WEEEMAKE



WEEEMAKE

PRODUCT BROCHURE

Weeemake coding & robotics kits are built specifically for the SA curriculum (CAPS). Featuring hands-on STEM activities, engaging micro:bit projects, robotics challenges & teacher-friendly e-learning, these kits empower both learners & educators across SA to explore coding, robotics & computational thinking with confidence.

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, onine/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 Voice-coding AI Robot

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







SKU: 181066

WEEEMAKE

WeeeBot mini V2.0



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

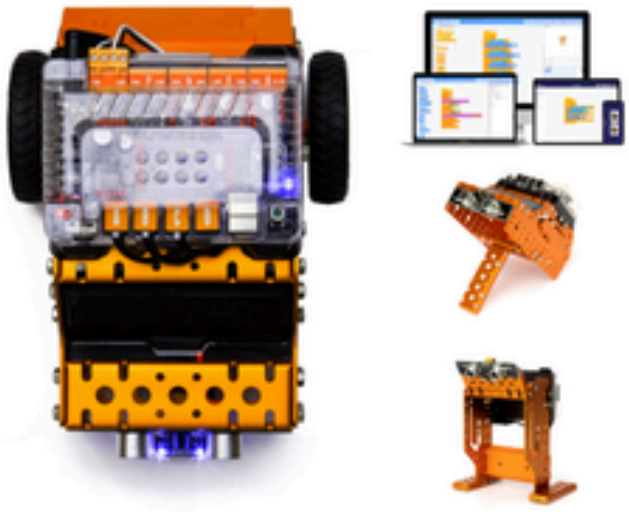
Video

SKU: 181008

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



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

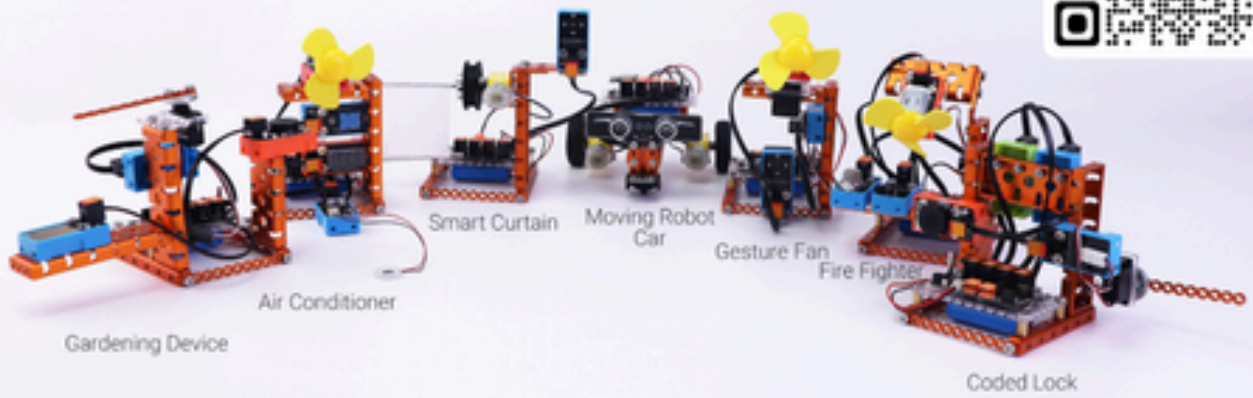
- 7 STEAM project, suitable for classroom
- Rich sensors and electronics
- Easy to assemble
- RJ11 wiring
- 16 Lesson (45 mins)
- Scratch and Arduino coding

Video

SKU: 181002

Home Inventor Expansion Set

Video



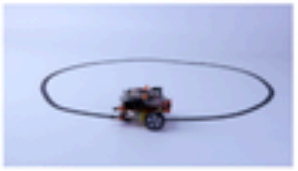
- 7 more intelligent STEAM projects with 16 more lessons.

