



**Features**

- ◆ Modular PLC with pluggable display
- ◆ Flexible IO card selection



**Technical Specification**

**Display specifications**

Type	7 segment LED	
Digits	(4 + 4) red + 6 green	3 + 4 digits red, 4 digits green
LED banks	4 red + 4 green LED	6 red round + 10 red bar graph
No. of keys	5 Touch keys (4 User configurable)	

No. of slots	2
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**Input specifications**

	MIBRX-48-0-0-230V	MIBRX-48-0-0-24V
<b>Digital input</b>		
No. of inputs	5+1*	5+2*
Input type	PNP	
Input voltage range	5-30V	
Response time	Depends on debounce time & ladder execution time	
Debounce time	10ms	
<b>Fast input</b>		
No. of inputs	1	
Input type	PNP	
Input frequency	5 kHz	
<b>Analog inputs</b>		
No. of channels	1*	3*
Analog type	Voltage	2 Voltage, 1 Current
Range	0-10V	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	1 Port - RS485 slave
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	No
<b>Memory</b>	
Data memory	32Kb
Code memory	240Kb
EPROM	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%

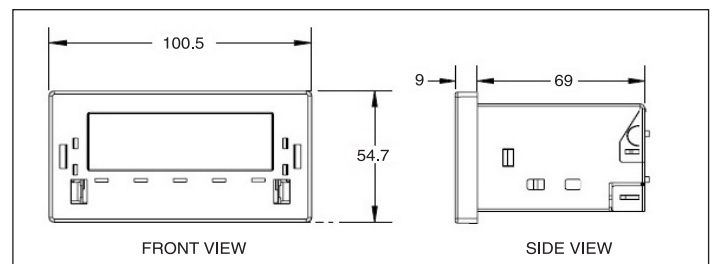
**Mechanical specifications**

Mounting type	Panel mount
Weight	200 gms without IO cards

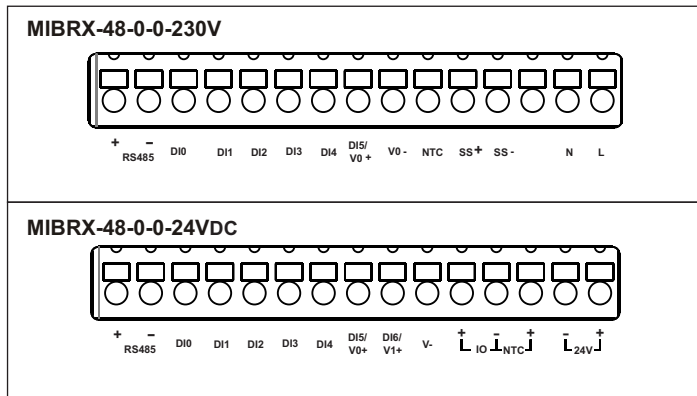
**Supply specification**

Supply voltage	90 to 270VAC/ DC (50/60Hz)	18 to 30VDC
Power consumption	9VA	6W
Sensor source	24V, 50mA	

**Dimensions (All are in mm)**



### Terminal connection



### Ordering information

Product code	Description	Certification
MIBRX-48-0-0-230V	MiBRX 48x96 Base module - 2 slots, 6DI (incl 1FI, 1AI-V), NTC- 230V	
MIBRX-48-0-0-24VDC	MiBRX 48x96 Base module - 2 slots, 7DI (incl 1FI, 2AI-V), 1AI-I, NTC-24VDC	

### Supported display modules

Display module	Description	Certification
MIBRX-DSP-48-7-2-11-A	MiBRX Display 48x96 - 7 Seg (3+4 & 4 digit), 6 LED, 10 Bar Graph LED	
MIBRX-DSP-48-7-2-14-B	MiBRX Display 48x96 - 7 Seg (8 & 6 digit), 8 LED	

### Accessories

Accessories for communication	
AC-USB-RS485-02 (Program downloading cable - USB to 2 pin open wire)	
Power Supplies	
RPS60-24-CE-RoHS	
Window - Based software for ladder programming - <a href="http://www.selec.com/software">www.selec.com/software</a>	
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

### 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-TO04	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-TO02	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-TO01	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	