

# **Features**

- Modular PLC with pluggable / independent display
- Flexible IO card selection
- Expandable via MODBUS Protocol
- RTC with time switch functions



# **Technical Specification**

## Display specifications

Туре	LCD with blue backlight & White font	7 Segment LED
Digits	2 lines x 8 characters (Font side 5x7mm)	1 Red
LED banks		6 Red LED
No. of keys	5 keys (4 User configurable)	1 key

No. of slots	Δ	
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## Input specifications

Digital input	
No. of inputs	4+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*
Analog type	Voltage
Range	0-10V
Resolution	12 bit
Conversion time	100ms
Accuracy	0.25%

<sup>\* = 1</sup> 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 (optional)	
Memory		
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	Rail mount
Weight	150 gms without IO cards

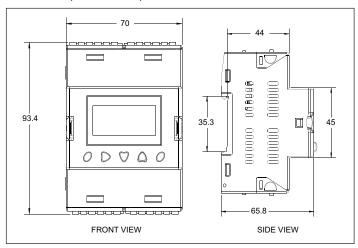
## Supply specification

Supply voltage	90 to 270VAC/DC (50/60Hz)	18to30VDC
Power consumption	6VA	6W
Sensor source	24V, 50mA	

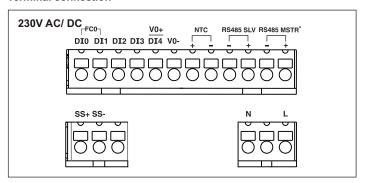
www.selec.com

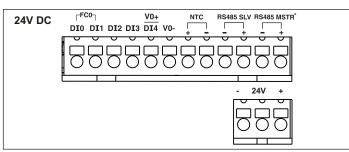


## Dimensions (All are in mm)



#### **Terminal connection**





NOTE: RS485 MASTER applicable to MIBRX-4M-1-1-1-24VDC & MIBRX-4M-1-1-1-230V

## **Ordering information**

Product code	Description	Certification
MIBRX-4M-1-1-1-230V	MiBRX 4M Base module - 4 Slots, 5DI (incl 1FI, 1AI-V), NTC, RTC, Master-230V	CE ROHS
MIBRX-4M-1-0-0 -230V	MiBRX 4M Base module - 4 Slots, 5DI (incl 1FI, 1AI-V), NTC-230V	C € ® ROHS
MIBRX-4M-1-1-1- 24VDC	MiBRX 4M Base module - 4 Slots, 5DI(incl 1FI, 1AI-V), NTC, RTC, Master-24VDC	CE ROHS
MIBRX-4M-1-0-0 -24VDC	MiBRX 4M Base module - 4 Slots, 5DI (incl 1FI, 1AI-V), NTC-24VDC	CE ROHS

### Supported display modules

Display module	Description	Certification
MIBRX-DSP-4M -0-1-06-A	MiBRX Display 4M - Blind, 6 LED	C E DROHS
MIBRX-DSP-4M -8-2-08-A	MiBRX Display 4M - LCD (8x2)	CE ROHS
MIBRX-DSP-AP-4M	MiBRX 4M Adapter Plate for independent display	C E ROHS