SKU: 150511

WEEEMAKE

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 Learing 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

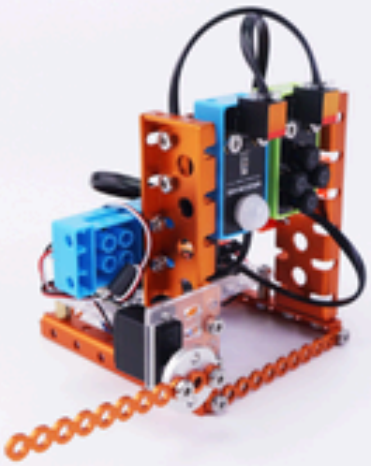
AI Advanced Kit



- 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



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

SKU: 181017

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

Primary & Secondary

Starter MakerSpace 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 MakerSpace Kit

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



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

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

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

6 IN 1 WEEEBOT EVOLUTION

STEAM Robot Kit













SKU: 181017 6 in 1 WeeeBot Evolution STEAM Robot Kit

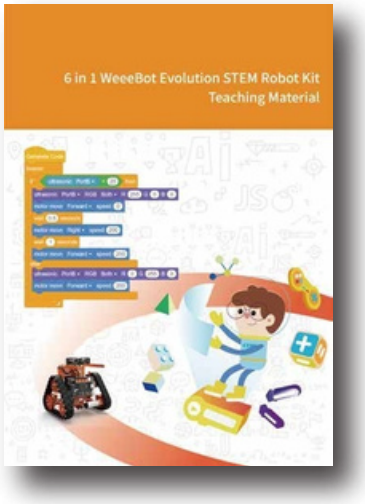
The 6 in 1 WeeeBot Evolution Robot Kit is a STEM construction robot kit with six cool pre-set forms. It consists of powerful main-board ELF, anodized aluminum mechanics, and smart modular electronics system. Evolution involved, building robots from the animal, to human, to robot machine times! Building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

Software and Curriculum

WeeeCode & WeeeMake APP



18 Lessons, 30 Hours



Specifications

D e scr i pti on	6-in-1 WeeeBot Evolution Robot Kit ELF	**Pre-set forms**	6
Mainboard	ATmega328P	**User**	10 +
On-board El e ctr oni cs	1 × Light sensor	**Motor**	2 × 188rpm DC Motor
	1 × Sound sensor	**External Electronic Modules**	RGB ultrasonic sensor
	1 × IR transmitter & receiver		Double-way line-following sensor
	1 × Buzzer	**Variety and quantity of parts**	Parts variety:55 +
	1 × On-board button		parts quantity: 380+
	1 × On-board RGB LED	**Operation Voltage**	6-12V
		Power Supply	18650 lithium battery × 2
Extension port	4×RJ11port,2×DCmotor port, 4 × Pin Port 6 × pin port, 1 × USB B port, 1× Bluetooth 2.4G port	**Programming Software**	APP (graphical programming) PC (graphic + Arduino C)
		Dimension (L×W×H)	500 × 150 × 350(max.)
C om m uni ca ti on	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

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 difference robot that is programmable in wireless way.



Software and Curriculum

WeeeCode & WeeeMake APP



12 Forms, 28 Lessons



Item	Parameter
El e ctr oni cs	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 C om pone nts	Over 400pcs ELF
Controller	
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

Weeemake 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

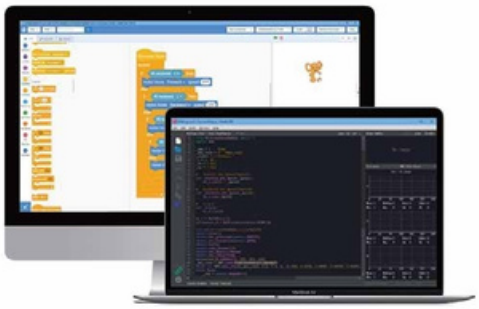
energy conservation and emission reduction, and can learn the graphical and Python language robot programming.

