water pump, LED full-spectrum plant lights, fan, and so on. Users can observe and monitor the growth of plants, and adjust the plant growth environment. It allows teachers, and students to intuitively and quickly understand and observe the plant growth process.

Video



AI Smart Agriculture System Display Kit



● SKU: 161805



College

University

Vocational School

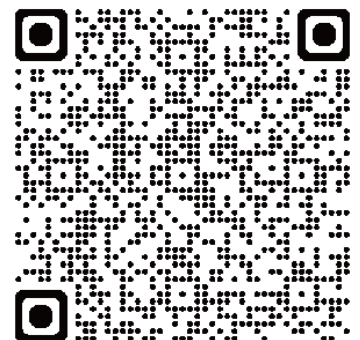
6 IN 1 WEEEBOT EVOLUTION

STEAM Robot Kit



SKU: 181017 6 in 1 WeeeBot Evolution STEAM Robot Kit

The 6 in 1 WeeeBot Evolution Robot Kit is a STEM construction robot kit with six cool pre-set forms. It consists of powerful main-board ELF, anodized aluminum mechanics, and smart modular electronics system. Evolution involved, building robots from the animal, to human, to robot machine times! Building process and learning programming with WeeeCode are fun and easy. Supports APP control and code, graphical programming, Arduino and Python programming.





Software and Curriculum

WeeCode & WeeMake APP

18 Lessons, 30 Hours

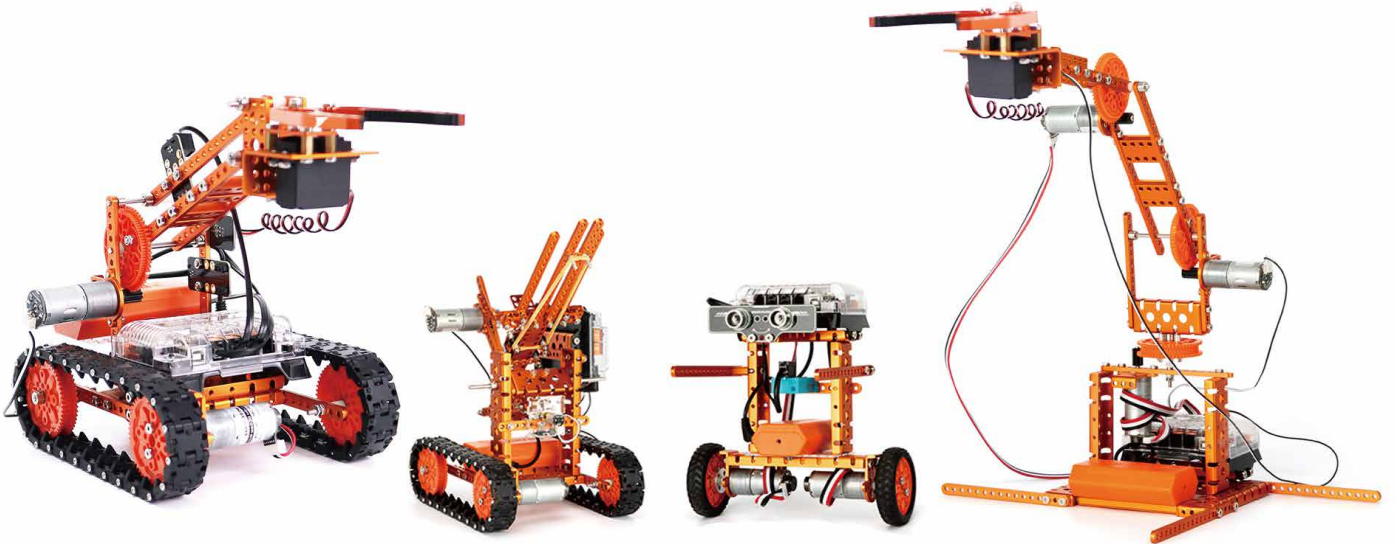


Specifications

Description	6-in-1 WeeBot Evolution Robot Kit	Pre-set forms	6
Mainboard	ELF	User	10 +
On-board Electronics	ATmega328P	Motor	2 × 188rpm DC Motor
	1 × Light sensor	External Electronic Modules	RGB ultrasonic sensor
	1 × Sound sensor		Double-way line-following sensor
	1 × IR transmitter & receiver	Variety and quantity of parts	Parts variety:55 +
	1 × Buzzer		parts quantity: 380+
	1 × On-board button	Operation Voltage	6-12V
1 × On-board RGB LED	Power Supply	18650 lithium battery × 2	
Extension port	4 × RJ11 port, 2 × DC motor port, 4 × Pin Port	Programming Software	APP (graphical programming) PC (graphic + Arduino C)
	6 × pin port, 1 × USB B port, 1 × Bluetooth 2.4G port	Dimension (L×W×H)	500 × 150 × 350(max.)
Communication	Micro USB, Bluetooth 4.1, IR	Net weight	1800g

12 IN 1 WEEEBOT ROBOTSTORM

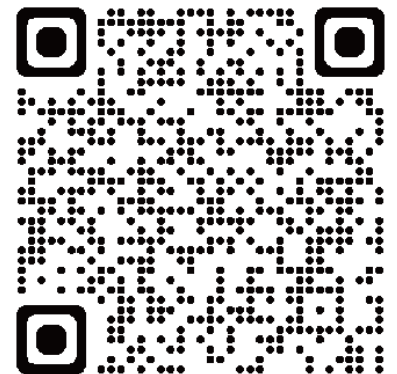
STEAM Education Robot Kit



SKU: 181018 12 in 1 WeeeBot RobotStorm

The 12-in-1 WeeeBot Robotstorm STEAM Robot Kit is a multi-functional DIY ultimate STEAM robot kit. It has more than 450 parts and contains 12+ cool pre-set forms. Whether you are a mechanical or an electronics engineer, a software engineer, a teacher a student, or a maker, this kit allows you to easily learn robot-related mechanical structure, electronics and programming knowledge, encourage team work for robot competition.

