

PRELIMINARY DATASHEET



**Technical Specification**

**Display specifications**

Type	7 Segment LED
Digits	(4 + 4) Red + 6 Green
LED banks	4 Red + 4 Green LED
No. of keys	5 Touch keys (4 User configurable)
No. of slots	2

**Input specifications**

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

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

**Communication**

Communication port	1 Ports - 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

**Features**

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

**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
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%

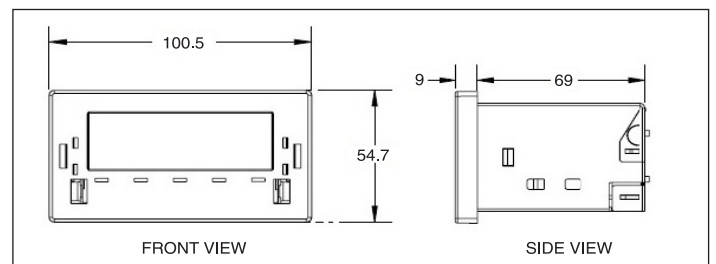
**Mechanical specifications**

Mounting type	Panel mount
Weight	200 gms without IO cards

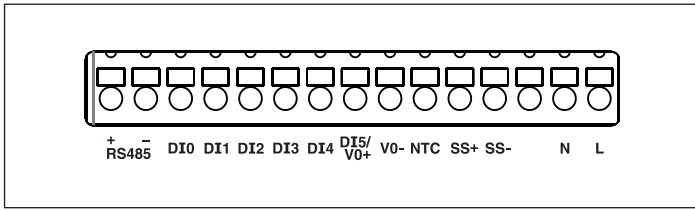
**Supply specification**

Supply voltage	90 to 270VAC (50/60Hz)
Power consumption	9VA
Sensor source	24V, 50mA

**Dimensions (All are in mm)**



**Terminal connection**



**Ordering information**

Product code	Description	Certification
MIBRX-48-0-0-230V	230V AC Power supply & Logic	CE
MIBRX-48-0-0-24V	24V DC Power supply & Logic	CE

**Supported display modules**

Display module	Description	Certification
MIBRX-DSP-48-7-2-14-B	Integrated 7seg Display for MIBRX 48x96. 8+6 digit 7seg, 8 LEDs for indication & 5 touch keys with LED indication	CE

**Supported I/O cards**

IO cards	Description	Certification
MIBRX-SC-DI04	4-Digital inputs card	CE
MIBRX-SC-DI06	6-Digital inputs card	CE
MiBRX-SC-RO03	3-Channel relay output card	CE
MiBRX-SC-RO04	4-Channel relay output card	CE
MiBRX-SC-TO04	4-Channel transistor output card	CE
MIBRX-SC-DI02-RO02	2-Digital input + 2-Channel relay output card	CE
MIBRX-SC-DI02-TO02	2-Digital input + 2-Channel transistor output card	CE
MiBRX-SC-AI02-I	2-Channel analog input card - Current	CE
MiBRX-SC-AI02-V	2-Channel analog input card - Voltage	CE
MIBRX-SC-AI02-V/I	2-Channel analog input card - Voltage/Current	CE
MIBRX-SC-AI02-NTC	2-Channel analog input card - NTC	CE
MIBRX-SC-AI02-PTC	2-Channel analog input card - PTC	CE
MiBRX-SC-AI02-TC	2-Channel analog input card - Thermocouple	CE
MiBRX-SC-AI02-RTD	2-Channel analog input card - RTD	CE
MIBRX-SC-AI02-PT1000	2-Channel analog input card - PT1000	CE
MiBRX-SC-AO01-V/I	1-Channel analog output card - Voltage/Current	CE
MiBRX-SC-FI02	2-Channel fast input card	CE
MiBRX-SC-FO02	2-Channel fast output card	CE
MiBRX-SC-LC02	2-Channel loadcell input card	CE
MIBRX-SC-DL	Datalogging card	CE

**Accessories**

<b>Accessories for communication</b>	
AC-USB-RS485-03 (USB to 6 pin RJ25 jack)	
AC-USB-RS485-02 (USB to 2 pin open wire)	
AC-IOEXP-03 (Port expansion adapter)	
<b>Power supply module</b>	
SMPS - RP-2M-1.1A-24VDC-CE-RoHS	
<b>Window - Based software for ladder programming</b>	
ACD-005	
<b>Relay module</b>	
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