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



Software and Curriculum

Scratch 3.0 & Python



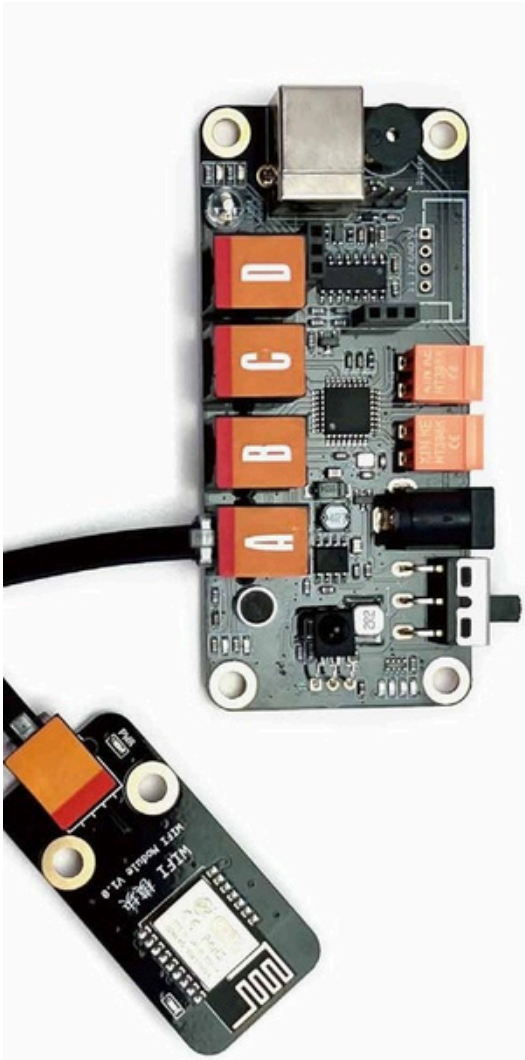
12 Projects, 36 Lessons



Specifications

Name: Chip:	Our Green World - Python Learning Kit	**Mainboard:**	ELF ESP32 Mainboard
Working Voltage:	ESP32	**Age:**	10+
Serial:	6-12V	**Curriculum:**	32 Lessons (90 mins/lesson)
Operating Voltage:	CH340C	**External**	Buzzer x1
Operating Current:	3.3V	**Electronics:**	Sound sensor x1
Motor Current:	Max. 1A		Button x1
Software:	Max. 1.5A		LED-red x1
	WeeeCode (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 swtich 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.

