



Features

- ◆ Modular PLC with pluggable display
- ◆ Flexible IO card selection
- ◆ RTC with time switch functions



Technical Specification

Display specifications

Digits	4 lines x 16 characters (Font side 5x7mm)	
LED banks	---	
No. of keys	8 Touch keys (6 User configurable)	
No. of slots	6	

Input specifications

Digital input	90 to 270 VAC	18 to 30 VDC
No. of inputs	3+1*	5+1*
Input type	PNP	
Input voltage range	5-30V	
Response time	Depends on debounce time & ladder execution time	
Debounce time	10ms	
Fast input		
No. of inputs	1	
Input type	PNP	
Input frequency	5 kHz	
Analog inputs		
No. of channels	1*	2*
Analog type	Voltage & Current	
Range	0-10V & 0-20mA	
Resolution	12 bit	
Conversion time	100ms	
Accuracy	0.25%	

* = 1 Digital input can be configured as analog input (0-10V)

Communication

Communication port	2 Ports ; Port 1 - RS485 slave, Port 2 - RS485 master	
Communication protocol	MODBUS RTU	
Connector type	2 Wire	
Transmission type	Half duplex	
Transmission speed	9600,19200, 38400, 57600, 115200 bps	
Data bits	7 or 8	
Parity	None, Odd, Even, Space, Mark	
Stop bits	1 or 2	

Functional specifications

Programming	Windows based software for ladder programming & HMI config
Timer operational modes	On delay, Off delay, Pulse, Special (Up / Down) Timer
Timer resolution	1ms (Only accurate 1ms timer block)
Counter	Up counter, Down counter, Up-Down counter, Special (Up-Down counter)
Other blocks	Analog input / output, Time switch, RTC etc
Memory retention	10 Years
RTC	Yes
Memory	
Data memory	32Kb
Code memory	240Kb
EEPROM	8Kb
No. of objects	5000
Min. scan time	200usec
Typical scan time	1msec (Based on ladder programming)

Environmental specifications

Operating temperature	5 to 55°C
Storage temperature	-25 to 70°C
Humidity (Non condensing)	10 to 95%

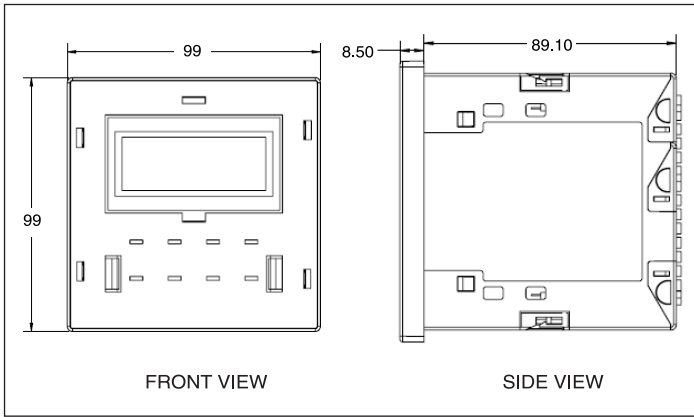
Mechanical specifications

Mounting type	Panel mount
Weight	330 gms without IO cards

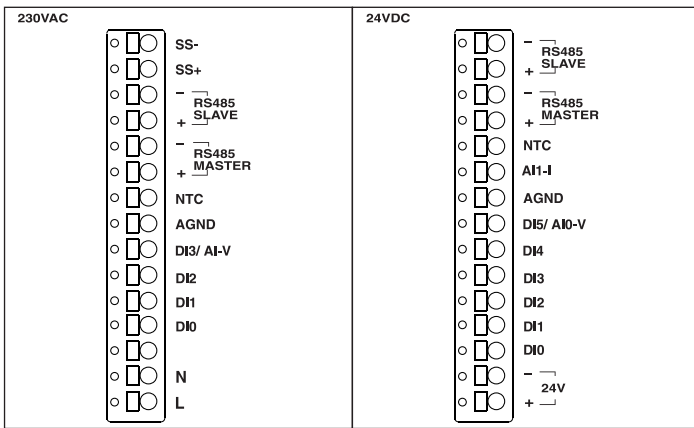
Supply specification

Supply voltage	90 to 270VAC (50/60Hz)	18 to 30VDC
Power consumption	10VA	
Sensor source	24V, 50mA	

Dimensions (All are in mm)



Terminal connection



Ordering information

Product code	Description	Certification
MIBRX-96-1-1-230V	MiBRX 96x96 Base module - 6 slots, 4DI (incl 1FI, 1AI-V), NTC, RTC, Master	
MIBRX-96-1-0-230V	MiBRX 96x96 Base module - 6 slots, 4DI (incl 1FI, 1AI-V), NTC, Master	
MiBRX-96-1-1-24VDC	MiBRX 96x96 Base module - 6 slots, 6DI (incl 1FI, 1AI-V), 1AI-I, NTC, RTC, Master	
MiBRX-96-1-0-24VDC	MiBRX 96x96 Base module - 6 slots, 6DI (incl 1FI, 1AI-V), 1AI-I, NTC, Master	