#### Supported I/O cards

IO cards	Description	Certification
MiBRX-SC-DI04	MiBRX Slot Card - 4 Digital Inputs	CE North
MIBRX-SC-DI04-ISO	MiBRX Slot Card - 4 Digital Inputs (Isolated)	C E North
MiBRX-SC-DI06	MiBRX Slot Card - 6 Digital Inputs	C E N RoHS
MiBRX-SC-DI06-AC	MiBRX Slot Card - 6 Digital inputs (AC)	C € NoHS
MIBRX-SC-DI06-ISO	MiBRX Slot Card - 6 Digital Inputs (Isolated)	C € NoHS
MiBRX-SC-RO03	MiBRX Slot Card - 3 Relay Outputs	C € NoHS
MiBRX-SC-RO04	MiBRX Slot Card - 4 Relay Outputs	C € North
MIBRX-SC-RO04-12V	MiBRX Slot Card - 4 Relay Output (12V)	C E N ROHS
MiBRX-SC-RO05	MiBRX Slot Card - 5 Relay Outputs (1.5 A)	C € Sents
MiBRX-SC-TO04	MiBRX Slot Card - 4 Transistor Outputs	C € NoHS
MiBRX-SC-DI02-RO02	MiBRX Slot Card - 2 Digital Inputs & 2 Relay Outputs	C E N ROHS
MIBRX-SC-DI02-RO03	MiBRX Slot Card - 2 Digital Inputs & 3 Relay Outputs	CE Securities
MiBRX-SC-DI02-TO02	MiBRX Slot Card - 2 Digital Inputs & 2 Transistor Outputs MiBRX Slot Card - 2 Digital Inputs & 1 Applied	CE Neoplas
MiBRX-SC-DI02-Al01-T	MiBRX Slot Card - 2 Digital Inputs & 1 Analog Input - TC/RTD	C € ( RoHS)
MiBRX-SC-Al02-V	MiBRX Slot Card - 2 Analog Inputs - Voltage MiBRX Slot Card - 2 Analog inputs	C E RoHS
MiBRX-SC-Al02-V-ISO	- Voltage (Isolated)	C E NROHS
MiBRX-SC-Al02-I	MiBRX Slot Card - 2 Analog Inputs - Current  MiBRX Slot Card - 2 Analog inputs - Current	CE ROHS
MIBRX-SC-AI02-I-ISO	(Isolated)  MiBRX Slot Card - 2 Analog Inputs - Current (Isolated)	C E ROHS
MiBRX-SC-Al02-V-I	& 1 Current  MiBRX Slot Card - 2 Analog Inputs  MiBRX Slot Card - 2 Analog Inputs	C E North
MiBRX-SC-Al02-TC MiBRX-SC-Al02-	- Thermocouple	CE Securitari
TC-ISO	MiBRX Slot Card - 2 Analog inputs - Thermocouple (Isolated)	CE ROHS
MiBRX-SC-AI02-RTD	MiBRX Slot Card - 2 Analog Inputs - RTD	C E Normalian
MIBRX-SC-AI02- RTD-ISO	MiBRX Slot Card - 2 Analog inputs - RTD (Isolated)	CE ROHS
MIBRX-SC-AI02 -Pt1000	MiBRX Slot Card - 2 Analog Inputs - PT1000	C € Norts
MiBRX-SC-Al02-PTC	MiBRX Slot Card - 2 Analog Inputs - PTC	C E DROHS
MiBRX-SC-Al02-NTC	MiBRX Slot Card - 2 Analog Inputs - NTC	CE ROHS
MiBRX-SC-AO01-V/I	MiBRX Slot Card - 1 Analog Output	C E ROHS
MIBRX-SC-A002- V-I-ISO	MiBRX Slot Card - 2 Analog Outputs (Isolated)	CE BROHS
MiBRX-SC-FI02	MiBRX Slot Card - 2 Fast Inputs (10KHz)	CE BROHS
MiBRX-SC-F001-T001	MiBRX Slot Card - 1 Fast Output (10KHz) & 1 Transistor Output	CE NOHS
MiBRX-SC-LC02	MiBRX Slot Card - 2 Analog Inputs - Load Cell (24 Bit)	CE BROHS
MiBRX-SC-DL	MiBRX Slot Card - Datalogging (2MB) & RTC	CE ROHS
MiBRX-SC-WIFI	MiBRX Slot Card - WIFI	CE North
MiBRX-SC-PD	MiBRX Portable Downloader	CE BROHS

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 - www.selec.com/software Relay modules

1) RLYMD-1-S4-1CO-24VDC : 4 Channel 1 change over relay module : 4 Channel 2 change over relay module 2) RLYMD-1-S4-2CO-24VDC 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 baesd relay module