SAP E & C ADVANCED PLC PROGRAMMING TRAINER KIT
(PRODUCT CODE: PCST – 14 & 14B)

STANDARD PORTABLE MODEL (PCST-14)

TABLE TOP BRIEFCASE MODEL (PCST-14B)

ADVANCED PLC PROGRAMMING TRAINER KIT

The **Advanced PLC Programming Trainer Kit (PCST – 14 & 14B)** gives an idea regarding the basics of Programmable Logic Controllers & its applications.

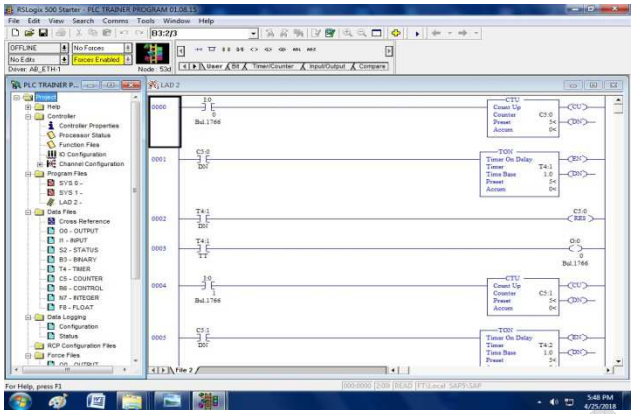
Technical Specification: -

No.	Item Name	Technical Specifications
01	**PLC-**	**Allen Bradley Micrologix 1400/Siemens S7-1200/Mitsubishi FX3GE/Eqvt.** Digital Inputs- **20** (For M.L. 1400), **16** (For Siemens S7 1200) Digital Outputs- **12** (For ML 1400)/**10** (For Siemens S7 1200), Analogue input- **4** (For ML 1400)/**2** (For Siemens S7 1200), Analogue output- **2,** Input /Output LED indication on front panel. PC interface facility, PC-PLC interfacing cable.
02	**Ladder Programming Software-**	**For Allen Bradley ML 1400**: RS LOGIX 500 MICRO STARTER/Eqvt. **For Siemens S7-1200**: Step 7 – Basic TIA, Version- 13/14 for Siemens/Eqvt. PLC Ladder Diagram programming on PC using Ladder Programming Software.
03	**Communication-**	Communication Port RS 232 / RS 485 / Ethernet
04	**Power Supply-**	24VDC, 3A/5A Power source. 4" X 2" X 2"
05	**Electrical control panel with Input / Output simulating devices-**	For simulation of digital inputs (switches - 20 Nos. & proximity sensors- 1 No., Optical Sensor – 1 No., miniature level switch- 1 No.(Optional) Front panel for display of digital input/output status: Lamps (32 Nos.), small DC electric motor (Optional) (1 No.), solenoid valve (1 No.) (Optional)
06	**Voltage Source**	Supply :- 230VAC , Range :- 0-10VDC with Varying Pot Provided on Front fascia
07	**Voltmeter**	Supply :- 230VAC , Input Range :-0-20VDC
08	**PLC panel dimensions-**	34"(L) X 12"(W) X 28"(H) with visible transparent front fascia (For PCST-14) 22"(L) X 7"(W) X 40"(H) (For PCST-14B)

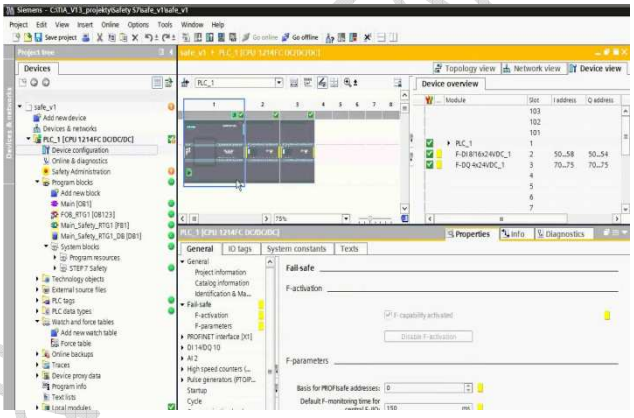
09	**Addition of HMI (Optional)-**	Size: 7” Color Display Make: Omron/Wecon/Mitsubishi/Siemens/Schneider/Equivalent.
10	**Output compatibility to Solenoid valves, Electric motors as actuating elements in respective assorted modules.**	
11	**SCADA SOFTWARE connectivity for PLC (Optional).** **Make: Siemens WinCC Basic 128 TAGS/GE Proficy IFIX 75 TAGS/Eqvt.**	
12	**High speed Frequency input** for optical encoder moduleJ260-58-AN-R-HVLD-360-V3-10-1-S-EG **(Optional)**	
13	**High speed PWM output** for Stepper motor module 42SH33-4AM/Servomotor module **(Optional).**	
14	**Optional Addition of Modules/ Static Application Panels Lift Simulator, Water Level Control Module, Traffic Light Simulator, Bottle Filling Plant etc. to the PLC Trainer-PCST-14**	

