| | |
|---|---|
| Isolation (CPU ↔ Output) | 2.5kV |
| Isolation (Output ↔ Output) | NA |
| Response Time | 20ms |
| Mechanical Life | 5 Million Operations |

***Note :*** *Use of RO and AO cards are limited in 230VAC variants. Mixed usages for RO/AO limits are auto-managed in Selpro settings or refer to product manual for details*

| | |
|---|---|
| No. of Outputs | As per Card Configurations: 4 Transistorized |
| Output Rating | 100mA @24V DC (current sourcing output), 18-30V DC (External Supply) |
| Output type | PNP (Source) |
| Short Circuit Protection | Yes |
| Isolation (CPU ↔ Output) | 2.5kV |
| Isolation (Output ↔ Output) | No |
| Polarity Inversion Protection | Yes |
| Response Time | 10ms |
| Nominal Load | 240Ω (likely referring to the typical load resistance) |
| Breaking Current | 110mA (maximum current that can be interrupted) |

| | |
|---|---|
| No. of Channels | As per Card Configurations: 1 / 2 |
| Output Range | 0-10V DC / 0-20mA DC |
| Resolution | 12 Bits |
| Load limit | 0-10V DC ≥1 kΩ, 0-20mA <=500Ω |
| Digital Resolution | 0.0-100.0% = 0-10.000V DC, 0.0-100.0% = 0-20.000mA |
| Conversion Time | 100ms |
| Isolation (CPU ↔ Output) | Yes for Isolated cards |
| Isolation (Output ↔ Output) | No |
| Output Error @25°C | ±0.25% of Full Scale |
| Linearity | 0.10% |

***Note :*** *Use of RO and AO cards are limited in 230VAC variants. Mixed usages for RO/AO limits are auto-managed in Selpro settings or refer to product manual for details*

| | |
|---|---|
| Programming Software | Windows-Based Ladder & HMI Configuration |
| Program Memory | 240 KB |
| Data Memory | 32 KB |
| EEPROM | 8 KB |
| Upload Memory | NA |
| Max Objects | 5000 (Subject to Memory Availability) |
| Min scan Time | 200µs |
| Typical scan Time | 1 ms (Depends on Ladder Logic Complexity) |

***Note :*** *Set jumpers as per the manual for PD & Wi-Fi Card before use.*

| | |
|---|---|
| Timer Operational Modes | On Delay, Off Delay, Special Timer (Up/Down), Pulse Timer, 1ms Timer* |
| Counter Modes: | Up Counter, Down Counter, Up/Down Counter, Special [Up/Down] Counter |
| Other Functional Blocks: | Array, For Next, Totalizer, Rate Totalizer, Analog Input, Scaling, FTC, Hysteresis, PIDT, Rampsoak, Communication |
| Memory Retention | 10 years (2 KB) |
| Real-Time Clock (RTC) | Yes |
| Clock drift | Maximum ±4 seconds per day |

**Limited to 4 Nos*

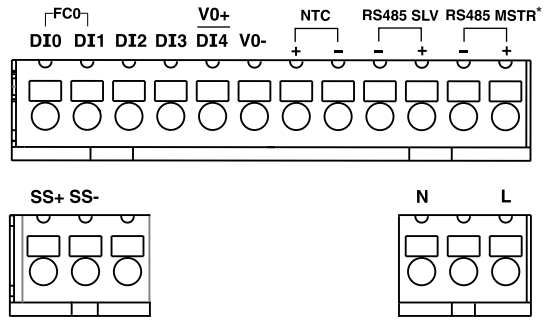
| | |
|---|---|
| Communication Port | RS485 [Slave], RS485 [Master] for Expansion |
| Communication Protocol | MODBUS RTU |
| Connector | 2 Wire |

| | | |
|---|---|---|
| Transmission Mode | Half Duplex | |
| Transmission Speed | 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps | |
| Data Bits | 7 or 8 | |
| Parity | None, Odd, Even, Space, Mark | |
| Stop Bits | 1 or 2 | |
| | | |
| Operating Temp | 0°C to 55°C | |
| Storage Temp | -20°C to 70°C | |
| Humidity | 10% to 95% RH (Non-condensing) | |
| IP rating | Display: IP50, Terminals: IP20 | |
| | | |
| Weight | 150 grams | |
| Mounting | DIN Rail Mountable | |
| Dimensions in mm (WHD) | 70 x 94 x 67 | |
| | | |
| Supply Voltage | With Retention: 180-270V AC @50/60 Hz<br>Without Retention: 90-270V AC @50/60 Hz | 18-30V DC |
| Inrush Current | 5A | 2.3A |
| Power Consumption | 6VA | 6W |
| Polarity Inversion Protection | YES | |
| Isolation (Power ↔ Communication) | NO | |
| Source Supply Output | 24V DC, 50mA | - |

