

Multiple PLC WorkBench

The Internet of Things (IoT) has made Today's manufacturing processes a lot more Intelligent, efficient, Automation, Advanced Robotics and other Smart Factory initiatives. PLCs play an important role in manufacturing and act as a central processor for all real-time decisions. For instance, a PLC sends robust data, including sensor performance and other data that can be integrated with cloud computing to give a more holistic picture.

PLCs have adapted well to modern manufacturing and automation systems. With no competitor on the horizon and solid fundamentals, PLCs and PLC programmers will continue to play an integral role in the manufacturing process.

This unique Multiple Programmable Logic Controller (PLC) WorkBench includes PLCs from Siemens, Mitsubishi, Fatek, Delta, ABB, Allen Bradely, Omron, Schneider Electric, and Wecon or can be easily customised depending upon users demand based on their application or Industry 4.0 career opportunities.



Product Features

- Select any PLC from different makes Siemens, Mitsubishi, Fatek, Delta, ABB, Allen Bradley, Omron, Schneider Electric, and Wecon.
- Open platform to explore a wide range of PLC applications.
- Industrial look and feel.
- Powerful instruction sets.
- PC based programming.
- Extremely easy and student friendly software to develop different programs.
- High execution speed.
- PLC interfacing with different application modules.
- Ready experimental details.
- Easy downloading of programs.
- Practice troubleshooting skills.
- Experiments configurable through patch board.
- MCB provided with AC supply for safety purpose.
- Drawers for patch cords, module, and other accessories for storage, easy identification and access.
- Castor wheels (with Locking mechanism).
- PC/Laptop (optional).

Note : For PLC Programming PC/Laptop is required.

Technical Specifications

Programmable Logic Controller

Schneider Electric

- : 14 nos.
- : 10 nos.
- : Schneider TM200 Programming
- : USB

Mitsubishi

- : 16 nos.
- : 16 nos. (transistor)
- : GOC Tool kit
- : USB

Allen Bradley

- : 8 nos. : 07 nos. (relay)
- :04 nos.

: Ethernet

- :01 no.
- : Connected component Workbench

Digital input Digital output Programming software cable

Digital input **Digital output Programming Software** Communication

Digital input Digital output Analog input Analog output Programming software Communication

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Siemens : 2 nos. : 02 nos. : 04 nos. : LOGO Soft Comfort

Fatek

: WinProladder

: ABB automation builder : USB

















: 8 nos.

: Ethernet

: 8 nos. : 6 nos. (relay) : USB

Wecon

: 8 nos. : 6 nos. (relay) : Wecon PLC Editor : USB

ABB : 6 nos. : 4 nos. (transistor) : 2 nos : 1 no.

Digital input Digital output Programming Software cable

Delta

: 24nos. : 16 nos. (relay) : ISPSoft Programming : USB

Omron

: 12 nos. (relay)

: 18 nos.

: CX-One

: USB

Digital input Digital output Programming software Programming cable

Application Modules:

Switches module

Pushbutton switch	:	4 nos.
Push on push off switch	:	4 nos.
PLC connection	:	4mm sockets

Sensor module

Proximity sensor	:	2 nos.
Photo sensor	1	2 nos.
RTD	:	2 nos.
PLC connection	:	4mm sockets

Relay control module

Double pole/through relay	:	4 nos.
Relay operating voltage	:	24VDC
PLC connection	:	4mm sockets

Indicators module

Visual indicator	: 4 nos.
Operating voltage	: 220VAC
Audio indicator	: 2 nos.
Operating voltage	: +5V/+12VDC
PLC connection	: 4mm sockets









Optional Modules:

Pneumatic Solenoid Valve Module:

Pneumatic solenoid valve : 3 nos. Type : 5/2 (5way and 2 position) Operating pressure range : 5 Psi to 150 Psi PLC connection : 4mm sockets

Pneumatic Cylinder Module:

Pneumatic cylinder : 3 nos. Type : Double acting Stroke length : 100mm Operating pressure range : 15 Psi to 150 Psi

Three Phase Induction Motor Module:

Power : 0.5HP Type : Induction Speed : 3000 RPM Voltage : 415VAC Operating Voltage : Three Phase PLC connection : 4mm sockets

Motor Starter Module:

Star delta starter : Indication facility Operating voltage : 220V~240VAC PLC connection : 4mm sockets

Voltage Frequency Drive Module:

Input : Single phase Output : Three phase Operating voltage : 220V~240VAC PLC connection : 4mm sockets

Seven Segment Display Module:

Seven segment display : 2 nos. Input operating voltage : 5V/12V PLC connection : 4mm sockets

Traffic Light Control Module:

Built-in : Green, yellow, and red indicators for interfacing PLC Operating voltage : 24V PLC connection : 4mm sockets

Stepper Motor Control Module:

Stepper motor : 2 nos. Operating voltage : 5V DC PLC connection : 4mm sockets

Speed Control Of DC Motor:

- DC motor control by PLC through ladder program.
- Study and use of PWM (pulse width modulation) and voltage to frequency convertor.
- Learn to run DC motor in clockwise and anticlockwise direction.
- Learn to change the speed of DC motor

Sorting System Control by PLC:

- Study and use of memory bit, timers, counters, compare instruction.
- Study and use of input device like proximity sensor, push to on switches and output device like DC motor, 5/2 solenoid valve and double acting cylinder.
- Conveyor control by PLC through ladder program.
- Ladder program for count metallic container using a proximity switch.
- Ladder program for run and control conveyor in manual and auto mode using a PLC.
- Ladder program for control direction a of DC motor.
- Ladder program for sorting of metallic object using double acting cylinder and PLC.

**Please feel free to share your requirements by filling your details in ask query section or request a Quote section on the website, we will be happy to cater your requirement.