Automation System Integration Products

PLC Training Kit_FX3G

Key Features:

• **Enclosure Specs**

Portable & durable; sizes: 380×250×170mm / 460×370×290mm.

• **Customization**

Brand-specific component setups; enclosure/mounting plate customization supported.

• **Software:**

GX Work 2



Applications:

• Educational use in colleges, vocational schools
• Industrial automation competition platforms
• Engineering projects & equipment retrofitting
• Technical R&D
• DIY projects for hobbyists & maker

Model	Specification
PLC-FX-01	DI/DO: DC24V; 5 Buttons/5 Lamps Sizes:380*250*170mm/460*370*290mm; Weight: 6kg Whether or not to bring a battery with magnetic equipment: NO
PLC-FX-02	HMI: MCGS; DI/DO: DC24V, 5 Buttons/4 Lamps, 1 buzzer; AI/AO: Analog temperature control PID kit Sizes:380*250*170mm/460*370*290mm; Weight: 6kg Whether or not to bring a battery with magnetic equipment: NO
PLC-FX-03	HMI: MCGS; DI/DO: DC24V, 5 Buttons/4 Lamps, 1 buzzer; AI/AO: Analog temperature control PID kit Drive: Stepper Drive kit Sizes:380*250*170mm/460*370*290mm; Weight: 6kg Whether or not to bring a battery with magnetic equipment: NO

PLC Training Kit-ST20

Key Features:

• **Enclosure Specs**

Portable & durable; sizes: 380×250×170mm / 460×370×290mm.

• **Customization**

Brand-specific component setups; enclosure/mounting plate customization supported.

• **Software:** STEP 7-Micro/WIN SMART, EasyBuilder Pro



Applications:

• Educational use in colleges, vocational schools
• Industrial automation competition platforms
• Engineering projects & equipment retrofitting
• Technical R&D
• DIY projects for hobbyists & makers

Model	Specification
PLC-ST-01	DI/DO: DC24V; 5 Buttons/5 Lamps Sizes:380*250*170mm/460*370*290mm; Weight: 4kg Whether or not to bring a battery with magnetic equipment: NO
PLC-ST-02	HMI: WEINVIEW; DI/DO: DC24V, 5 Buttons/4 Lamps, 1 buzzer; AI/AO: Analog temperature control PID kit Sizes:380*250*170mm/460*370*290mm; Weight: 4kg Whether or not to bring a battery with magnetic equipment: NO
PLC-ST-03	HMI: WEINVIEW; DI/DO: DC24V, 5 Buttons/4 Lamps, 1 buzzer; AI/AO: Analog temperature control PID kit Drive: Stepper Drive kit Sizes:380*250*170mm/460*370*290mm; Weight: 4kg Whether or not to bring a battery with magnetic equipment: NO

Siemens S7-1200 and Remote Modules Communication Training Kit

Key Features：

• Integrated and comprehensive coverage:

This kit discards the piecing together of scattered modules and highly integrates the most mainstream communication scenarios in industrial sites - human-machine interaction (HMI), inter-controller communication (PLC-PLC), and distributed remote IO (PLC-ET200SP) into one. Users can systematically learn and practice the three core communication technologies on one platform without having to configure multiple additional devices, and build a complete knowledge system.



• From simple to complex, step by step:

The experimental design of the kit follows the scientific learning curve. From the simplest indicator light status monitoring to the complex bidirectional switch quantity control, and then to theanalog signal transmission that simulates industrial reality, the experimental difficulty increases step by step. Each step has clear physical feedback (lights on, indicators moving), ensuring that beginners can build confidence and advanced learners can deepen their understanding, achieving a smooth transition from beginner to expert.



Model Number	Core PLC Model	Specification
Communication-Siemens-01	SIMATIC S7-1200	1211C+1211C+ET200SP+KTP400 Basic HMI Sizes:330*210*200mm/200*150*170mm; Weight: 6.45kg Whether or not to bring a battery with magnetic equipment: NO
Communication-Siemens-02		1211C+1211C+ET200SP+MCGS HMITPC24023Ei Sizes:330*210*200mm/200*150*170mm; Weight: 6.45kg Whether or not to bring a battery with magnetic equipment: NO
Communication-Siemens-03		1211C+1211C+KTP400 Basic HMI Sizes:330*210*200mm; Weight: 4.3kg Whether or not to bring a battery with magnetic equipment: NO
Communication-Siemens-04		ET200SP（PLC needs to be self-provided） Sizes:200*150*170mm; Weight: 2.1kg Whether or not to bring a battery with magnetic equipment: NO

Siemens S7-1200 PLC & Frequency Inverter Practical Training Kit

Key Features：

• Fully Pre-Integrated Hardware, Ready-to-Run:

The complete system is professionally assembled, including a Siemens S7-1200 1212C Central Processing Unit (CPU), 4-inch HMI, Analog I/O module, pushbuttons, signal lamps, and a Siemens V20 Frequency Inverter. All components are pre-wired, ready for power-up and immediate use.