This kit is a powerful parts library consists of more than 450 parts. With heavy-duty mechanical parts such as beams, plates, brackets, gears, grippers, tracks, shafts, wheels, and easy-to-use electronic





Arduino Series

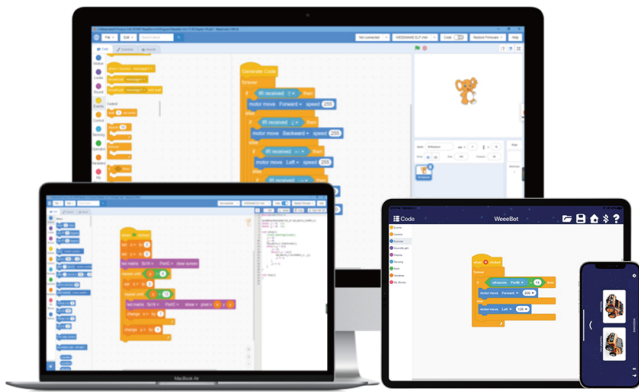
modules like ELF mainboard, RGB ultrasonic sensor, Line-following sensor, gyroscope sensor, limit switch, RGB LED-8 module, light sensor, sound sensor, buzzer, IR receiver, Bluetooth module, Bluetooth dongle, you can get an enhanced hands-on experience on 12 different robot that is programmable in wireless way.



Software and Curriculum

WeeCode & WeeMake APP

12 Forms, 28 Lessons



Chapter	Chapter Objective	Learning Time	Activities
Chapter 1	Control of Servo DC Motor	30 mins	1 Task
Chapter 2	Control of RGB Lamp	30 mins	1 Task
Chapter 3	Controlling Encoder DC Motor and RGB Lamp	30 mins	1 Task
Chapter 4	Light-driven Robot	30 mins	1 Task
Chapter 5	Line-driven Robot	30 mins	1 Task
Chapter 6	Bluetooth remote control robot	30 mins	1 Task
Chapter 7	Following Robot	30 mins	1 Task
Chapter 8	Obstacle Avoidance Robot	30 mins	1 Task
Chapter 9	Following Robot	30 mins	1 Task
Chapter 10	Line-following Robot	30 mins	1 Task
Chapter 11	Line-following Control with Obstacle Avoidance	30 mins	1 Task
Chapter 12	Line-following Remote Control Robot	30 mins	1 Task
Chapter 13	Bluetooth remote control speed control Fan RPM Robot	30 mins	1 Task
Chapter 14	Accurate Control of Encoder DC Motor	30 mins	1 Task
Chapter 15	Remote Control of Encoder Robot	30 mins	1 Task
Chapter 16	Remote Control of Three-axis Mechanical Arm	30 mins	1 Task
Chapter 17	Remote Control of Speed Controller Three-axis Mechanical Arm	30 mins	1 Task
Chapter 18	Bluetooth Remote Control Robot	30 mins	1 Task
Chapter 19	Autonomous Remote Control Robot	30 mins	1 Task
Chapter 20	Remote control Robot Arm Task	30 mins	1 Task
Chapter 21	Line Remote control Robot Arm Task	30 mins	1 Task
Chapter 22	Autonmaly handling robot	30 mins	1 Task
Chapter 23	Remote control robot	30 mins	1 Task
Chapter 24	Autonmaly control function	30 mins	1 Task
Chapter 25	Bluetooth remote control speed robot	30 mins	1 Task
Chapter 26	Measurement and Application of Gyroscope Sensor Application	30 mins	1 Task
Chapter 27	Measurement and Application of Gyroscope Angle	30 mins	1 Task
Chapter 28	Bluetooth remote control robot	30 mins	1 Task

Specifications

Item	Parameter
Electronics	RGB ultrasonic sensor, Double-way line-following sensor, Gyroscope sensor, Limit switch module, Light sensor, Sound sensor, IR receiver RGB LED -8 (pins), Encoder/DC motor driver, IR remote control, Bluetooth 4.1 module, Bluetooth Dongle module
Mechanical Components	Over 400pcs
Controller	ELF
Communication	USB port, Bluetooth, 2.4G Wireless
Motor drive	10 ways(M1-M10)
Sensor port	10 (4xRJ11, 6xoptional)
Motor	4
Robot Forms	12 forms are provided
Size	437 x 320 x 200 mm
Weight	4500 g

OUR GREEN WORLD Python Learning Kit



SKU: 181512 Our Green World—Python Learning Kit

Weemake Our Green World - Python Learning Kit is an affordable entry-level Python education hardware set. It is consisting of ELF ESP32 mainboard, open-source electronic modules, durable metal structure parts, Scratch and Python programming software, and teaching tutorials. Let students step into Python programming, understand the meaning and importance of energy conservation and emission reduction, and can learn the Python language-based robot programming.

