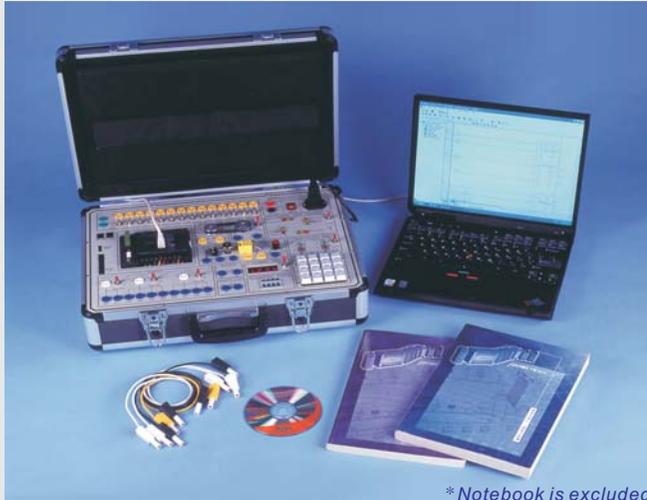




## PLC-100

### Programmable Logic Controller (FATEK PLC) Trainer



\* Notebook is excluded

Since PLC (Programmable Logic Controller) was first introduced in 1970, it has been in common usage in various industries such as machine and process controls. Designed with the latest microprocessor and electronic circuitry, today's compact PLCs features high reliability, high performance, high speed and networking. The use of PLCs in automated production lines enhances system reliability, product quality, information sharing, efficiency and flexibility and thus reduces costs.

PLC-100 is a self-contained trainer which consists of a FATEK PLC main unit and commonly used I/O devices for simulation. It provides students with a thorough understanding of the theories and applications of programmable logic controllers. The trainer enables students to learn step by step from the fundamentals of PLC to more advanced controls used in industry.

#### ► Features

- Input-simulation switches function as level and pulse input for different input signal
- Installation of output relay helps to increase load current
- Easy-to-use, windows-based development software
- With various peripheral devices and other devices that support external extensions, particularly suited for laboratory experiment and project implementation
- Equipped with various simulations I/O devices for the convenience of studying and observing the results
- Use 4mm safety sockets input/output terminals to ensure the physical safety of users
- Easy to carry, move and store with a suitcase design

#### ► Specifications

1. AC power supply : 100V-240V AC, 50/60Hz
2. PLC main unit : FATEK FBs-24MC
3. Digital input : 14
4. Digital output : 10
5. Support 16 high-speed counters
6. Support five 0.1ms high-speed timers
7. Execution speed (average) : 0.33 $\mu$ s/sequential instruction
8. Four Communication ports :  
USB, RS-232, RS-485, ethernet ; expandable up to 5 ports ;  
maximum transfer rate : 921.6K bps
9. One 4-digit 7-segment display
10. One 4-digit thumbwheel switch
11. One step motor
12. One encoder
13. One 24V DC motor
14. One proximity sensor
15. One micro switch
16. One buzzer
17. One 4x4 keypad
18. One 24V DC expansion power
19. Provide module expansion port and DIO extension port
20. Provide traffic light control module
21. Provide tank-filling device module
22. Windows-based programming software (Win Proladder) allows the programmer to modify the program while running

#### ► Experiments

1. Win Proladder operations
  - Editing ladder program
  - Testing ladder program
  - Monitoring status

2. Basic control circuits
  - Self-holding circuit
  - Flashing control
  - Inching control
  - Single button control
3. Light control
  - Simple light control
  - Complex light control
4. Traffic light control
  - Traffic light controller (step)
  - Traffic light controller (conventional)
5. Digital clock control
  - 7-segment display control
  - Time clock
6. Step motor control
  - Speed and direction control
  - Encoder operation
  - Step motor and encoder
  - Step display of step motor
7. Tank filling device control
  - Tank filling control
  - Tank filling control with thumbwheel
8. Keypad control
  - Keypad operation
  - Digital lock control
9. DC motor control
  - PWM speed controller
  - Proximity and micro switches
  - Automatic speed control
10. Multiple PLC trainers
  - Connecting PLCs via RS-485
  - Connecting PLCs via ethernet

#### ► System Requirements

1. PC with Pentium II or better CPU
2. Windows 98/2000/XP

#### ► Accessories

1. USB cable
2. Connecting leads set
3. Power cord
4. Experiment manual
5. User's manual
6. Software CD