PLC Programming Software:

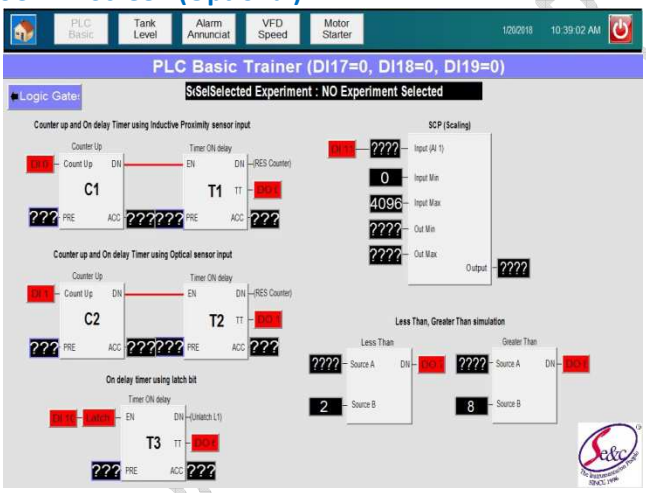
For Allen Bradley ML1400: RS Logix 500 MicroStarter

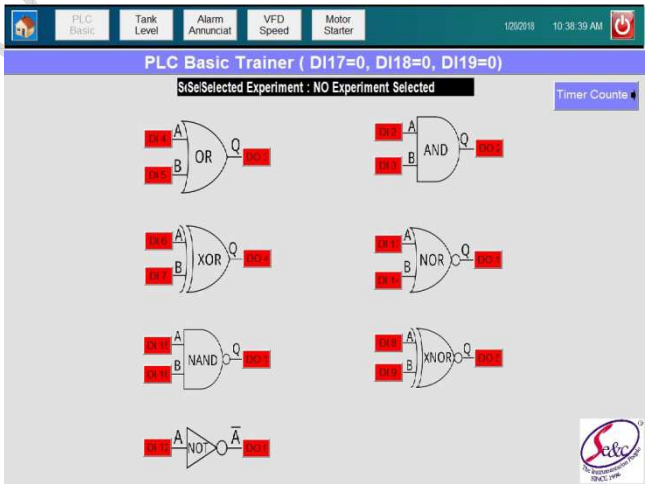


For Siemens S7-1200: TIA Portal Step7 Basic



SCADA Screen (Optional):





Range of experiments-

- ❖ Study Of PLC Ladder programming trainer kit.
- ❖ Study of Auxiliary Experiments.
- ❖ Study of Auxiliary/optional following PLC working modules:
  - Batch Process Reactor (PCST-14-I)
  - Rotary Bottle Filling Plant (PCST-14-II)
  - DC Motor Speed Control Module (PCST-14-III)
  - Star-Delta Starter (PCST-14-IV)

- Discrete Application Trainer (PCST-14-V)
- Density Based Traffic Light Control (PCST-14-VI)

❖ Study of HMI **(Optional)**
❖ Study of SCADA operation and Interfacing **(Optional)**

Features: -

❖ Compact Ergonomic Design.
❖ User Friendly, Self Explanatory Systems.
❖ Robust Construction.
❖ Enhanced Electrical Safety Considerations.
❖ Self-explanatory instruction manuals, copy of S/W are provided.
❖ Inbuilt Safety Measures to avoid improper usage.
❖ Computer Interface (Optional).
❖ Caster wheel mounted movable frame

System Dimensions: 3Ft. (L) X 1.5Ft. (W) X 4Ft. (H) (For PCST-14)
2Ft. (L) X 0.5Ft. (W) X 1.5Ft. (H) (For PCST-14B)

Weight: Approx.35Kg. (For PCST-14)
Approx. 10 Kg. (For PCST-14B)

Services Required-

❖ Electric Supply of 1ϕ, 230 V AC motor, 6A, 50Hz.

Note-

All descriptive matter and illustrations are intended to give only a general idea of the equipment Detailed specifications may be altered at the company's discretion without any notice.

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