It is consisting of basic pack A (SKU 181510) and expansion pack B (SKU 181511). Pack A provides 6 desktop projects, 16-chapter lessons, step into Python world. Suitable for one-semester learning plan. Pack B provides additional 6 desktop projects and 16-chapter lessons, let students understand the meaning and importance of

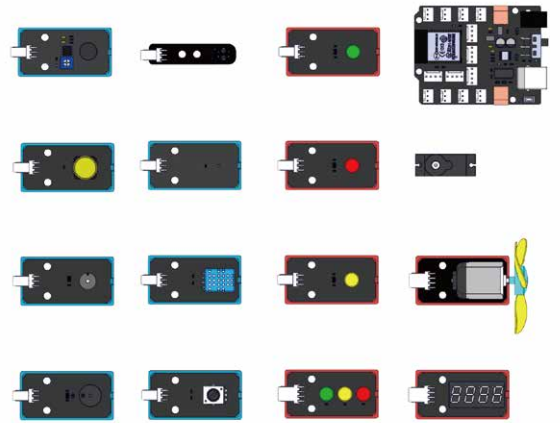




Python Series

energy conservation and emission reduction, and can learn the graphical and Python language robot programming.

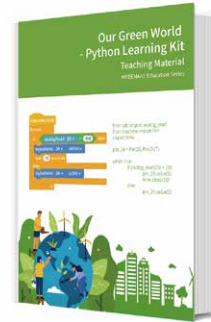
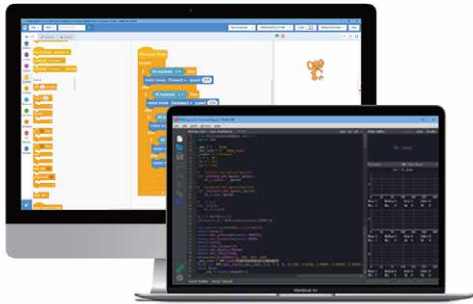
The complete kit (SKU 181512) covers one school year learning plan.