• Master Industrial Communication Protocols:

Practice mainstream industrial communication protocols via the integrated RS485 interface, including PROFINET (Ethernet protocol), MODBUS RTU, and Siemens' proprietary USS protocol, aligning with real-world industrial application scenarios.

Model Number	Core PLC Model	Specification
PLC-1212C-01	SIMATIC S7-1200	Includes PLC, TIA Portal V20 Software, KTP400 Basic 4-inch HMI, I/O Components, Inverter & Motor Kit Sizes:470*280*170mm; Weight: 8.5kg Three-phase asynchronous motor with electromagnetic equipment

1200 Series Temperature PID Control Training Kit

Key Features：

• Plug and play:
Pre-completed standardized wiring and function testing, training can be carried out immediately after unpacking and powering on, no additional hardware configuration is required.

• Dual-mode control:
Supports manual adjustment of heating power and automatic PID closed-loop control to intuitively compare control effects.

• Full coverage of skills:
Covers core capabilities such as PLC wiring, PID parameter tuning, and fault troubleshooting, adapting to teaching and enterprise training needs.

• High safety and portability:
Built-in overvoltage and short circuit protection, taking into account the needs of fixed teaching in laboratories and on-site mobile training, ensuring training safety and equipment durability.



Model Number	Core PLC Model	Specification
PID-S7-1211C-T01	SIMATIC S7-1200	PT100+SSVR+Digital Temperature Display+Pot+Voltmeter+ Transmitter+Heating Module+Switching Power Supply+Circuit Breaker+PLC+AI+AQ Sizes:480*350*150mm; Weight: 6kg Whether or not to bring a battery with magnetic equipment: NO

Two-axis_Interpolation_Motion Training Kit

Key Features：

• Fully Pre-integrated Hardware, Ready-to-Use：
The entire system is professionally assembled, including the Siemens S7-1200 1215C Central Processing Unit (CPU), 7-inch HMI, buttons, signal lamps, and a stepper motor set. All components are pre-wired, allowing immediate use once powered on.

• Proficiency in Industrial Communication Protocols：
Through the integrated RS485 interface, hands-on practice of mainstream industrial communication protocols is available,including PROFINET (Ethernet protocol), MODBUS RTU, and Siemens-specific USS protocol. These protocols are highly consistent with real-world industrial application scenarios.

• Professional Software Environment：
It is compatible with Siemens' industry-standard software — Totally Integrated Automation (TIA) Portal V20. This ensures users learn with tools widely used in the global industrial sector, and the skills acquired can be directly applied to workplace needs.



Model Number	Core PLC Model	Specification
PLC-1215C-01	SIMATIC S7-1200	Including PLC, TIA Portal V20 software, Weintek MT8072IP 7-inch HMI, I/O modules, and stepper motor kit Sizes:480*480*270mm; Weight: 17kg The stepper motor is equipped with an electromagnetic device.

Siemens S7-1200 Pneumatic Component Timing Control System

Key Features：

•Precise Timing:
Supports multi-level timing adjustment with accurate time control.

• Component Synergy:
Forms a closed-loop control system with PLC (Programmable Logic Controller), pneumatic valve groups, cylinders, and sensors as the core components.

• Flexible Adaptability:
Allows setting of multiple timing modes, is compatible with pneumatic components of different specifications, and suits application scenarios across various industries.

• Suitable for Practical Training:
Features a modular structure that supports disassembly, assembly, and mode switching, meeting the needs of teaching and practical training.



