



72 x 72 mm

Features :

- Compact PLC with Built-in HMI
- Configurable LED Display
- Windows based User Friendly Software for Ladder Programming &
- HMI Configuration
- RS485 based communication with MODBUS RTU Protocol

Display Specifications

Display	7 segment LED
Digits	6 Red & 4 Green LED Display
LED bank	2 Red LED's, 2 Green LED's
No. of Keys	3 keys (2 user configurable)

Input Specifications

Digital Input	
Digital inputs	3+1*
Input Type	PNP
Input Voltage Range	5 - 30V DC
Response Time	Typical 2 mSec (Based on Ladder Scan Time) & 100 µSec for fast Input
Debounce Time	0 to 255 mSec (Default 10 mSec)
Fast Counter Input	
No. of fast Input channels	1
Input Type	PNP
Max Speed	5kHz
Analog Input	
No. of channels	3 [1 (TC/RTD), 1 (0-10V DC), 1 (0-20mA DC)]
Sensors	J, K, T, R, S, C, E, B, N, L, U, W, PLTNL, mVolt (-5 to 65mV), 0-10V, 0-20mA
Resolution	14 bit for temperature, 12 Bit for AIS
Accuracy	0.25% ± 1°C (TC), 0.1% ± 1°C (RTD) at 25°C ±0.25% of FS. ±1 count for AIS
Conversion time	100 mSec
Input Impedance	560KΩ (TC), 750KΩ (RTD), 330KΩ (0-10V) 100Ω (0 - 20mA)

* = Digital input can be configured as Analog Input (0-10V)

Output Specifications

Digital Output - Relay	
No. of Outputs	2 (NO type with 2 COM point)
Contact Rating	5A @ 240V AC (Resistive) 5A @ 28V DC (Resistive)
Response Time	10 ms
Mechanical life	2000000 Cycles
Isolation	No
Digital Output - Transistor	
No. of Outputs	2
Output Type	Source 100mA @24V DC
Response Time	10ms
Short Circuit Protection	Yes
Nominal Load	240E
Breaking Current	110mA

Communication

Communication Port	RS485 [Slave]
Communication Protocol	MODBUS RTU
Connector	Screw terminal
Transmission Mode	Half Duplex
Transmissions Speed	9600, 19200, 38400, 57600, 115200
Data Bits	7 or 8
Parity	None, Odd, Even, Space, Mark
Stop Bits	1 or 2

Functional Specifications

Programming Method	Windows based software for ladder programming and HMI configuration.
Memory	Data Memory : 32 KB Code Memory : 240 KB EEPROM Memory : 1 KB
Max. no. of Objects	2000 (As per memory)
Minimum Scan Time	200 µSec
Typical Scan Time	2 ms (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	Panel
Weight	240 gms approx

Functional Features

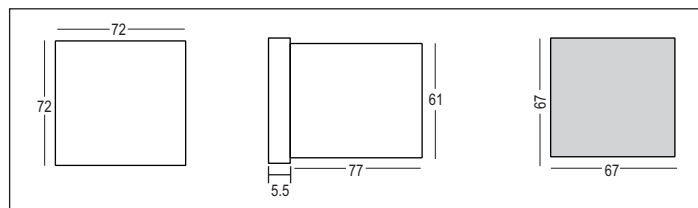
Timer Operational Modes	On Delay, Off Delay, Pulse, Special [Up/Down] Timer, 1ms Timer*
Timer Resolution	1 ms (Accurate only for 1 msec Timer block)
Counter	Up Counter, Down Counter, Up/Down Counter, Special [Up/Down] Counter
Other Blocks	Analog input, FTC, PID, Rampsoak
Memory Retention	10 years (2KB)
RTC	No
*Limited to 4 Nos	

Auxiliary Supply Specification

Supply Voltage	90 to 270V AC 50/60 Hz.,
Power Consumption	6W Max
Sensor Source (SS)	12V, 50mA

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

Dimensions (In mm)



UNIX-1									
NO1	1	30	29	28	27	26	25	24	SS+
C1	2			24V	GND	T01	T02	23	SS-
	3							22	DI0
NO2	4							21	DI1
C2	5							20	DI2
	6							19	DI3
L (+)	7							18	AI-V0+
	8							17	AI-I0+
N(-)	9	10	11	12	13	14	15	16	

Ordering Information

Order Code	Description
UNIX-1-230V	(3+1) DIs, 3AIs, 2 ROs, 2 TOs, 90 to 270V AC Supply

Accessories (To be ordered separately)

Downloading Cable	AC-USB-RS485-02
Networking	AC-IOEXP-03 (Expansion Adaptor)