## DIGIX-1

## Programmable Logic Controller



### Features :

- Compact PLC with built in HMI
- 2 line 8 character LCD
- Real Time Clock
- Windows based user friendly software for ladder programming & HMI configuration
- RS485 based communication with MODBUS protocol

Size : 70 x 90 x 66.4mm

#### **Technical Specifications**

#### Display

2.00.01	
Display	2 line X 8 characters LCD (Green backlight)
No. of keys	5 keys (4 - User configurable)

#### Input Specifications

Digital Input	
Digital inputs	8
Input Type	PNP
Input Voltage Range	5 - 30V DC
Response Time	Typical 2 mSec (Based on ladder scan time)
	& 100 µSec for Fast Input
Isolation	No
Debounce Time	0 to 255 mSec (Default 10 mSec)
Timer Accuracy	0.1% or 2 mSec (Whichever is greater)
Fast Input	
No. of Channels	1
Frequency	5 kHz.

#### **Output Specifications**

Digital Output - Relay	
Digital Outputs	5 (NO type with 2 COM points)
Contact rating	5A @ 240V AC (Resistive) 5A @ 28V DC (Resistive)
Isolation	NO
Response Time	10 mSec
Mechanical Life	2000000 cycles
Communication	
Communication Port	RS485 [Slave] RS485 [Master]
Communication Protocol	MODBUS RTU
Connector	RJ25
Functional Specifications	
Programming Method	Windows based software for ladder programming and HMI configuration.
Memory	Data memory : 16 kB

# Memory Data memory : 16 kB Code memory : 112 kB EEPROM Memory : 1 kB Max. no. of Objects 2000 (As per memory) Minimum Scan Time 200 µSec Typical Scan Time 2 mSec (Based on ladder scan time)

#### **Environmental Specifications**

Operating Temperature	0 to 55 °C
Storage Temperature	-20 to 70 °C
Humidity (Non Condensing)	10% to 95% RH

#### **Mechanical Specifications**

Mounting	DIN Rail Mount
Weight	Approx 240 gms.

#### **Functional Features**

Timer Operational Modes	On Delay, Off Delay, Pulse, Special [Up/Down] Timer
Timer Resolution	1 mSec (Accurate only for 1 mSec Timer block)
Counter	Up Counter, Down Counter, Up/Down Counter, Special [Up/Down] Counter
Other Blocks	Analog input, FTC, PID, Ramp Soak
Memory Retention	10 years
RTC	No
Clock Data Retention	NA
Clock Drift	NA

#### **Supply Specification**

Supply Voltage	90 to 270V AC 50/60 Hz., 18 to 30V DC
Power Consumption	6W Max
Sensor Supply (SS)	10V, 50mA in AC model only

VAR IN\_OUT & VAR OUTPUT types Variables Maximum Retention 25 variables only each of 32 bit @ 110V

Dimensions (All dimensions are in mm)



#### **Terminal Connections**







#### **Ordering Information**

Order Code	Description
DIGIX-1-1-1-230V	8 Inputs, 8 Outputs, RS485 Master, RTC, 230V AC Supply
DIGIX-1-230V	8 Inputs, 8 Outputs, 230V AC Supply
DIGIX-1-0-0-24VDC	8 Inputs, 8 Outputs, 24V DC Supply

#### Accessories (to be ordered separately)

Downloading Cable	AC-USB-RS485-03
	ACH-004 (RJ25 Cable)
Networking	AC-IOEXP-03 (Expansion Adaptor)
	AC-USB-RS485-02 (USB to RS485 Cable)