



DOBOT Magician Lite



Product Overview

The DOBOT Magician Lite is a multi-functional lightweight intelligent robotic arm. It is one of the core products in Dobot's education line up. Students can interact with the Magician Lite using software, hardware and expansion interfaces to maximize their creative freedom.

Through the process of building and playing, students can learn how AI and robots work. They will be also introduced to the world of robotics and how robots can be applied in the real world.

Key Features

Calligraphy and drawing

Drag-to-teach

Voice recognition

Graphical programming / Scripting

Facial recognition

Offline control

Product Highlights

Made for K12 Education

- Weighs only 2.4 kg, easy for students to carry around.
- Satisfies education scenarios with ± 0.2 mm repeatability and 0.25 kg payload.
- With a maximum reach of 340 mm, it can be placed on ordinary desks.

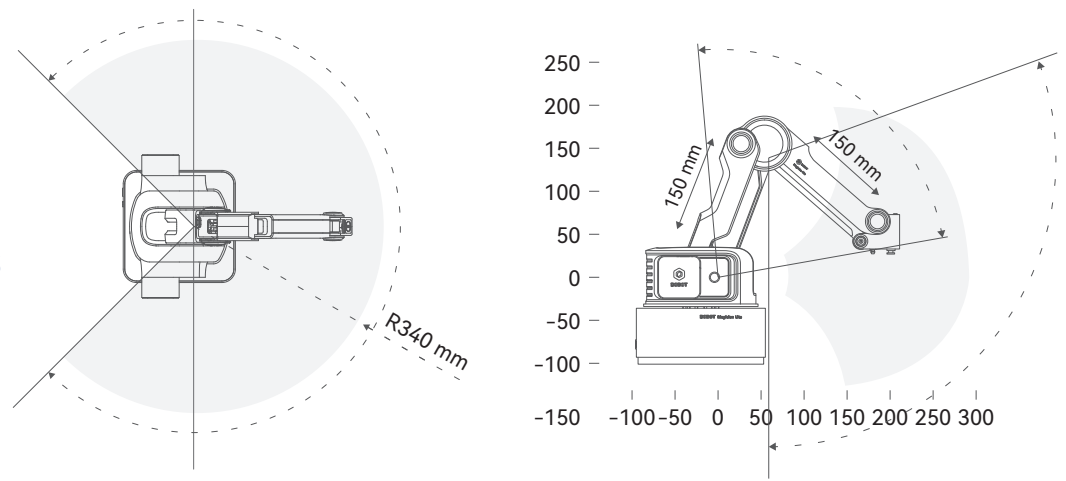
Wide Variety of Accessories

- A vibrant ecosystem of accessories consists of flexible grippers, suction cups, pen holders and other end effectors to enable drawing, grabbing and transporting tasks.

Safe and Easy to Use

- Made with eco-friendly industrial plastic and aircraft grade aluminum alloy. Equipped with collision detection feature to ensure students' safety.
- Plug and play end effectors for fast switching.
- End effector connection includes supply for electricity and air flow. Easily and safely switch between grippers with no additional wiring.
- Comes with a game controller for young students and beginners.

Product Specifications



DOBOT Magician Lite

Number of Axes	4
Maximum Payload	250 g
Maximum Reach	340 mm
Repeatability	±0.2 mm
Voltage	100 to 240V AC, 50/60 Hz
Power Input	12V, 5A DC
Working Environment	-5° to 45° C
Power Consumption	60W Max
Communication Interface	USB Virtual Serial Port/Serial Port
Software	DobotStudio/DobotScratch
Weight	2.4 kg
Rear Arm and Forearm Length	150 mm
Base Dimension	146 mm x 146 mm
Range of Motion J1	-135° to +135°
Range of Motion J2	-5° to +80°
Range of Motion J3	-10° to +85°
Range of Motion J4	-135° to +135°

End Effectors

Pen Holder	8 ~ 12 mm pen diameter
Suction Cup	Built-in air pump drive works under negative pressure, with suction cup diameter of 20 mm
Soft Gripper	Built-in air pump drive works under positive and negative pressure, with maximum opening and closing distance of 50 mm

Magic Box

MCU	ARM 32-bit Cortex-M4
Main Frequency	168 MHz
Voltage	100 to 240V AC, 50/60 Hz
Power Input	12V, 5A DC
Working Environment	-5° to 45° C
Power Consumption	60W Max
Communication Interface	USB Virtual Serial Port/Serial Port/Bluetooth
Programming Language	MicroPython
Software	DobotStudio/DobotScratch
Weight	98 g
Dimensions	95 mm x 80 mm x 21.5 mm

Expansion Interface

Power Interface	2	4PIN, 12V, 3A DC
Multi-Functional Communication Interface	2	10PIN, serial communication
I/O Interface	6	Green Port, 4PIN, 3.3V/5V-I/O, 5V 1A-VCC, Multi-functional interface Interface, User-Defined I/O, AD, PWM Output, I2C, etc.
Stepper Motor Interface	2	Yellow port, 4pin, 2-phase stepper motor, 16 subdivision, 12V, 1A
Power Interface	2	Red terminal, 2pin, 12V, 3A Max

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