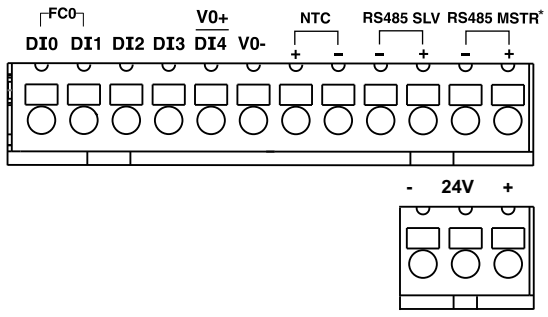
***Note:*** *A maximum of 25 variables of type VAR_IN_OUT and VAR_OUTPUT (each 32-bit) can be retained when operating at 110V.*

## Terminal Connections

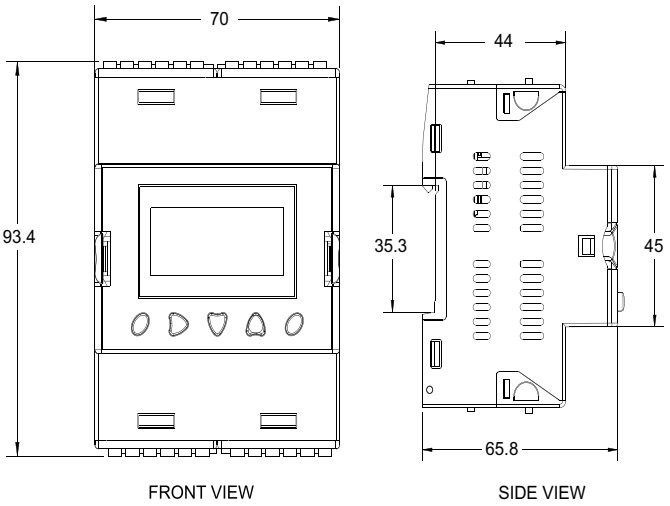
**MiBRX-4M-1-1-1-230V**




**MiBRX-4M-1-1-1-24VDC**




## Dimensions (All are in mm)



## Ordering information

| | Description | |
|---|---|---|
| **MiBRX-4M-1-1-1-230V** | MiBRX 4M Base module - 230VAC - 4 Slots, 5DI (incl 1FI, 1AI-V), NTC, RTC, Master | |
| **MiBRX-4M-1-1-1-24VDC** | MiBRX 4M Base module - 24VDC - 4 Slots, 5DI (incl 1FI, 1AI-V), NTC, RTC, Master | |

## Supported display modules

| Product code | Description | Certification |
|---|---|---|
| **MiBRX-DSP-4M-0-1-06-A** | MiBRX Display 4M - Blind, 6 LED | |
| **MiBRX-DSP-4M-8-2-08-A** | MiBRX Display 4M - LCD Text (8x2) | |
| **MiBRX-DSP-AP-4M** | MiBRX 4M Adapter Plate for Extending display | |

