

DOBOT Magician

TITLE: DOBOT Magician robotic Arm Specifications and Working Range

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Buttons: [Product description](#) [Technical parameters](#) [Download](#)

PARAMETERS:

Specifications	
Number of Axis	4
Payload	500g
Max. Reach	320mm
Position	
Repeatability(Control)	0.2 mm
Communication	USB / WIFI / Bluetooth
Power Supply	100 V - 240 V , 50/60 HZ
Power In	12 V / 6.5A DC
Consumption	60W Max
Working Temperature	-10°C - 60°C

Axis Movement		
Axis	Range	Max Speed (250g workload)
Joint 1 base	-90° to + 90°	320° / s
Joint 2 rear arm	0° to +85°	320° / s
Joint 3 forearm	-10° to +95°	320° / s 480° / s
Joint 4 rotation servo	-90° to +90°	

Physical

Net Weight	3.4KG
Gross weight (Standard Version)	7.2KG
Gross weight (Education Version)	8.0KG
Base Dimension(Footprint)	158mm × 158mm
Materials	Aluminum Alloy 6061, ABS Engineering Plastic
Controller	Dobot Integrated Controller
Robot Mounting	Desktop
Packing Size (L × W × H)	380mm x 385mm x 480mm
Carton Size for Standard Version (L × W × H)	380mm x 385mm x 480mm
Carton Size for Education Version (L × W × H)	380mm x 385mm x 480mm

Applications

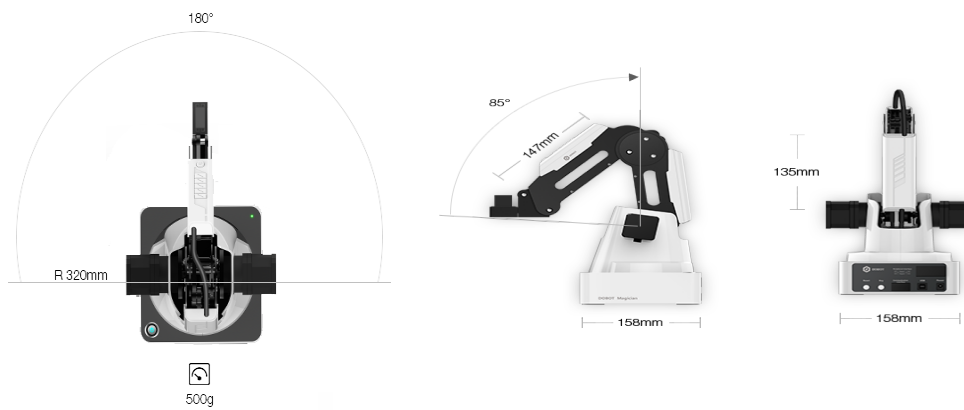
Software	DobotStudio, Repetier Host, GrblController3.6, DobotBlockly (Visual Programming editor)
SDK (Software Develop Kit)	Communication Protocol, Dobot Program Library
Extensible I/O Interfaces	<ol style="list-style-type: none"> 1. I/O × 10 (Configurable as Analog Input or PWM Output) 2. Controllable 12V Power output × 4 3. Communication Interface (UART, Reset, Stop, 12V, 5V and two I/O included) 4. Stepper × 2

Endeffectors

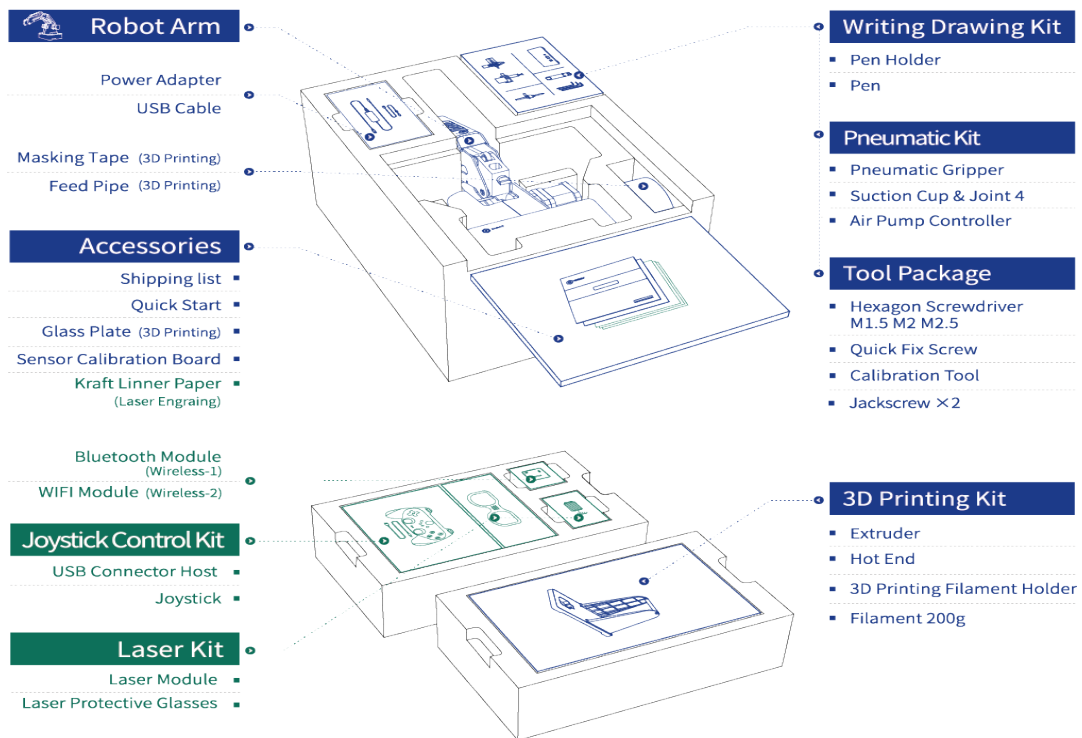
	Maximum Print Size (L × W × H)	150 mm × 150 mm × 150mm (MAX)
3D Printer Kit	3D printing material	PLA
	Resolution	0.1mm
Laser *	Power Consumption	500mw

	Type	405nm (Blue laser)
	Power	12V , TTL trigger (With PWM Driver)
Pen Holder	Pen Diameter	10mm
Vacuum Suction Cup	Suction Cup Diameter	20mm
	Pressure	-35 Kpa
Gripper	Range	27.5mm
	Drive Type	Pneumatic
	Force	8N

IMAGE:



Plan & Shipping List



■ All accessories painted with blue color in the above drawing are included in the **BASIC VERSION**. ■ while accessories painted with green color are additional for **EDUCATIONAL VERSION**.

Items	Contents
1. Dobot Magician	Robot Arm USB Cable Power Adapter
2. Vacuum pump Kit (Share JOINT 4)	Air Pump Kit M1 Hexagon Wrench
3. Gripper	Gripper
4. Writing and Drawing Kit	Writing and Drawing Kit (Pen holder & Pen)
5. 3D Printing Kit	Extruder Hot End Printing Filament : PLA (100g/35m)
	Aluminiumplate / Glass Masking Tape
6. Bluetooth Module	Bluetooth Module (with cables)
7. Other Accessories	Kraft Linner Paper 20g*5/pc User Manual Pamphlets Calibration Paper
8. WIFI Module	WIFI Module
9. Laser Engraving Kit (Laser Engraving & Gray Engraving)	Laser Kit Laser Protective Glasses
10. Joystick Control Kit	SB Connector Host Joystick