Model Number	Core PLC Model	Specification
S7-1200-PTC01	Siemens S7-1200	Core Configuration: PLC, expansion module, HMI, TN10X30S, TN10X70S, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO
S7-1200-PTC02		Core Configuration: PLC, expansion module, HMI, TN10X30S, HLS8X20S, HFR10, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO
S7-1200-PTC03		Core Configuration: PLC, expansion module, HMI, TN10X30S, TN10X70S, HLS8X20S, HFR10, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO

MITSUBISHI FX5U PLC & FR-D720S Inverter Hands-On Training Kit

Key Features：

• Fully Pre-Integrated Hardware, Plug-and-Play Ready：
The entire system is professionally assembled and pre-wired, including the Mitsubishi FX5U-32MT/DS Central Processing Unit (CPU), 7-inch HMI (Mitsubishi GS2107-WTBD-N or Weintek TK8072iP), FX5U's built-in analog I/O channels, buttons, signal lights, and the Mitsubishi FR-D720S inverter. Simply connect the power supply to start training immediately

• Mastery of Mainstream Industrial Communication Protocols：
Leverage the PLC's built-in RS-485 port to practice industry-standard communication protocols such as Mitsubishi's proprietary MC Protocol and Modbus RTU, which align perfectly with real-world industrial applications. Additionally, the PLC's built-in Ethernet port supports hands-on training for Ethernet-based communication, covering the core communication needs of modern industrial systems.



Model Number	Core PLC Model	Specification
PLC-FX5U-01	Mitsubishi FX5U	Includes PLC, GX Works3 software, Mitsubishi GS2107-WTBD-N inch HMI, I/O components, FR-D720S inverter, and motor kit Sizes:470*280*170mm; Weight: 10kg Three-phase asynchronous motor with electromagnetic equipment

Mitsubishi Communication user manual

Key Features：

• Comprehensive coverage of communication methods：

The CC-Link master and slave station configuration learning can be carried out through the FX-CCL-MS module, and Ethernet communication can also be achieved through the built-in network port of the PLC and the switch, meeting the diverse communication protocol learning requirements.
2.The complete communication experiment process from hardware wiring, parameter configuration to program writing is provided to help students build a systematic communication knowledge system.

• Hardware simulates industrial real scenes：

1.Equipped with real industrial components such as emergency stop buttons, fuses, alarm indicator lights, potentiometers, and voltmeters, it restores the electrical environment of the actual control cabinet.

2.Two Mitsubishi FX5U PLCS and GT series touch screens are adopted to form a typical architecture of "PLC-PLC" and "PLC-HMI", enabling seamless connection between learning scenarios and industrial sites.



Model Number	Core PLC Model	Specification
Communication-Mitsubishi-01	Mitsubishi FX5U	FX5U-32MT/DS*2+GS2107-WTBD-N+FX-CCL-MS*2 Sizes:450*380*200mm; Weight: 9.2kg Whether or not to bring a battery with magnetic equipment: NO

MITSUBISHI FX5U Two-axis_Interpolation_Motion Training Kit

Key Features：

• Fully Pre-integrated Hardware, Ready-to-Use:

The entire system is professionally assembled, including the Mitsubishi FX5U-64MT/DS Central Processing Unit (CPU), 7-inch HMI, buttons, signal lights, and a stepper motor set. All components are pre-wired, allowing immediate use once powered on.

• Proficiency in Industrial Communication Protocols:

Through the integrated RS485 interface, practice mainstream industrial communication protocols hands-on, including PROFINET (Ethernet protocol), MODBUS RTU, and Mitsubishi's dedicated USS protocol. These align closely with real-world industrial application scenarios.



Model Number	Core PLC Model	Specification
PLC-64MT-01	Mitsubishi FX5U	Including PLC, GX Works3 software, 7-inch HMI, I/O components, and stepper motor set Sizes:480*480*270mm; Weight: 17kg Whether or not to bring a battery with magnetic equipment: NO

MITSUBISHI PID FX5U-32MT/DS-T01

Key Features：

• Dual- Mode Control:

Supports manual heating power adjustment and automatic PID closed- loop control, enabling direct comparison of control performance.

• Comprehensive Skill Coverage:

Full- process core capabilities including PLC wiring, analog configuration, PID parameter tuning, and fault diagnosis, meeting needs for classroom teaching, corporate training, and self- study.

•Plug & Play:

Pre- wired and functionally tested to standard; ready for training immediately after power- on, no extra hardware configuration required



Model Number	Core PLC Model	Specification
PID-S7-FX5U-32MT/DS-T01	Mitsubishi FX5U	PT100+SSVR+Digital Temperature Display+Pot+Voltmeter+ Transmitter+Heating Module+Switching Power Supply+Circuit Breaker+PLC+AI+AQ Sizes:480*350*150mm; Weight: 6kg Whether or not to bring a battery with magnetic equipment: NO

Three-Phase Motor Forward/Reverse Rotation Training Set

Key Features：

•High Compatibility:

It is compatible with three-phase asynchronous motors of different powers. By flexibly adjusting parameters such as cable specifications and contactor rated current, it meets diverse load requirements without the need for additional customization of basic components, reducing equipment adaptation costs.