Python Series

Software and Curriculum

Scratch | Arduino | Python Programming





IoT Platform



APP Inventor

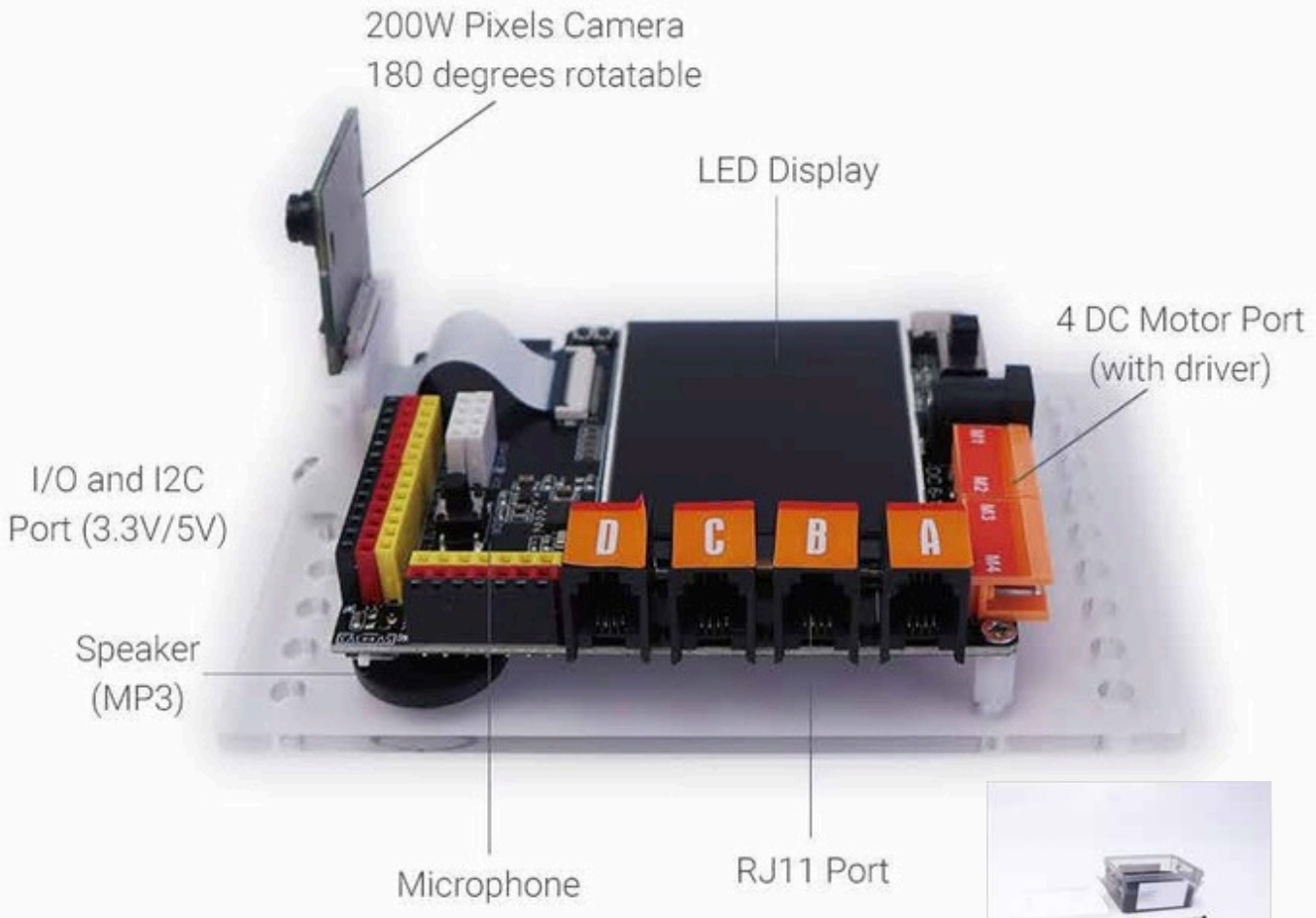
14 Lessons



Specifications

Operation Voltage:	6-12V
MCU:	ATmega 328p or ESP32
Wiring Port:	4x RJ11 port
	2 xDCmotor port
	1 xWireless communication port (Bluetooth 2.4G)
	1x USBport (type B)
Onboard Electronics:	1x Soundsensor
	1x Lightsensor
	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.

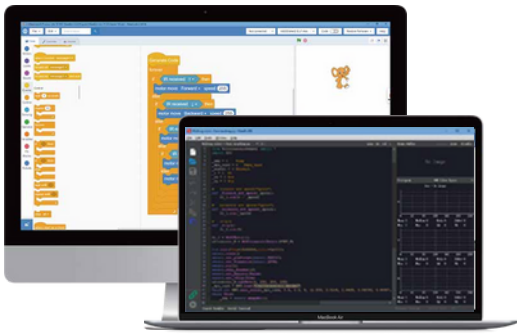
SKU: 131012 ELF AIOT K210 Mainboard

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

AI x Python Series

Software and Curriculum

Scratch 3.0 & Python



Projects







Specifications

C hi p:	K210, ESP32	**K210 Chip:**	
Working Voltage:	6-12V	Dual-core 64bit 400 MHz (up to 600 MHz) SRAM: 8M byte Image Recognition: QVGA@60fps/VGA@30fps Network Model: YOLOv3/Mobilenetv2/TinyYOLOv2/Face recognition Deep Learning Frame: TensorFlow/Keras/Darknet/Caffe.. Video Processing: Neural Network Processor (KPU) ·FPU meets IEEE754-2008 standard ·Audio processor (APU) ·Fast Fourier Transform Accelerator (FFT)	
Working Temperature:	-30° C-85° C		
P or t:	4 x RJ11 port (Weeemake 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		
Onboa r d El e ctr oni cs:	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		
Wi-Fi:	802.11 b/g/n	**Software:**	·WeeeCode 3.5 or higher (Supports graphical programming, Arduino C, microPython) ·MaixPy IDE (MicroPython)
Wi-Fi Frequency:	2400MHz -2483.5MHz		