Software and Curriculum

Scratch 3.0 & Python

12 Projects, 36 Lessons

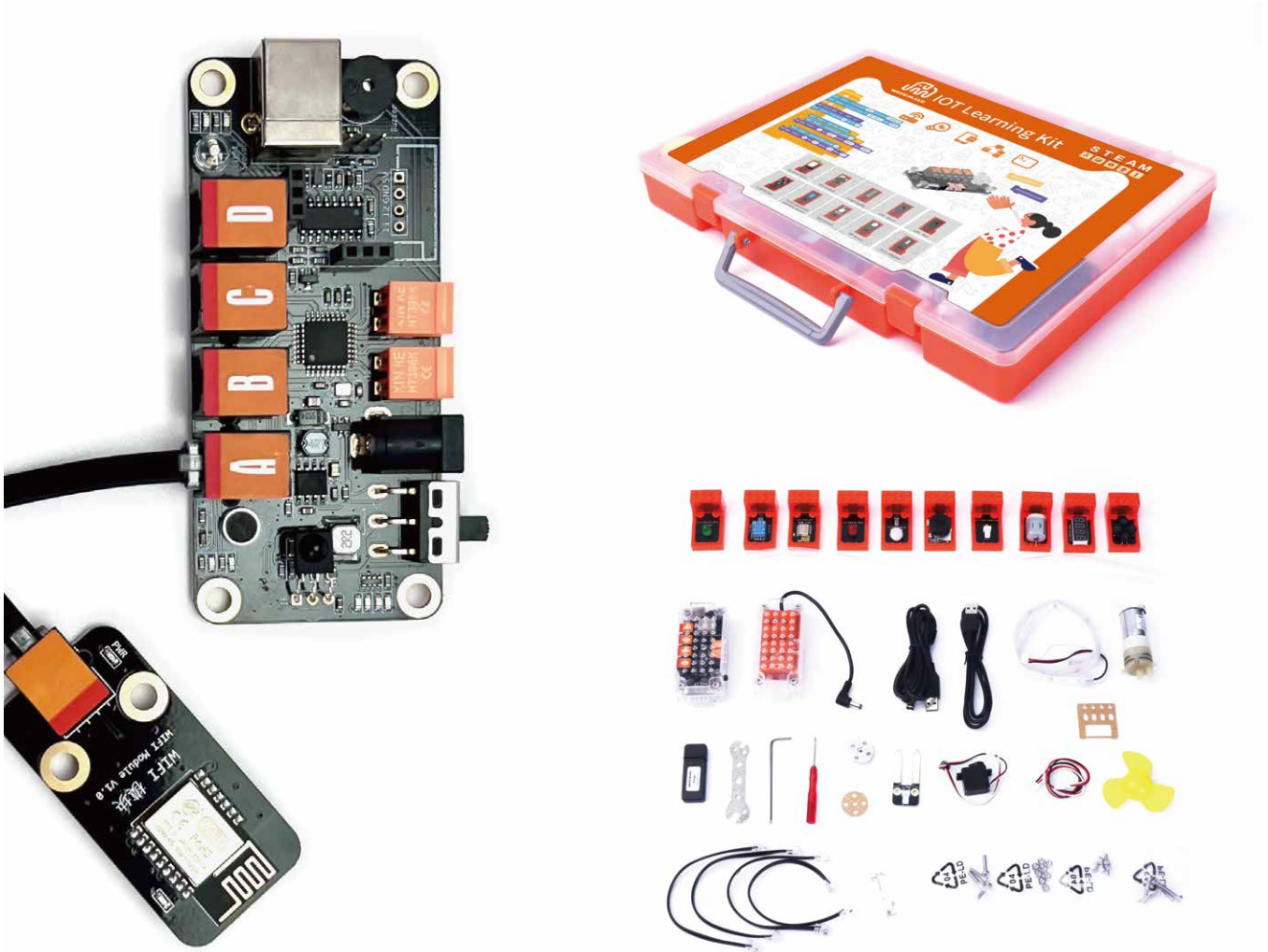


Specifications

Name:	Our Green World - Python Learning Kit	Mainboard:	ELF ESP32 Mainboard
Chip:	ESP32	Age:	10+
Working Voltage:	6-12V	Curriculum:	32 Lessons (90 mins/lesson)
Serial:	CH340C	External	Buzzer x1
Operating Voltage:	3.3V	Electronics:	Sound sensor x1
Operating Current:	Max. 1A		Button x1
Motor Current:	Max. 1.5A		LED-red x1
Software:	WeeCode (3.0) Thonny IDE, Mu Editor		4 digit LED display (LED segment display) x 1
Onboard Electronics:	LED x1		LED-yellow x1
	DC motor port x2		LED-green x1
	Power switch x1		Light sensor
	Reset button x1		Potentiometer x1
	3P2510 port x8		Traffic light module x1
	4P2510 port x5		Active Buzzer x1
Motors:	5V130 motor x1		Temperature and humidity sensor x1
	9g Servo motor x1		Line-following sensor x1

IoT Learning Kit

The Internet of Things



SKU: 161051 IoT Learning Kit

IoT Learning Kit is a middle-level STEM education kit to learn the Internet of Things. The purpose is to let students get hands-on experience on creating simulated smart home and smart farm projects with magical Internet of Things technology.

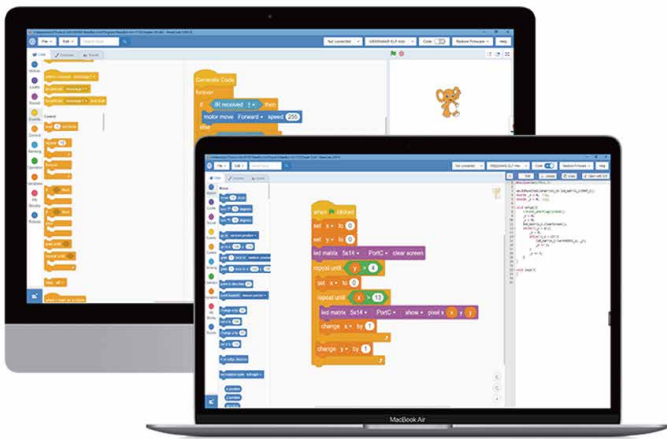
This Kit is designed to let students apply various programming knowledge, Internet of Things technology, connect the network world and the real world, and cultivate students' programming control ability, hands-on practice ability, daily life observation ability and spatial imagination, and comprehensive practice. Improve students' comprehensive scientific and engineering literacy.