• Safety and Reliability:

A dual safety system consisting of hardware protection and operating specifications is established. Hardware integrates short-circuit, overload, and emergency power-off protection devices, and standardized procedures are defined for operations, avoiding risks such as phase-to-phase short circuits and contact ablation from the source.



Model Number	Core Motor Model	Specification
MTR-FR-CON01	Y-Series Three-phase Asynchronous Motor	Including three-phase asynchronous motor, motor forward and reverse contact ors, emergency stop switch, power protection device, forward and reverse ch angeover switch, operation status indicator light, and control circuit wiring Sizes:330*240*125mm; Weight: 5kg Whether or not to bring a battery with magnetic equipment: NO

Mitsubishi FX5U Pneumatic Component Timing Control System

Key Features：

•Precise Timing:
Supports multi-level timing adjustment with accurate time control.

• Component Synergy:
Forms a closed-loop control system with PLC (Programmable Logic Controller), pneumatic valve groups, cylinders, and sensors as the core components.

• Flexible Adaptability:
Allows setting of multiple timing modes, is compatible with pneumatic components of different specifications, and suits application scenarios across various industries.

• Suitable for Practical Training:
Features a modular structure that supports disassembly, assembly, and mode switching, meeting the needs of teaching and practical training.



Model Number	Core PLC Model	Specification
FX5U-PTC01	Mitsubishi FX5U	Core Configuration: PLC, expansion module, HMI, TN10X30S, TN10X70S, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO
FX5U-PTC02		Core Configuration: PLC, expansion module, HMI, TN10X30S, HLS8X20S, HFR10, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO
FX5U-PTC03		Core Configuration: PLC, expansion module, HMI, TN10X30S, TN10X70S, HLS8X20S, HFR10, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO

MITSUBISHI FX5U Two-axis_Interpolation_Motion Training Kit

Key Features：

• Fully Pre-integrated Hardware, Ready-to-Use:
The complete system is professionally assembled, containing the AB Micro850 (2080-L50E-48QBB) controller, a 4-inch PanelView 800 HMI, pushbuttons, signal lights, and a stepper motor set. All components are pre-wired; simply power it on to start using immediately.

• Master Industrial Communication Protocols:
Practice mainstream industrial communication protocols through the integrated Ethernet and serial ports, including EtherNet/IP, Modbus TCP/RTU, and AB's DF1 protocol, aligning closely with real-world industrial application scenarios



Model Number	Core PLC Model	Specification
PLC-M850-01	AB Micro850 2080-L50E-48QBB	Includes PLC, CCW software, 4-inch PanelView HMI, I/O components, and stepper motor set. Sizes:480*480*270mm; Weight: 17kg Whether or not to bring a battery with magnetic equipment: NO

AB 850 Series Temperature PID Training Kit

Key Features：

•Dual- Mode Control:

Supports manual heating power adjustment and automatic PID closed- loop control, enabling direct comparison of control performance.

• Comprehensive Skill Coverage:

Full- process core capabilities including PLC wiring, analog configuration, PID parameter tuning, and fault diagnosis, meeting needs for classroom teaching, corporate training, and self- study.

•Plug & Play:

Pre- wired and functionally tested to standard; ready for training immediately after power- on, no extra hardware configuration required.



Model Number	Core Motor Model	Specification
PID- AB2080- L50E- T01	AB2080- L50E- 24QBB + 2080- IF2 + 2080- QF2	PT100+SSVR+Digital Temperature Display+Pot+Voltmeter+ Transmitter+Heating Module+Switching Power Supply+Circuit Breaker+PLC+AI+AQ Sizes:480*350*150mm; Weight: 6kg Whether or not to bring a battery with magnetic equipment: NO
PID- AB2080- L50E- T02	Without (PLC+2080- IF2+ 2080- QF2)	PT100+SSVR+Digital Temperature Display+Pot+Voltmeter+Transmitter+Heating Module+Switching Power Supply+Circuit Breaker Sizes:480*350*150mm; Weight: 6kg Whether or not to bring a battery with magnetic equipment: NO
PID- AB2080- L50E- T03	AB2080- L50E- 24QBB + 2080- IF2 + 2080- QF2 + AB HMI: 2711R- T7T (AB) 7 inches	PT100+SSVR+ Digital Temperature Display+Pot+Voltmeter+Transmitter+Heating Module+Switching Power Supply+Circuit Breaker+PLC+AI+AQ+AB HMI Sizes:480*350*150mm; Weight: 6kg Whether or not to bring a battery with magnetic equipment: NO

AB Micro850 PLC + PowerFlex 22F VFD Hands-On Training Kit

Key Features：

• Fully Pre-Integrated Hardware, Plug-and-Play:

The complete system is professionally assembled and pre-wired, featuring an AB Micro850 2080-L50E-24QBB PLC, a 4-inch PanelView Component touchscreen, analog I/O modules (2080-IF2, 2080-OF2), pushbuttons, signal lights, and a PowerFlex 22F-A2P5N113 VFD. Simply power it on to begin training immediately.

