



- The PLC Application Trainer provides a complete, structured solution to the problem of training today's industrial control engineers & technicians in the programming & troubleshooting of PLC applications.
- Rugged and reliable, the trainer's flexible design allows it to be used in both Introductory & Advanced PLC applications.
- The System includes an Industrially Relevant Applications Trainer, An Industry Standard PLC, A Sequence Switch Module, A compressed air pump and Curriculum manual.
- These features make PLC particularly suitable for training & multi-skilling courses.

Specifications

The PLC Module comprises:

- ▶ PLC Applications trainer with Conveyor belt having forward & reverse directions.
- ▶ Three Pneumatically Controlled Pistons, for pushing parts off the conveyor.
- ▶ Two sets of infra-red Parts sensors.
- ▶ Set of Cylindrical Parts along with Parts bin for sorting parts into different categories.
- ▶ Run / Stop switches with Indicator lamps.
- ▶ Seven SPDT Switches which can be used to manually control the inputs of the PLC, in order to simulate a various Input Conditions.
- ▶ On board Sensors indication LEDs
- ▶ On Board 10K Knob Potentiometer A(0-10V)

The SIMATIC S7-1200, CPU 1214C, COMPACT CPU, DC/DC/DC controller, ONBOARD I/O: 14 DI 24V DC; 10 DO 24 V DC; 2 AI 0 - 10V DC, Timers, and Counters & Sequencer Functions.

The controller is supplied with Programming Software, which is used to Program, Monitor, Edit & Troubleshoot Sequences for practical exercises.

An Interface RJ45 cable that connects the controller to the computer is included.

Electrically Operated compressed air pump provides a safe source of compressed air.

The PLC application trainer enables students to create Sequences which simulate the operation of a modern Industrial Production line

Typical activities around PLC Includes :

- ▶ Identify Hard Wired Ladder & PLC Ladder Logic diagrams and its operation.
- ▶ Investigate the operation of a Ladder Logic Program.
- ▶ Investigate the operation of Examine ON, Examine OFF & Output Energize instructions and their operation
- ▶ Identify the operation of Latching and Self-Latching Relays.
- ▶ Recognize the Retentive Timer ON and RESET instructions and how they are programmed.
- ▶ Recognize the Bit Shift Left and Bit Shift Right instructions and how they are programmed.
- ▶ Recognize the operation of the Sequencer Output instruction and how it is programmed.
- ▶ Write a program to Sort components by Height.
- ▶ Write a program to Sort components by Width.
- ▶ Produce a complete processing system program.

The PLC covers following topic areas:

- ▶ Introduction to Programmable Logic Controllers
- ▶ Relays and Relay Ladder Logic
- ▶ Introduction to Ladder Logic Programming
- ▶ Basic Programming Instructions
- ▶ Latches and Master Control Reset (MCR) Instructions
- ▶ Timers
- ▶ Counters and Shift Registers
- ▶ Sequencers
- ▶ Programming the Complete System

The Manual covers all relevant topic areas & provides background theory, practical activities and assessment questions.

The Supplied Curriculum Manual, Student workbook & Instructor's guide helps to cover background theory, practical activities and assessment questions with respect to above topics.

Ordering Info

PLC	PLC & Its Application Training System
ACCS SET	SIEMENS PLC with all accessories for above

Note: Specifications are subject to change.

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