Supported display modules

Display module	Description	Certification
MiBRX-DSP-96-8-4-16-B	MiBRX Display 96x96 - LCD (16x4)	

Supported I/O cards

IO cards	Description	Certification
MiBRX-SC-DI04	MiBRX Slot Card - 4 Digital Inputs	
MIBRX-SC-DI04-ISO	MiBRX Slot Card - 4 Digital Inputs (Isolated)	
MiBRX-SC-DI06	MiBRX Slot Card - 6 Digital Inputs	
MiBRX-SC-DI06-AC	MiBRX Slot Card - 6 Digital inputs (AC)	
MIBRX-SC-DI06-ISO	MiBRX Slot Card - 6 Digital Inputs (Isolated)	
MiBRX-SC-RO03	MiBRX Slot Card - 3 Relay Outputs	
MiBRX-SC-RO04	MiBRX Slot Card - 4 Relay Outputs	
MIBRX-SC-RO04-12V	MiBRX Slot Card - 4 Relay Output (12V)	
MiBRX-SC-RO05	MiBRX Slot Card - 5 Relay Outputs (1.5 A)	
MiBRX-SC-T004	MiBRX Slot Card - 4 Transistor Outputs	
MiBRX-SC-DI02-RO02	MiBRX Slot Card - 2 Digital Inputs & 2 Relay Outputs	
MIBRX-SC-DI02-RO03	MiBRX Slot Card - 2 Digital Inputs & 3 Relay Outputs	
MiBRX-SC-DI02-T002	MiBRX Slot Card - 2 Digital Inputs & 2 Transistor Outputs	
MiBRX-SC-DI02-AI01-T	MiBRX Slot Card - 2 Digital Inputs & 1 Analog Input - TC/RTD	
MiBRX-SC-AI02-V	MiBRX Slot Card - 2 Analog Inputs - Voltage	
MiBRX-SC-AI02-V-ISO	MiBRX Slot Card - 2 Analog inputs - Voltage (Isolated)	
MiBRX-SC-AI02-I	MiBRX Slot Card - 2 Analog Inputs - Current	
MiBRX-SC-AI02-I-ISO	MiBRX Slot Card - 2 Analog inputs - Current (Isolated)	
MiBRX-SC-AI02-V-I	MiBRX Slot Card - 2 Analog Inputs - 1 Voltage & 1 Current	
MiBRX-SC-AI02-TC	MiBRX Slot Card - 2 Analog Inputs - Thermocouple	
MiBRX-SC-AI02-TC-ISO	MiBRX Slot Card - 2 Analog inputs - Thermocouple (Isolated)	
MiBRX-SC-AI02-RTD	MiBRX Slot Card - 2 Analog Inputs - RTD	
MiBRX-SC-AI02-RTD-ISO	MiBRX Slot Card - 2 Analog inputs - RTD (Isolated)	
MiBRX-SC-AI02-PT1000	MiBRX Slot Card - 2 Analog Inputs - Pt1000	
MiBRX-SC-AI02-PTC	MiBRX Slot Card - 2 Analog Inputs - PTC	
MiBRX-SC-AI02-NTC	MiBRX Slot Card - 2 Analog Inputs - NTC	
MiBRX-SC-AO01-V/I	MiBRX Slot Card - 1 Analog Output	
MiBRX-SC-AO02-V-I-ISO	MiBRX Slot Card - 2 Analog Outputs (Isolated)	
MiBRX-SC-FI02	MiBRX Slot Card - 2 Fast Inputs (10KHz)	
MiBRX-SC-FO01-T001	MiBRX Slot Card - 1 Fast Output (10KHz) & 1 Transistor Output	
MiBRX-SC-LC02	MiBRX Slot Card - 2 Analog Inputs - Load Cell (24 Bit)	
MiBRX-SC-DL	MiBRX Slot Card - Datalogging (2MB) & RTC	
MiBRX-SC-WIFI	MiBRX Slot Card - WIFI	
MiBRX-SC-PD	MiBRX Portable Downloader	

Accessories

Accessories for communication
AC-USB-RS485-02 (Program downloading cable - USB to 2 pin open wire)
Power Supplies
RP-2M-1.1A-24VDC-CE-RoHS
RPS60-24-CE-RoHS
RPS120-24-CE-RoHS
RPS240-24-CE-RoHS
Window - Based software for ladder programming - www.selec.com/software
Relay modules
1) RLYMD-1-S4-1CO-24VDC : 4 Channel 1 change over relay module
2) RLYMD-1-S4-2CO-24VDC : 4 Channel 2 change over relay module
3) RLYMD-2-S8-1CO-24VDC : 8 Channel 1 change over relay module
4) RLYMD-2-S8-2CO-24VDC : 8 Channel 2 change over relay module
5) ERLYMD-2-1-S8-1CO-24VDC : 8 Channel 1 change over communication based relay module