

PLC Trainer with Modules (EDC-PLC-1215C)

DESCRIPTION:

A programmable logic controller (PLC) is an industrial digital computer which has been ruggedized and adapted for the control of manufacturing processes, such as assembly lines, or robotic devices, or any activity that requires high reliability, ease of programming and process fault diagnosis. PLCs can range from small modular devices with tens of inputs and outputs (I/O), in a housing integral with the processor, to large rack-mounted modular devices with a count of thousands of I/O's. They can be designed for many arrangements of digital and analog I/O.



BASE UNIT SPECIFICATIONS:

- PLC: SIEMENS CPU S7-1215C/Fatek FBs32M
- Digital Inputs: 14
- Digital Outputs: 10
- Analog Inputs: 2 X Voltage Type with 10-bit ADC
- Analog Outputs: 2X Current Type with 10-bit resolution
- Program/data memory 125KB.
- Window-based programming software
- Standard Communication ports

APPLICATION MODULES:

- Traffic Light Control by PLC EDC-PLC-1215C -01
 - Vertical Traffic Light Poles (Simulated)
 - Street Layout with Flexible Signal Timing
- Motor Control by PLC EDC-PLC-1215C -02
 - DC motor PWM control with optical encoder & direction control
 - Stepper Motor speed, position & direction control with home position sensor.
- Conveyor Belt Control by PLC EDC-PLC-1215C -03
 - Manual/Auto Mode
 - Proximity Sensor
 - DC Gear Motor control
 - Forward/Reverse control

APPLICATION MODULES:

- Water Tank Control by PLC EDC-PLC-1215C -04
 - 2x inlet valves using LED indicator
 - 2x outlet valves using toggle switch
 - 2x water pumps using LED indicator
 - Simulated water level using timers and optical sensor for five water levels
- Temperature Control by PLC EDC-PLC-1215C -05
 - Heater with monolithic Temperature sensor
 - Temperature Sensor Analog control
 - DC Fan for cooling
 - Heater and Fan ON/OFF control
- Elevator Control by PLC EDC-PLC-1215C -06
 - 3 level simulated elevator
 - Elevator internal panel
 - Floor Level indication and direction
 - Door open/close indication

APPLICATION MODULES:

- Industrial Conveyor Control by PLC EDC-PLC-1215C -07
 - 2x pneumatic cylinders with Filter & Regulator
 - 2x optical sensors & inductive sensors
 - DC Gear Motor
 - Metallic & Non-Metallic Samples
 - Sorting using Pneumatic control
 - Sample collection Boxes
 - Flexible sorting options



SCOPE OF DELIVERY:

- 1 x EDC-PLC-1215C.
- 1 x Instructional Manual.
- 2mm Patch Cords.
- Power Cord.
- PC Programming Cable.
- Software CD.