

## Product Specifications

Item	Specifications
Dimensions (L*W)	500 * 600 mm
Power Supply	220V AC
HMI Touch Screen	7-inch, Resolution: 800 * 480
PLC Specifications	Power Supply: 24VDC
	Input Points: 14-bit
	Output Points: 12-bit
	Output Type: PNP
Photoelectric Sensor	Photoelectric Switch (Diffuse-reflective PNP)
	Detection Range: 0-100 mm adjustable
Push Rod Module	Cylinder Diameter: 8 mm, Stroke: 30 mm

## Configuration List

Product Name	Description
Training Platform Components	Base Plate Assembly
	Conveyor Belt
	PLC Module (with HMI Touch Screen)
	Building Block Positioning Plate
	Emergency Stop Module (with Start/Stop Buttons)
	Air Pump Box
4-Color Square Blocks *4	✓
Tool Kit (Screwdrivers, Screws, etc.)	✓

\*This document is for reference only. Actual product functions, parameters, and configurations are subject to the final release version and may change without prior notice.



# DOBOT Magician E6 Training Platform

An All-in-One Hands-On Automation Platform  
Designed for High School Students

# DOBOT Magician E6 Training Platform

The DOBOT Magician E6 Training Platform is a low-cost automation training platform specifically designed for high school students. This kit integrates multidisciplinary knowledge in mechanics, electronics, pneumatics, and programming. It aims to provide students with a comprehensive practical platform, covering everything from robot motion control to PLC programming. By seamlessly combining theory and practice, it helps young learners quickly grasp the fundamental principles and applications of modern automation technology.

## Key Features

### Modular Design

Each component is independently designed, making it easy for teaching, assembly, and maintenance. The conveyor belt and PLC module (including the HMI touch screen) are integrated, and can be used independently with the Magician E6 for individual control or combined for interactive control, meeting the progressive needs of experimental teaching.

### Intuitive and Easy to Use

Equipped with an HMI touch screen, the user-friendly interface helps students intuitively understand the automation control processes.

### Cost-Effective

Offering high value at an affordable price, this training platform provides schools and training institutions with an efficient and easy-to-use solution.

### Multi-Field Integration

Covers robotic arm operation, motor control, sensor applications, pneumatic component control, and PLC programming with HMI interaction, truly achieving cross-disciplinary teaching.

### Safe and Reliable

The emergency stop module is designed for safety protection, ensuring human-machine safety during experiments.

## Application Scenarios

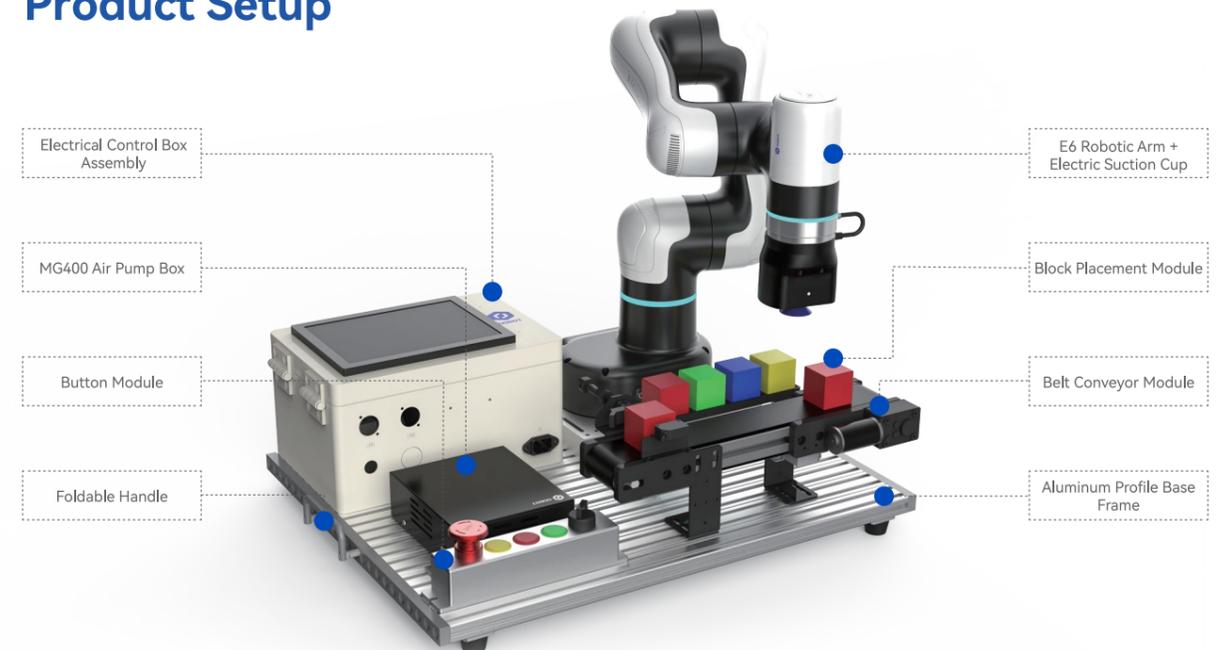
### High Schools and Vocational Technical Schools

Used as a training device for basic robotics and automation courses, cultivating students' interest in intelligent manufacturing and helping them master essential practical skills.

### Science Popularization and Experience

Display and experience in science museums and youth science centers, promoting knowledge of modern industrial automation technologies.

## Product Setup



## Teaching Content

### • Robot Motion Control

Operate a 6-axis robotic arm to understand the structure, kinematics, and control principles of robotic arms.

### • Motor and Conveyor Belt Control

Simulate material transportation scenarios in Industry 4.0, learning motor control principles and transmission system design.

### • Sensor and Signal Processing

Use block-sensing sensors to achieve material positioning and detection, mastering sensor application skills.

### • Pneumatic Component Practice

Recognize the crucial role of pneumatic systems in automation through a pump box and cylinder pushrod module.

### • PLC Programming and HMI Interaction

Start with basic programming and gradually master PLC control logic and HMI interface operations to control the entire system.

### • Safety Operation Knowledge

Train in the use of the emergency stop module and start/stop buttons, reinforcing safety awareness and emergency response abilities.