

Industrial IoT Remote Modbus Controller

Model: RP-MB01E



System Feature

- Wi-Fi/Ethernet Connected Industrial IoT Device
 - Wi-Fi/Ethernet connectivity auto select.
 - Once the system is powered up, it will auto create a persistence connection to the server without user intervention.
 - Server can be placed either at public cloud, private cloud or LAN.
- Device able to work behind firewall.
- Network link with MQTT Broker Server
 - Open Standard protocol and readily available either using paid version or free version of MQTT Broker Server.
 - Messaging format based on JSON format.
 - JSON messaging format is supported by various programming languages and

- easily integrated to any existing system.
- Modbus Master Isolated Interface Port
 - Auto polling with period control
 - Supported baud rate 4800 baud to 115200 baud.
 - 1/8-unit load enable up to 256 nodes on the bus.
- Included with FWBus
 - Can connect to 8-unit 8x Input/8x Output I/O Extension unit with up to maximum 64x input port and 64x output port.
- Auto fetch real time clock from Internet Time Server.
 - Auto connect with the Internet Time Server to fetch the Real time value (EPOCH Time) when network is connected, and internet link is available.
 - Manually set time by server if internet link is not available.
 - Auto readjust the time drift periodically.
 - Append the EPOCH time to all the messages.
- Easy setup and configuration
 - System configures with Web Browser.
 - Provide detailed device properties, E.g., model number, version number, etc.
 - Connectivity selection either using Wi-Fi and/or Modbus Slave Link.
 - MQTT Broker Server IP/Domain Name Setup.
 - DHCP/Fix IP.
 - Internet Time Server Setting.
- Other
 - Water/Dust resistance enclosure
 - Support wide supply input voltage, 12V DC to 24V DC.
 - All terminal block connector is detachable for easy installation
 - External water/dust resistance link indicator and configuration push button.
 - External configuration push button can be disabled.

Specification

Power and Enclosure Specification

<i>Input Voltage</i>	DC 12V to 24V Terminal Block Connector
<i>System Power Consumption</i>	5W Max
<i>Operation Humidity</i>	10%-95%RH
<i>Operation Temperature</i>	25°C to 55°C
<i>Storage Humidity</i>	10%-95%RH
<i>Storage Temperature</i>	0°C to 85°C
<i>Enclosure Dimension</i>	68mm (W) x 99.5mm (L) x 50mm (H) (Exclude Wire Glands Outlet)
<i>Enclosure Type</i>	Water/Dust resistance Durable Industrial PPM Casing

Modbus Port

<i>Baud Rate</i>	4800baud – 115200baud
<i>Load</i>	1/8-unit load
<i>Port type</i>	Isolated RS485 Modbus RTU
<i>Termination Resistor</i>	120 Ohm. Build-In

Wi-Fi Specification

<i>Frequency</i>	2.4Ghz~2.5Ghz
<i>Supported Wi-Fi Protocol</i>	802.11 b/g/n
<i>Antenna Type</i>	Internal
<i>Security Protocol</i>	WPA/WPA2 personal, WPA/WPA2 Enterprise
<i>Encryption Protocol</i>	WEP/TKIP/AES

Backend Server Connectivity

<i>Server Connection</i>	MQTT Broker with TCP, TCP-TLS, Web-Socket, SSL Web-Socket Connection
<i>Encryption/Security</i>	Public CA
<i>Messaging Format</i>	JSON
<i>Other</i>	NTP auto RTC update

Device Outer Dimension