WEEEMAKE

AI MACHINE LEARNING

Educational Starter Kit



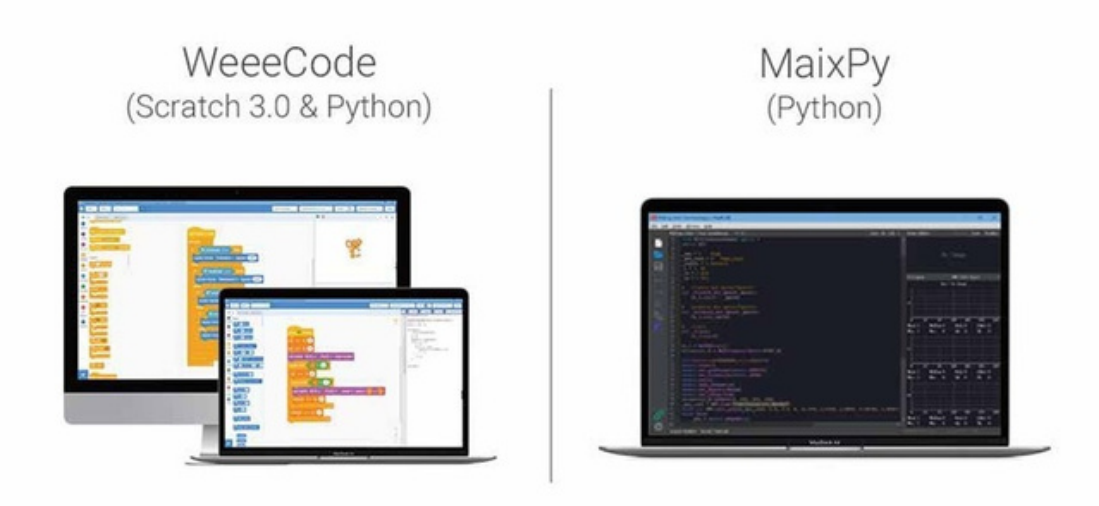
Powered by ELF AIOT K210 mainboard.

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.

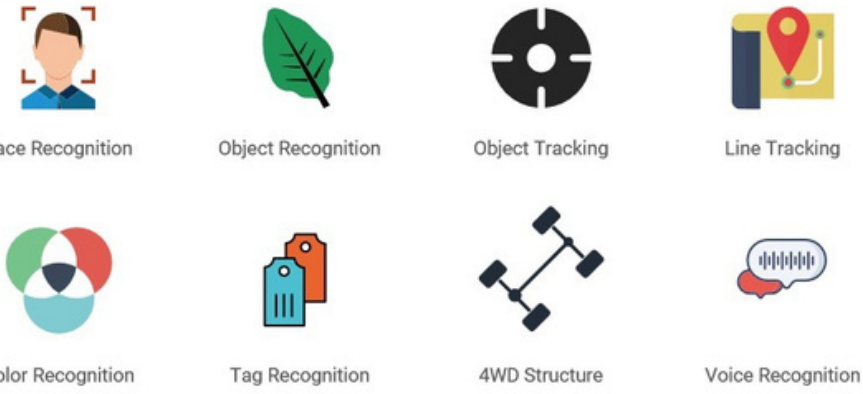
AI x Python Series

Software and Curriculum



14 Lessons





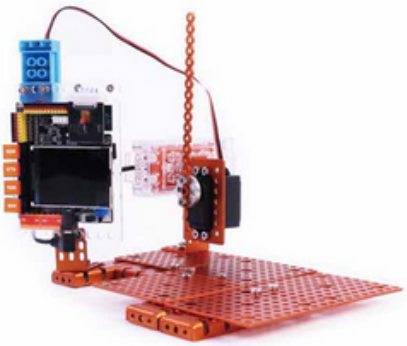
Name:	AI Machine Learning Starter Kit	**Mainboard:**	ELF AIOT K210
Working Voltage:	6-12V	**Age:**	10+
Onboa r d Electronics:	1 x 2.4inch TFT Display 1 x 180° Rotatable 2MP Camera 1 x Microphone 1 x Speaker 1 x On-board button 1 x Boot/Reset Button 1 x 3.3V/5V Toggle Switch 1 x Power switch	**Curriculum:**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

WEEEMAKE

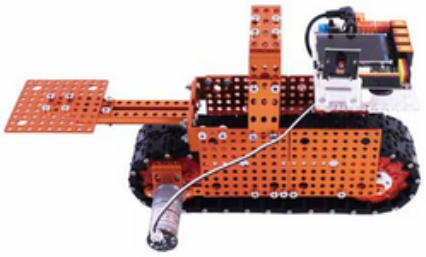
AI FACTORY ROBOT KIT AI x Industry 4.0



AI Sorting Robot



AI Factory Gate



AI Warehouse Robot

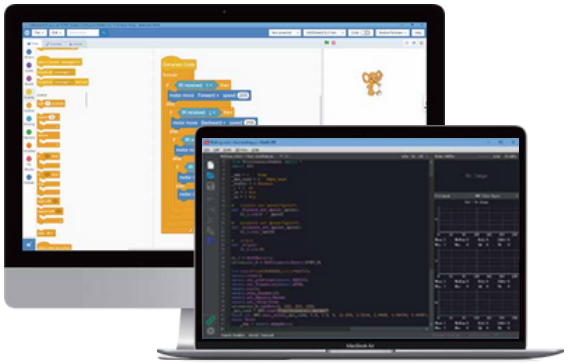
Powered by K210 and ESP32 chips.