• Master Key Industrial Communication Protocols:

Utilize the PLC's built-in RS-232/485 interface for hands-on practice with standard protocols like Modbus RTU, mirroring real-world industrial applications. Additionally, the PLC's embedded Ethernet port supports EtherNet/IP communication, covering the core networking needs of modern control systems..



Model Number	Core PLC Model	Specification
AB-800-PLC-VFD- TK	AB 2080-L50E-24QBB	Includes Micro850 PLC, CCW Software, PanelView 4" HMI, 2080-IF2/OF2 Analog Modules, I/O Components, PowerFlex 22F VFD & Motor Set. Sizes:480*280*200mm; Weight: 10kg Three-phase asynchronous motor with electromagnetic equipment

AB Micro850 Pneumatic Component Timing Control Equipment

Key Features：

•Precise Timing:

Supports multi-level timing adjustment with accurate time control.

• Component Synergy:

Forms a closed-loop control system with PLC (Programmable Logic Controller), pneumatic valve groups, cylinders, and sensors as the core components.

• Flexible Adaptability:

Allows setting of multiple timing modes, is compatible with pneumatic components of different specifications, and suits application scenarios across various industries.

• Suitable for Practical Training:

Features a modular structure that supports disassembly, assembly, and mode switching, meeting the needs of teaching and practical training.



Model Number	Core PLC Model	Specification
Micro850-PTC01	AB Micro850	Core Configuration: PLC, HMI, TN10X30S, TN10X70S, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO
Micro850-PTC02		Core Configuration: PLC, HMI, TN10X30S, HLS12X50S, MHY2-20D, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO
Micro850-PTC03		Core Configuration: PLC, HMI, TN10X30S, TN10X70S, HLS12X50S, MHY2-20D, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO

AB Micro 850 Communication Training Kit

Key Features：

• Deep disassembly and standard integrations：

Adopting the "one screen, dual control" architecture, it clearly shows the independent communication paths between the touch screen and the two PLCs, as well as the cross-device linkage mechanism between the two PLCs. The system integrates Modbus, Ethernet communication and analog quantity acquisition technologies, helping trainees penetrate the surface of communication protocols and master the core principles of industrial buses.

• Diverse scenarios, unlimited expansion：

Covering various process scenarios such as switch quantity control, analog quantity acquisition , logic interlock, array display, etc. The hardware interface is open, supporting trainees to write complex logic (such as custom running lights, pattern editing), meeting the needs from basic cognition to innovative design throughout the entire stage.



Model Number	Core PLC Model	Specification
Communication-AB-01	Micro850	PLC*2(2080-L50E-24QBB)+HMI(2711R-T4T)+2080-IF2+2080-OF2+2080-SERIALISOL Sizes:450*380*200mm; Weight: 8.7kg Whether or not to bring a battery with magnetic equipment: NO

AB MicroLogix 1400 Pneumatic Component Timing Control Equipment

Key Features：

•Precise Timing:
Supports multi-level timing adjustment with accurate time control.

• Component Synergy:
Forms a closed-loop control system with PLC (Programmable Logic Controller), pneumatic valve groups, cylinders, and sensors as the core components.

• Flexible Adaptability:
Allows setting of multiple timing modes, is compatible with pneumatic components of different specifications, and suits application scenarios across various industries.

• Suitable for Practical Training:
Features a modular structure that supports disassembly, assembly, and mode switching, meeting the needs of teaching and practical training.



Model Number	Core PLC Model	Specification
MicroLogix 1400-PTC01	AB MicroLogix 1400	Core Configuration: PLC, TN10X30S, TN10X70S, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO
MicroLogix 1400-PTC02		Core Configuration: PLC, TN10X30S, HLS12X50S, MHY2-20D, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO
MicroLogix 1400-PTC03		Core Configuration: PLC, TN10X30S, TN10X70S, HLS12X50S, MHY2-20D, and accessories (e.g., sensors, solenoid valves, etc.), as well as an air compressor; equipped with a 24V/1.5A power supply and pneumatic accessories Sizes:420*400*170mm; Weight: 10.9kg Whether or not to bring a battery with magnetic equipment: NO