Software and Curriculum

Scratch | Arduino | Python Programming

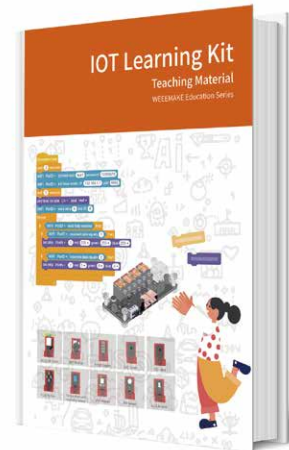
14 Lessons



IoT Platform



APP Inventor

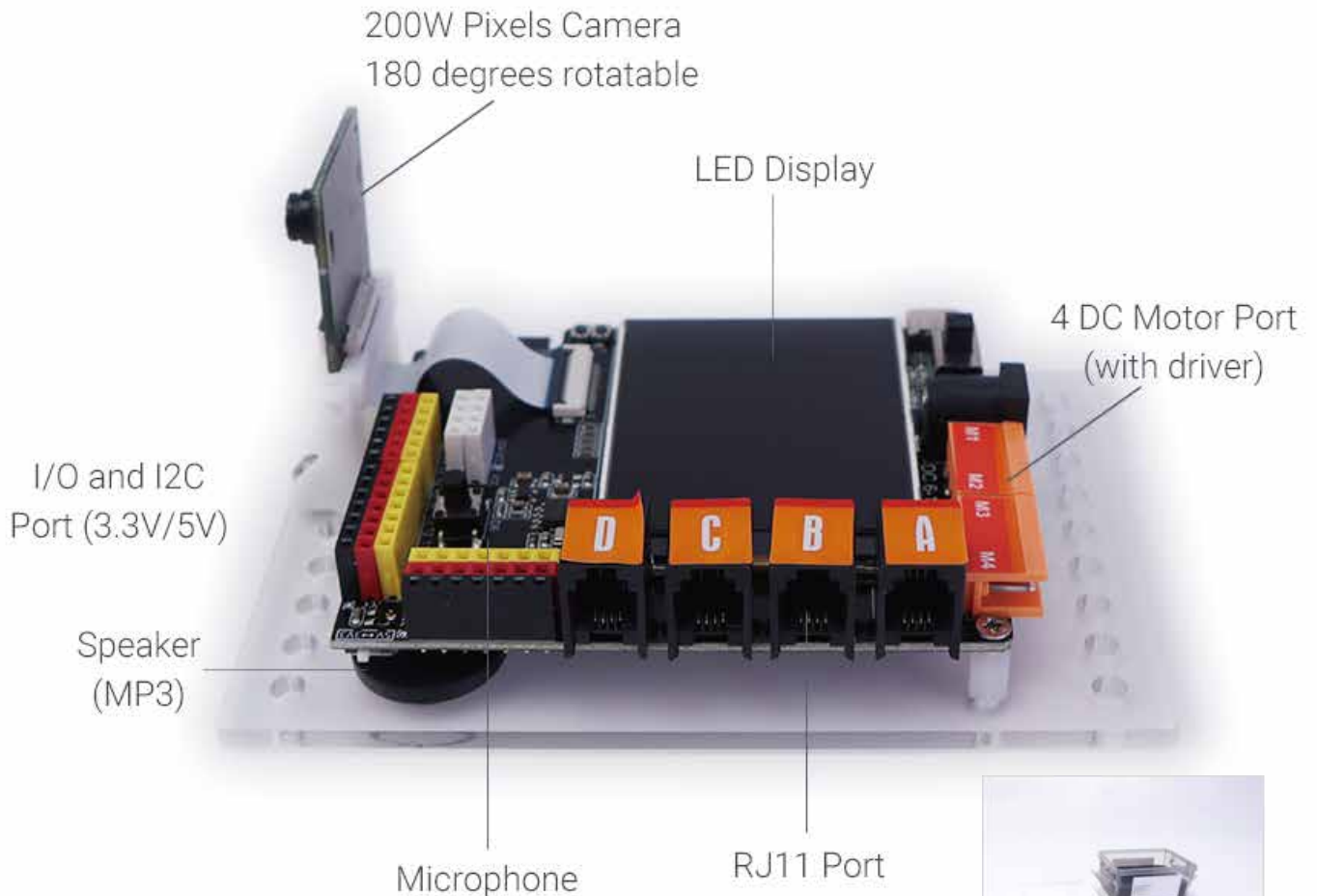


Specifications

Operation Voltage:	6-12V
MCU:	ATmega 328p or ESP32
Wiring Port:	4x RJ11 port
	2 x DC motor port
	1 x Wireless communication port (Bluetooth 2.4G)
	1x USB port (type B)
Onboard Electronics:	1x Sound sensor
	1x Light sensor
	1x IR Receiver
	2x Red LED
	2x Yellow LED
	4x Blue LED (Power Indicator)
Software:	WeeeCode (Scratch 3.0)
	App Inventor

ELF AIOT K210

AI x Python Controller



Powered by K210 and ESP32 chips.

SKU: 131012 ELF AIOT K210 Mainboard

ELF AIOT K210 is a powerful AI controller board for artificial intelligence education. This mainboard can perform artificial intelligence functions such as face recognition, voice recognition, size recognition, shape recognition, number detection, color recognition, machine learning, etc. Support Python programming and graphical programming, suitable for both beginners and professional users.

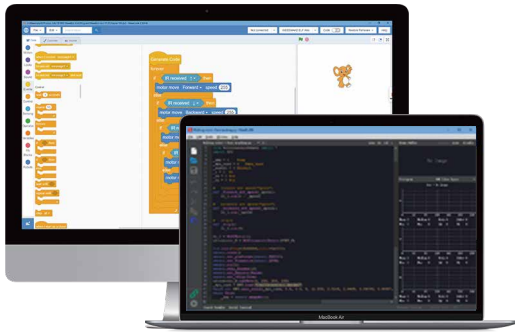
*Gift: Type-C cable, microSD card, microSD card reader