AI Factory Robot Kit is a project-based demostration 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.

AI x Python Series

Software and Curriculum

Scratch 3.0 & Python



3 Projects, 8 Lessons

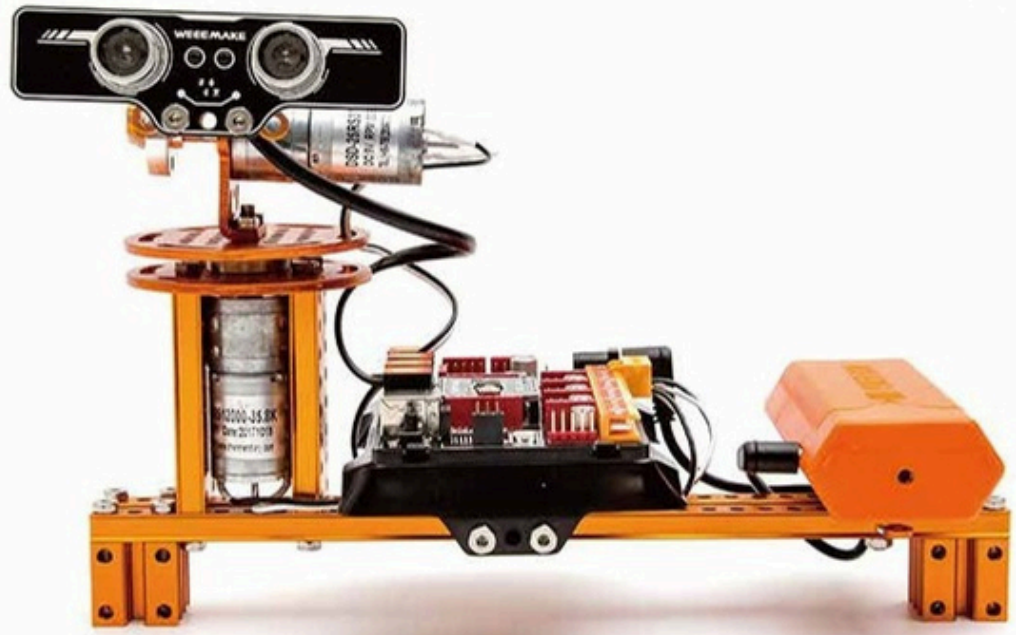


No.	Curriculum	Course content	No.	Curriculum	Course content
1	Factory Study - Start	Design a game to start the study of AI factory, get familiar with the WeeeCode programming and algorithm. Know the structure of various types of structures, learn the mainboard, design a AI factory gate.	5	Smart Warehouse Robot	Learn to load and use the object recognition mo del.
2	AI Factory Gate - Structure Design		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 pr o gr ammi ng

Specifications

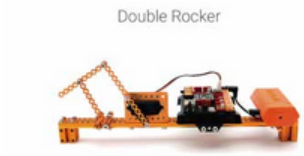
Name	AI Factory Robot Kit	Mainboard	ELF AIOT K210 8 Lessons 56T
Working Voltage	6-12V	Curriculum	Plastic Gear Track Pack 25 DC
Onboard Electronics:	1 x 2.4inch TFT Display 1 x 180° Turnable 2MP Camera	Wheel	Motor, MG995 Servo 18650 Lithium Battery Pack
	1 x Microphone	Motor	WeeeCode (Scratch & microPython)
	1 x Speaker	Battery	MaixPy (microPython) Plastic box
	1 x On-board button	Software	3800 g 38 x 27 x 15 cm
	1 x Boot/Reset Button		
	1 x 3.3V/5V Toggle Switch	Package	
	1 x Power switch	Weight	
Electronics	RJ11 Adapter Module	Size	

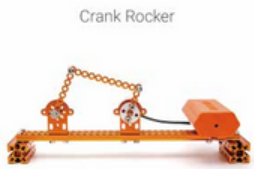
9 IN 1 Science Kit



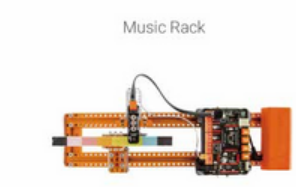
















SKU: 160509 9-in-1 Science Kit

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.