Product Name :	**Product Code :**
Programmable Logic Controller Application Modules	PLC77-P1,P5,P6,P7

Description :

Programmable Logic Controller Application Modules -

The trainer should be designed to work with most equipment that can be
controlled by PLCS. It should specifically work with the PLC trainers provided
in this package. It should have the
following features:

- The
  system should consist of a base station which provides a platform for the
  modules. The base station includes
  a number of switches, power supply and other control and signaling devices
  that can be used in conjunction with the modules for control, signaling or
  modification purposes.

- The
  modules should feature graphic representations of the device that they are
  simulating and use LED's to illustrate the actions that are taking place.

- The
  modules should range from basic to intermediate levels in complexity.

- These
  modules should provide practical programming applications for the student

to work on and apply his new knowledge about PLC operations.

- These
  modular application modules should allow immediate and easy use of PLC
  programming techniques and also the student may perform debugging
  procedures after watching the program run and correction errors.

- This
  unit should work with PLC Trainer above.

Specifications:

**1.
Base Station**

The base station should have the following
specifications:

- The
  base station should provide a platform and general facilities which the
  modules require for operation.

- It
  should contains a number of relays, switches, signaling devices, lights
  and buzzers which can connect to the application modules via 2mm stacking
  interconnect cables that are also included.

- These
  switches and signaling devices should allow the application simulation
  modules to operate and also provide some variables to the operation so
  that different characteristics could be explored.

**2.
Modules:**

**a. Traffic
Light Module**

Objective: After completing this experiment, the students are expected
to understand of using the TIM instruction in the Traffic Light operation
programming application

**b. Vehicle
Parking Module**

Objective: After completing this experiment, the students are expected
to understand of using DIFU,DEC, CMP, and MOVE instructions in the Vehicle
Parking operation programming application.

**c. Elevator
Lift Module**

Objective: After completing this experiment, the students are expected
to understand of using SET, KEEP, SBS, TIM, SBN and RSET instructions in the
Elevator Lift operation programming application.

**d. Laundry
Module**

Objective: After completing this experiment, the students are expected
to understand of using KEEP, SET, TIM, DIFU, CNT and RSET instructions in the
Laundry operation programming application.

**e. Bottling
Plant Module**

Objective: Upon the completion of this experiment, the students will be
guided to understand of using SET, TIM, and RSET instructions in the Bottling
Plant operation programming application

**f. Product
Line Inspection Module**

Objective: After completing this experiment, the students are expected
to understand of using SET, TIM, and RSET instructions in Product Line
Inspection operation programming application

**g. Packing
Module**

Objective: After completing this experiment, the students are expected
to understand of using CNT instruction in the Packing system Operation
programming application.

**h. Tank
Level and Pump Control Module**

Objective: After completing this experiment, the students are expected
to understand of using DIFU and TIM instruction in the Tank Level and Pump
Control Operation programming application

**i. Alarm
System Module**

Objective: After completing this experiment, the students are expected
to understand of using TIM and KEEP instruction in the Alarm System Operation
programming application.

**j. Safety
Door Module**

Objective: After completing this experiment, the students are expected
to understand of making the simple ladder diagram for safety door application

**k. Fan
Control Device Module**

Objective: After completing this experiment, the students are expected
to understand of using the SBS, SBN and RSET in programming application.

**l. Seven
Segment Display Module**

Objective: After completing this experiment, the students are expected
to understand of using SET, MOV, ANDW, JMP, DIV, SBS, RSET, JME, CMP, RET, SBN,
ROR, and RET in Seven Segment Display Operation programming application

**m. Tank
Filling/Draining Control Module**

Objective: After completing this experiment, the students are expected

to understand of using DIFU, DIFD, CNT and TIM in Filling, Draining Control
Operation programming application

n.
Measuring The Life of a Cutting Knife/Punch Module

Objective: After completing this experiment, the
students are expected to understand of using DIFU, CLC, ADD, CMP and MOV in
Measuring the Knife of a Cutting Knife Operation programming application.

o. Two Door Auto Access Warehouse Module Model

Objective: After completing this experiment, the
students are expected to understand using TIM and KEEP in two doors auto access
warehouse operation programming application.

1.
To come
complete with comprehensive courseware included with operation manuals and
experiment manuals.

Experimental manuals to be provided during bidding process to ensure all
above training exercises are covered.