Software and Curriculum

Scratch 3.0 & Python



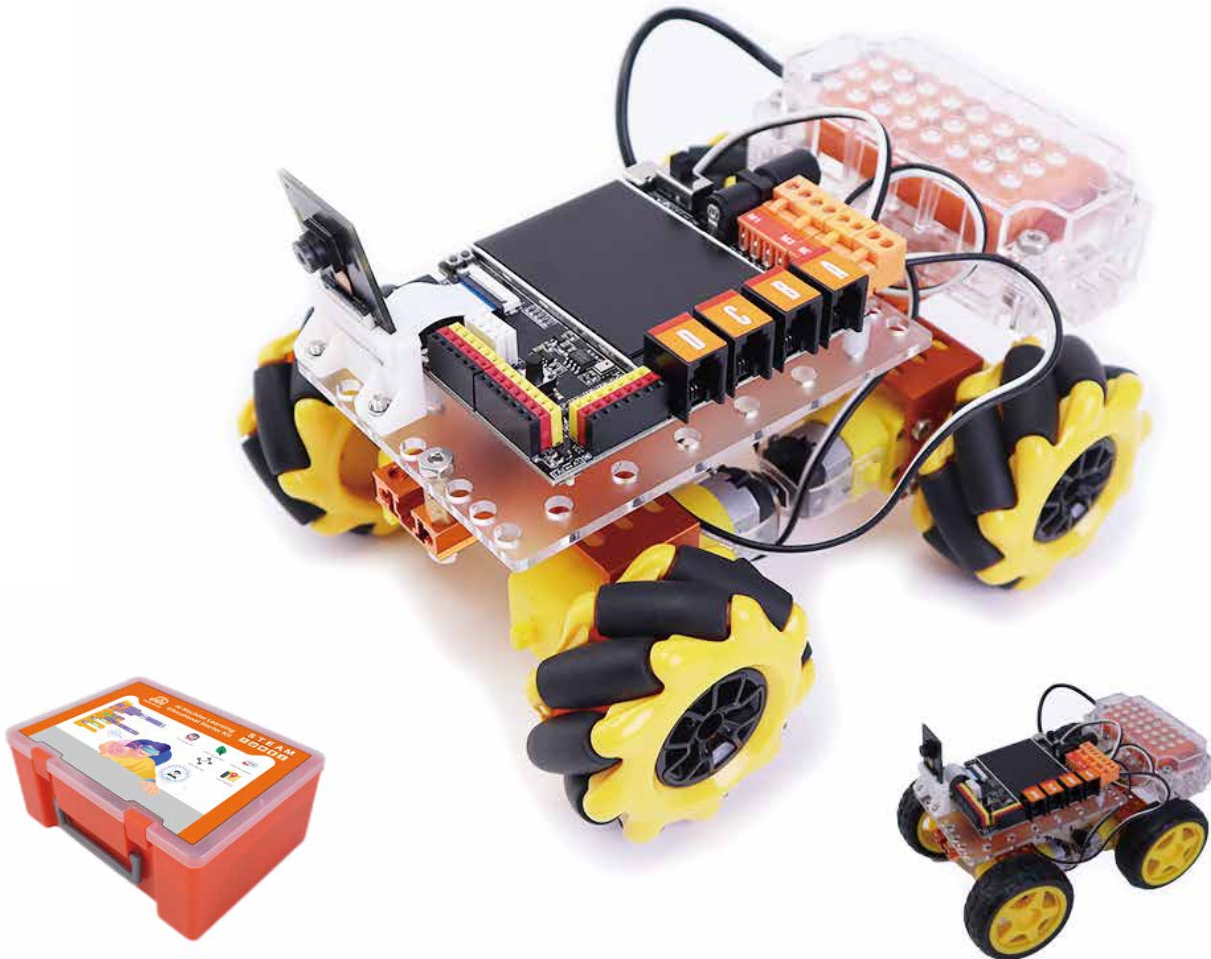
Projects



Specifications

Chip:	K210, ESP32	K210 Chip:	Dual-core 64bit 400 MHz (up to 600 MHz)
Working Voltage:	6-12V		SRAM: 8M byte
Working Temperature:	-30° C-85° C		Image Recognition: QVGA@60fps/VGA@30fps
Port:	4 x RJ11 port (Weemake sensors) 20 x I/O pin port 2 x I2C pin port 4 x DC motor port 1 x Type C port 1 x TF card slot 1 x Power supply port		Network Model: YOLOv3/Mobilenetv2/TinyYOLOv2/Face recognition
Onboard Electronics:	1 x 2.4inch TFT Display 1 x 180° Rotatable 2MP Camera 1 x Microphone 1 x Speaker 1 x On-board button 1 x Boot/Reset Button 1 x 3.3V/5V Toggle Switch 1 x Power switch		Deep Learning Frame: TensorFlow/Keras/Darknet/Caffe..
Wi-Fi:	802.11 b/g/n	Video Processing:	Neural Network Processor (KPU)
Wi-Fi Frequency:	2400MHz -2483.5MHz	Software:	<ul style="list-style-type: none"> FPU meets IEEE754-2008 standard Audio processor (APU) Fast Fourier Transform Accelerator (FFT)
			<ul style="list-style-type: none"> WeeCode 3.5 or higher (Supports graphical programming, Arduino C, microPython) MaixPy IDE (MicroPython)

AI MACHINE LEARNING Educational Starter Kit



Powered by ELF AIOT K210 mainboard.

SKU: 161052 AI Machine Learning Starter Kit

AI machine learning starter kit is a 2 in 1 entry-level DIY robot kit for students to get hands-on ability about artificial intelligence. This kit uses ELF AIOT K210 mainboard as the controller, introduced AI knowledge focusing on machine vision and machine hearing such as face recognition, vision line-tracking algorithm, object recognition algorithm, etc. by user-friendly graphical programming as well as professional Python programming. At the same time, it also offers engineering knowledge such as 4-wheel drive structure, mecanum wheel installation and usage, and so on.