## Accessories (To Be Ordered Separately)

| Product Code | Description |
|---|---|
| | |
| RPS60-24-CE | 60W, 24V/2.5A DIN rail mounted power supply in plastic housing - CE Certified |
| **Cables & Communication Accessories** | |
| AC-USB-RS485-02 | Protocol Converter Cable – USB to RS485 (2 wire) |
| **For MODBUS Networking** | |
| AC-USB-RS485-03 | Protocol Converter Cable – USB to RS485 (RJ25) |
| ACH-004-CE-RoHS | Expansion Cable – RJ25 to RJ25 (6Pin) |
| AC-IOEXP-03-CE-RoHS | Communication adapter |
| **Relay Modules** | |
| ERLYMD-2-1-S8-1CO-24V-CE-RoHS | 8 Channel 1 Change Over, Communication based |
| **Expansion modules on Master RS485** | |
| EXP FLEX 2M | MiBRX 4M Adapter Plate for independent display |
| EXP FLEX 2M V3 | Expansion Cable – RJ25 to RJ25 (6Pin) |
| **For Extending Display ( *Use external power supply)** | |
| MIBRX-DSP-AP-4M | MiBRX 4M Adapter Plate for independent display |
| ACH-004-CE-RoHS | Expansion Cable – RJ25 to RJ25 (6Pin) |
| MiBRX-DSP-IND-96-8-0-00-B | MiBRX Independent Display 96x96 - Customized, 14 & 7 Seg, Bar Graphs, Speedometer |
| MiBRX-DSP-IND-96-8-0-00-C* | MiBRX Independent Display 96x96 - 3.5 Inch Graphic Touch |
| MiBRX-DSP-IND-96-8-2-16-B | MiBRX Independent Display 96x96 - LCD Text (16x2) |
| MiBRX-DSP-IND-96-8-4-16-B | MiBRX Independent Display 96x96 - LCD Text (16x4) |
| www.selec.com/software | |
| Selpro | Windows-based software for ladder logic and built-in HMI programming |
| USB to Serial Driver | USB to Serial cable drivers |

## Supported I/O Cards

| | | |
|---|---|---|
| **MiBRX-SC-DI0X**** | MiBRX Slot Card - 4 / 5 / 6 Digital Inputs | |
| **MiBRX-SC-DI05-230V AC** | MiBRX Slot Card - 5 Digital Inputs 230V (AC) | |
| **MiBRX-SC-TO04** | MiBRX Slot Card - 4 Transistor Outputs | |
| **MiBRX-SC-RO0X*** | MiBRX Slot Card - 2 / 3 / 4 / 5 Relay Outputs | |
| **MiBRX-SC-DI02-TO02** | MiBRX Slot Card - 2 Digital inputs & 2 Transistor Outputs | |
| **MiBRX-SC-DI02-RO03** | MiBRX Slot Card - 2 Digital Inputs & 3 Relay Outputs | |
| **MiBRX-SC-AI0X-V **** | MiBRX Slot Card - 2 / 3 Analog Inputs - Voltage | |
| **MiBRX-SC-AI0X-I **** | MiBRX Slot Card - 2 / 3 Analog Inputs - Current | |
| **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-AI03-2TC-1I-ISO** | MiBRX Slot Card - 3 Analog Inputs - 2 Thermocouple (Isolated) & 1 Current (Isolated) | |
| **MiBRX-SC-AI02-RTD **** | MiBRX Slot Card - 2 Analog Inputs - RTD | |
| **MiBRX-SC-AI03-2RTD-1I-ISO-P** | MiBRX Slot Card - 3 Analog inputs - 2 RTD (Isolated) & 1 Current (Isolated), With Pluggable Terminals | |
| **MiBRX-SC-AI02-PT1000** | MiBRX Slot Card - 2 Analog Inputs - PT1000 | |
| **MiBRX-SC-AI02-NTC** | MiBRX Slot Card - 2 Analog Inputs - NTC | |
| **MiBRX-SC-AI02-PTC** | MiBRX Slot Card - 2 Analog Inputs - PTC | |
| **MiBRX-SC-DI02-AI01-T** | MiBRX Slot Card - 2 Digital Inputs & 1 Analog Input - TC/RTD | |
| **MiBRX-SC-AO01V/I *** | MiBRX Slot Card - 1 Analog Output (Voltage/Current) | |
| **MiBRX-SC-AO02-V-I *** | MiBRX Slot Card - 2 Analog Outputs - 1 Voltage & 1 Current (Isolated) | |
| **MiBRX-SC-AO02-X-ISO *** | MiBRX Slot Card - 2 Analog Outputs - Voltage / Current (Isolated) | |
| **MiBRX-SC-FI02** | MiBRX Slot Card - 2 Fast Inputs (10KHz) | |
| **MiBRX-SC-FO01-TO02-N** | MiBRX Slot Card - 1 Fast Output (200KHz) & 2 Transistor Output (NPN) | |
| **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 Slot Card - Portable Downloader | |

***Pluggable card variant available**
**** Pluggable + Isolated (ISO) variant available**
**e.g., MiBRX-SC-DI0X-ISO, MiBRX-SC-DI0X-P**

**Note:**
**1. Non-Isolated DI cards supports only in Non-ISO variant.**
**2. Pluggable variant is not available for MiBRX-SC-RO05.**
**3. Refer to the IO card and base module compatibility guidelines to ensure effective and valid IO card combinations.**