



ELECTRIC 6-AXIS MANIPULATOR



This trainer simulates the operation of an industrial robot, such as: overall rotation, arm rotation, forearm rotation, wrist rotation, gripper rotation, gripper opening/closing.

It integrates different technologies, such as belt drive transmission technology, stepper motor driving, position detection, PLC and microprocessor technology.

The trainer can be controlled by MCU and PLC.

TRAINING OBJECTIVES

This model is mainly used for teaching, demonstration, experiments, practical training, curriculum design and scientific research. It can train the students to know the mechanical structure and drive, to design and debug both hardware and software of the electrical control system, to analyze and solve the problems that occur in the actual operation process.

The electric manipulator is a typical product of the electromechanical integration technology. Its design and application has a very important meaning in mechatronics, automation, information technology, etc.

TECHNICAL FEATURES

- \bullet Power supply: 220V \pm 10%, 50Hz
- Angles/distance range:

 $\begin{tabular}{lll} Manipulator rotation angle: 180° \\ Upper arm rotation angle: 100° \\ Forearm rotation angle: 100° \\ Wrist rotation angle: 100° \\ Gripper rotation angle: 180° \\ Gripper opening and closing: $0-50$ mm. \\ \end{tabular}$

- PLC: 24 digital inputs, 16 transistor switching output
- Stepper motors and drivers.
- Panel with buttons and PLC interface.
- Microprocessor control board with USB interface.
- PLC program and Microprocessor program

Complete with programming software in CD and manuals.

Dimensions:

Max load: 300g

Base size: 380x200mm, total height: 950mm Weight: 27.5 kg. Stepper motor: 6