Software and Curriculum

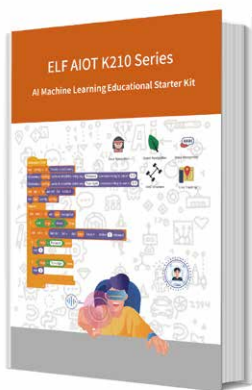
WeeCode
(Scratch 3.0 & Python)



MaixPy
(Python)



14 Lessons



Face Recognition



Object Recognition



Object Tracking



Line Tracking



Color Recognition



Tag Recognition



4WD Structure



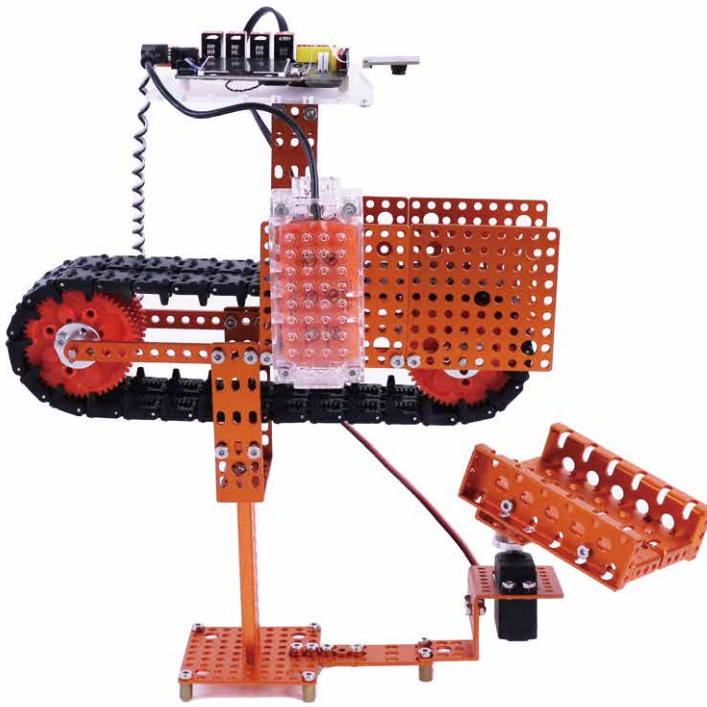
Voice Recognition

Specifications

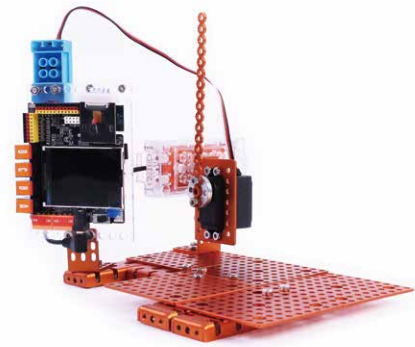
Name:	AI Machine Learning Starter Kit	Mainboard:	ELF AIOT K210
Working Voltage:	6-12V	Age:	10+
Onboard Electronics:	1 x 2.4inch TFT Display	Curriculum:	14 Lessons (90 mins/lesson)
	1 x 180° Rotatable 2MP Camera	Wheel:	4 x 60mm mecanum wheel 4 x Rubber wheel
	1 x Microphone	Battery:	18650 Lithium Battery Pack
	1 x Speaker	Software:	WeeCode (Scratch & microPython) MaixPy (microPython)
	1 x On-board button	Package:	Plastic box
	1 x Boot/Reset Button	Package Size:	253x189x102 mm
	1 x 3.3V/5V Toggle Switch	Weight:	1350 g
Motor:	4 x 6V TT motor		

AI FACTORY ROBOT KIT

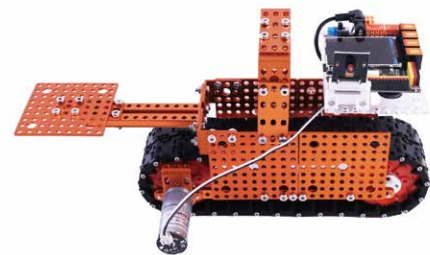
AI x Industry 4.0



AI Sorting Robot



AI Factory Gate



AI Warehouse Robot

Powered by K210 and ESP32 chips.

SKU: 160556 AI Factory Robot Kit

AI Factory Robot Kit is a project-based demonstration robot kit for AI image recognition education. This kit uses ELF AIOT K210 main board as the controller, includes three projects - the AI factory gate, the warehouse robot, and the AI sorting robot.

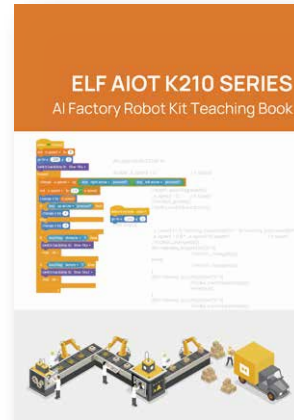
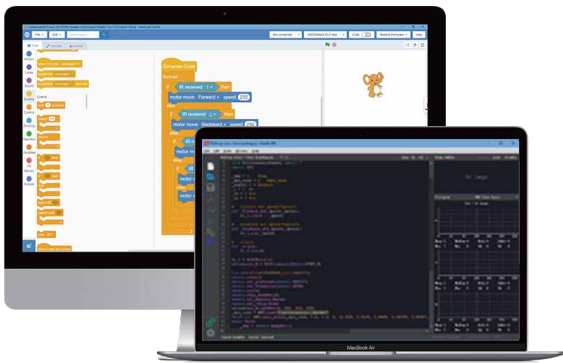
This robot kit simulates the common scenes of AI factories. By assembly, program and control, students get hands-on experience on programming, robotics, and industry 4.0.



