# What is DOBOT Magician Lite?

DOBOT Magician Lite is the world's first child-friendly, AI-infused and multi-functional intelligent robotic arm for K12 educators and students. Designed for users of all experience levels and abilities, Magician Lite provides everything that teachers or educators need to instruct students on how to apply the key concepts of AI and STEAM to real-world problems.

Key Specifications

±0.2mm
Repeatability

0.25kg
Payload

340mm
Reach
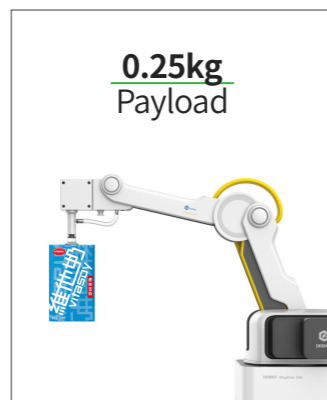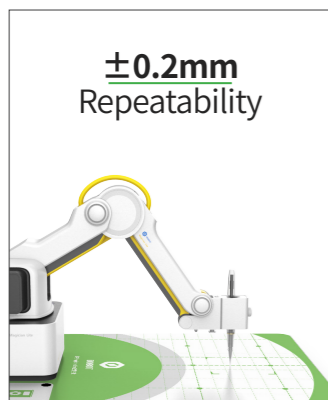
Truly Kids-Friendly: Safe & Easy to Get Started

Collision Detection

Handheld Teaching

2.4kg
Weight

External Controller "Magic Box"

Unlock

Unlimited Possibilities
for Development

Communication
Interface 2

12V VCC

Communication
Interface 1

POWER -12V

12V VCC

Universal Serial Port

USB Host

Motor Drive Interface

Custom 12V Power

USB

Power Box

Make Your Class

Mobile
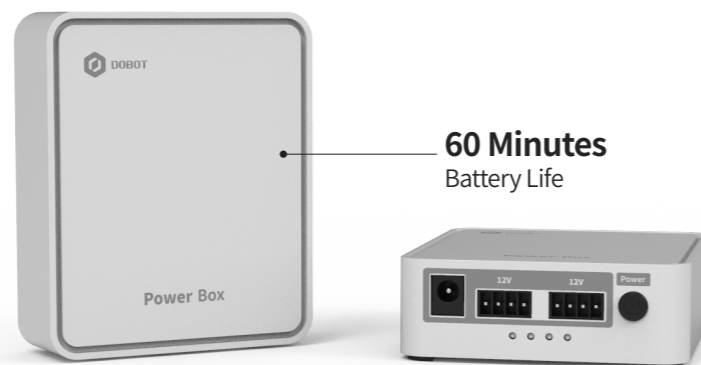

60 Minutes
Battery Life
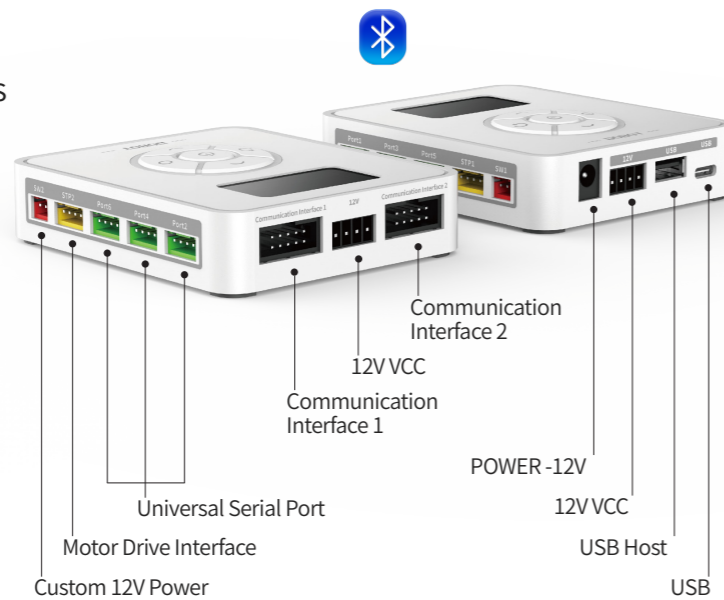
Power Box

Fast to Change End-Tools: To Write & Grab

Suction Cup

Gripper

Pen Holder

AI Smart Camera: To "See" and "Hear"

- Distortion-Free Lens
- 1 Megapixels
- 135° Rotation
- Microphone

DobotBlock: AI-Powered Visual Programming Software

Explore, Tinker, Realize

T OCR		U Facial Recognition	
Image Recognition		Voice Recognition	

*Magician Lite is also programmable on Python.

What's in the introductory package?

Magician Lite	Magic Box	Power Box	Camera
Pen Holder	Suction Cup	Gripper	Block Set
Tool Kit	Cable Set	DobotBlock	DobotLink Development Software
Technical Support	1-Year Warranty	Step by Step Guide	Video Demo

What can I add on to develop further?

AI Teaching Kit

AI Teaching Kit includes 4 packages of accessories for 4 AI application scenarios including commodity storage (OCR), smart grocery store(image recognition and image segmentation), smart shop assistant (voice recognition and face recognition) and smart garbage classification (image recognition and voice recognition).

With this AI Teaching Kit, students can experience real-world AI scenarios, engage in a series of hands-on activities and be inspired to prototype their own AI solutions.

