

Programmable Logic Controller (PLC) Trainer

PLC-2240

EDU-LABS



(I) PLC CPU Unit

- I/O Capacity : 24 points
- Timers & Counters : 256 timers / counters
- Data Memory : Read / Write : 2560 words ; Read-only : 512 words
- Interrupt Processing : External interrupt = 4
- Interval Timer Interrupts : 1
- Memory Protection : HR and Read / Write DM area contents; and Counter values maintained during power interruptions.
- Self-Diagnostic Functions : CPU unit failure (watchdog timer), I/O bus error, and memory failure.
- Program Checks : No END instructions, programming error (continuously checked during operation).
- High-Speed Counter : One high-speed counter : 6 x 30Khz single-phase & 4 x 30Khz two-phase
- Pulse Output : Two points at 20Khz pulse rate
- Input Time Constants : Can be set to 1 ms, 2ms, 4ms, 8ms, 16ms, 32ms, 64ms or 128ms.
- Analog Controls : 2 controls.
- Build-In RS 232 adapter on PPI cable
- PPI cable with RS232 / RS485 converter
- PLC Training Manual
- Ladder Programming Software (Windows) c/w Manual
- Programming Console Since lot of limitation with console, it is advisable to use PC
- Accessories : Power Cord, Cable, Manual

(II) Trainer Base Consist Of :

- Indicator Lamps for all outputs (10 points)
- standard 4mm electrical sockets Terminal For Input and Output
- Switches for all inputs (14 nos)

Technical Specification

Physical Size	
Dimensions (WxHxD)	330mmx113mmx330mm
Weight	Approx. 3 kg
Power Loss (dissipation)	Approx. 16.5W at full load (i.e. with additional loads connected).
CPU Features	
On-board digital inputs	14 inputs. (Additional connectors to external switches are provided. Built-in switches are toggle type.)
On-board digital outputs	10 outputs. (Indicator lamps)
High speed counters (32-bit value)	
Total	6 High-speed counters
Single Phase Counters	6, each at 30kHz max. clock rate
Two Phase Counters	4, each at 30kHz max. clock rate
Pulse outputs	2 at 20 kHz pulse rate
Analog adjustments	2 with 8-bit resolution
Timed interrupts	2 with 1 ms resolution
Edge interrupts	4 edge up and/or 4 edge down
Selectable input filter times	7 ranges from 0.2 ms to 12.8 ms
Pulse Catch	14 pulse catch inputs
Time of Day Clock (clock accuracy)	2 minutes per month at 25°C 7 minutes per month at 0°C to 55°C
Program size (stored permanently)	4096 words
Data block size (stored permanently) :	2560 words
Stored permanently	2560 words
Backed by super capacitor or battery	2560 words
Number of Expansion I/O modules	7 modules
Maximum digital I/O	256 points
Maximum analog I/O	32 inputs and 32 outputs
Internal memory bits	256 bits
Stored permanently on power down	112 bits
Backed by super capacitor or battery	256 timers
Timers total	256 bits
Backed by super capacitor or battery	64 timers
1 ms	4 timers
10 ms	16 timers
100 ms	236 timers
Counters total	256 counters
Backed by super capacitor or battery	256 counters
Boolean execution speed	0.37 μ s per instruction
Move Word execution speed	34 μ s per instruction
Timer/Counter execution speed	50 μ s to 64 ps per instruction
Single precision math execution speed	46 μ s per instruction
Real math execution speed	100 μ s to 400 μ s per instruction
Super capacitor data retention time	190 hours, typical, 120 hours minimum at 40°C