Software and Curriculum

Scratch 3.0 & Python

3 Projects, 8 Lessons



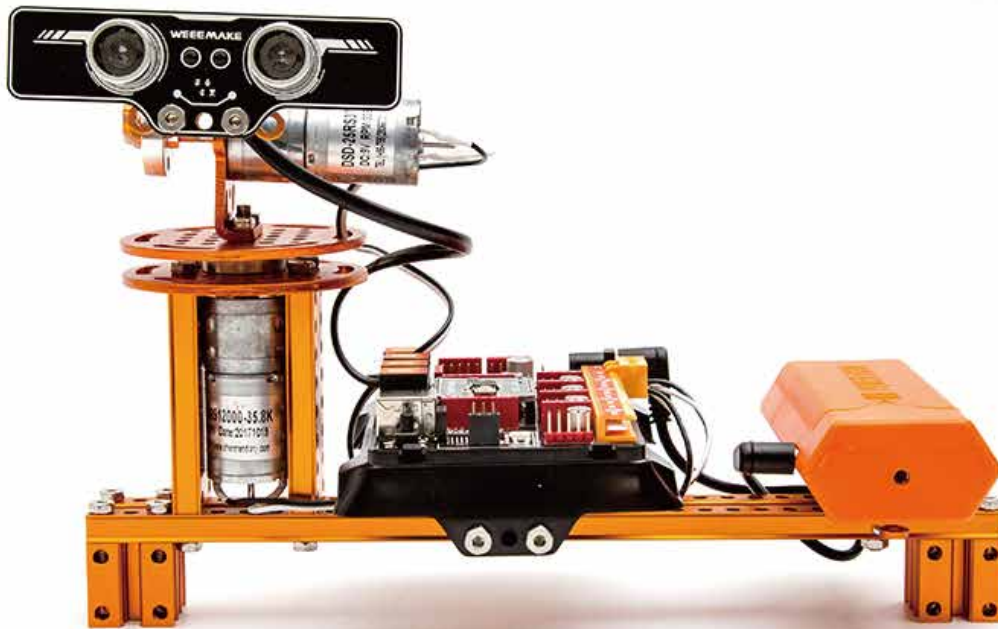
No.	Curriculum	Course content	No.	Curriculum	Course content
1	Factory Study - Start	Design a game to start the study of AI factory, get familiar with the WeeeCode programming and algorithm.	5	Smart Warehouse Robot	Learn to load and use the object recognition model.
2	AI Factory Gate - Structure Design	Know the structure of various types of structures, learn the mainboard, design a AI factory gate.	6	Color Block LAB collection	Learn the color model LAB, and learn to use the color space to collect the LAB value, and learn single color recognition.
3	AI Factory Gate - Program Design	Learn to load and use the label and code recognition model.	7	AI Sorting Robot - Structure Design	Through the modification of the warehouse robot, use servo motor to make a AI sorting robot.
4	Warehouse Robot - Structure Design	Recognize various structural parts and analysis robot structure, design a warehouse transportation robot.	8	AI Sorting Robot - Program Design	Comprehensive use of the knowledge learned in the previous course for programming

Specifications

Name	AI Factory Robot Kit	Mainboard	ELF AIOT K210
Working Voltage	6-12V	Curriculum	8 Lessons
Onboard Electronics:	1 x 2.4inch TFT Display 1 x 180° Turnable 2MP Camera 1 x Microphone 1 x Speaker 1 x On-board button 1 x Boot/Reset Button 1 x 3.3V/5V Toggle Switch 1 x Power switch	Wheel	56T Plastic Gear Track Pack
		Motor	25 DC Motor, MG995 Servo
		Battery	18650 Lithium Battery Pack
		Software	WeeeCode (Scratch & microPython) MaixPy (microPython)
		Package	Plastic box
		Weight	3800 g
		Electronics	RJ11 Adapter Module



9 IN 1 Science Kit



Generator



Meshing Belt Driving



Double Rocker



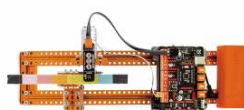
Crank Rocker



Ultrasonic Guitar



Music Rack



Oscillating and Reciprocating

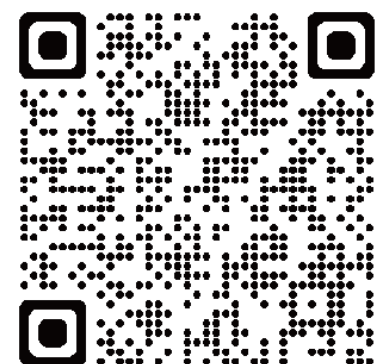


Slider-crank



SKU: 160509 9-in-1 Science Kit

The 9 in 1 Science Kit is an educational robot DIY kit which can simultaneously build at least 9 classic STEAM application cases. Each structure is cleverly designed, simple and compact, and is closely integrated with the school's internal science and physics classes to stimulate students' scientific interest. It is consist of aluminum mechanical parts, electronic modules, motors, hardware, tools, and storage solution. Designed for mechanical engineering education.





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