DOBOT Sensor Kit

When equipped with the right sensors, DOBOT Magician Lite make sense of its surrounding environment. Being able to collect data from the environment, the robot can make better decisions. The sensor kits contains:

- photoelectric sensor
- ight sensor
- sound sensor
- temperature and humidity sensor
- color sensor
  …

DOBOT
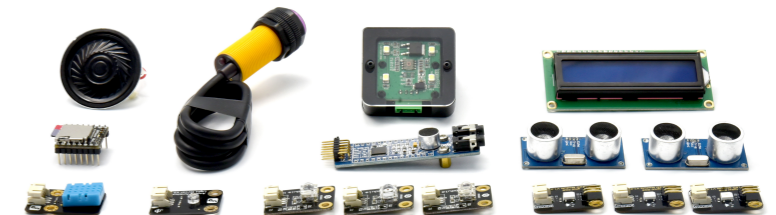
Linear Rail Kit

With the Linear Rail Kit, Magician Lite can have its working range expanded to one meter (3.28 feet). This means the robot can do more AI scenario-based tasks with long-distance pick and place, and a larger range of writing and drawing.

Conveyor Belt Kit

The Conveyor Kit features adjustable speed & length and color sensor, making it perfect for creating mini automated assembly line to educate students on how smart automation system works in real world.
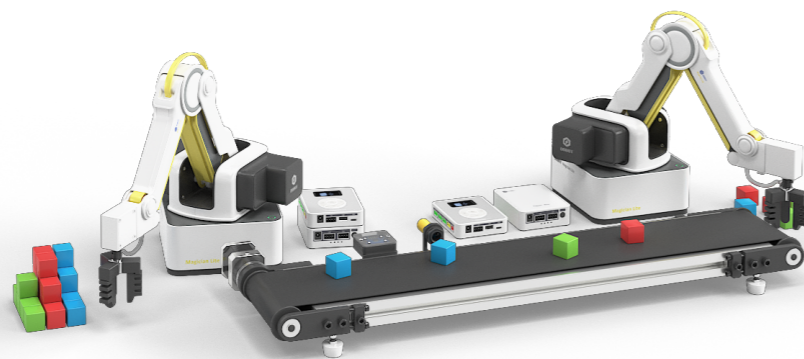
What's in included in the curriculum solution?

AI Curriculum for Elementary School

Prerequisite: In this course, you will learn graphical programming and robotics based on task-based teaching, and program the DOBOT Magician Lite to get the hands-on experiences with AI technologies.

Mandatory: In this course, you will learn what Artificial Intelligence (AI) is, explore cases and applications of AI, understand AI concepts and terms like machine learning, image recognition and natural language processing through relevant application tasks.

Practice: In this course, you will experience how AI and robots play their parts in real life by designing and building AI solutions that draw inspiration from our day-to-day life. From projects like smart parking to smart farm, you will learn and explore how AI automates and simplifies our everyday processes and how it transforms the way we farm and produce.

Curriculum Packages for Elementary School

From models to maps, these curriculum packages contain everything students and teachers need to design and build AI projects that are in the textbooks.

▌ AI Curriculum for Middle School

Prerequisite: In this course, you will explore and learn coding skills in Python, and program DOBOT Magician Lite to fulfill engaging curriculum tasks and have a smack at smart AI systems.

Mandatory: In this course, you will learn what Artificial Intelligence (AI) is, explore AI application cases using Python and DOBOT Magician Lite, and improve your understanding of AI concepts and terms like machine learning, image recognition and natural language processing.

Project Training: In this course, you will explore and design a variety of AI applications that are based on real life using Python and DOBOT Magician Lite. These AI projects come from different sectors such as healthcare, catering, servicing, transportation, etc. Through these scenarios, you will be exploring the future of autonomous systems and learn how to build real-world autonomous control systems.

▌ Curriculum Packages for Middle School
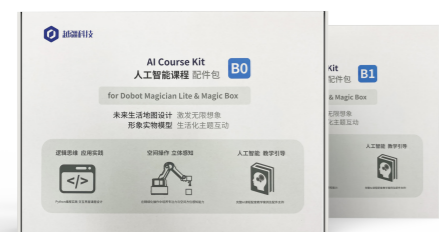
From models to maps, these curriculum packages contain everything students and teachers need to design and build AI projects that are in the textbooks.

▌ What is DOBOT AI-Starter?

DOBOT AI-Starter is an entry-level educational robot. With built-in sensors including IR patrol line, ultrasonic color, light sensitivity, geomagnetism, students can control the robot to track along the line, avoid or follow objects just like a self-driving vehicle does.

▌ Features：
- ▌ available XBEE, general IO serial port, I2C and other expansion interfaces for further development
- ▌ programmable on drag and drop graphical coding software
- ▌ be able to combine with DOBOT robotic arms to unlock more possibilities

▌ DOBOT Competition Kits
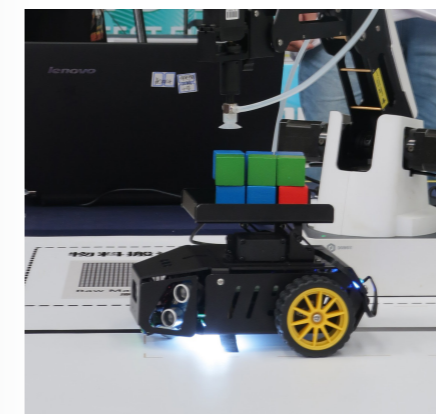
DOBOT Intelligent Manufacturing Challenge-Ecohero Challenge simulates how garbage is classified by robots in real life, aiming to leverage technologies like AI to raise awareness in young people for environment protection cause.

The competition is open to elementary schoolers, middle schoolers, high schoolers and university /college students. Contestants need to program the robotic arm and the AI-Starter vehicle (not for college group) to identify, move, transport, and unload different types of garbage.