

Industrial IoT Remote I/O (WAN-IO)

Model: RP-1204(S) With 12 Channel Isolated Input and 4 Channel Dry Contact Output

Model: RP-1204(E) With 12 Channel Isolated Input and 4 Channel Dry Contact Output with Ethernet 10/100.



System Feature

- Wi-Fi/Ethernet Connected Industrial IoT Device
 - Once system power 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 language and easily integrated to any existing system.
- Opto-Isolated Input Port
 - Total 12 Input Port Channel
 - Separated in to 3 Groups with each having their own input common.
 - Bi-directional opto-isolated allow use either common positive or common negative input.
 - Accept input DC 12V~24V
- Relay dry contact Output
 - Total 4 Relay output channel
 - With one output common

- Each output with 5A Max Contact
 - Total Max Current for all output is 5A
 - Build in NTC Temperature sensor port.
 - Temperature measure with +/- 1.5°C.
 - Auto fetch real time clock from Internet Time Server.
 - Auto connect with the Internet Time Server to fetch the Real time value (EPOC 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 EPOC time to all the message.
 - Easy setup and configuration
 - System configures with Android Apps.
 - Provide detail device properties, E.g., model number, version number, etc.
 - Connectivity selection either using Wi-Fi, Ethernet or USB Link.
 - Upload WPA Enterprise Server private/public key.
 - 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.



NTC Temperature Sensor

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

Input Channel

<i>Total Channel</i>	12
<i>Input Type</i>	Bi-directional Opto-Isolated, User can define either common positive or common negative
<i>Arrangement</i>	4 Channel per Group, total 3 groups. Each group will have individual common input
<i>Input Range</i>	12V to 24V DC

Output Channel

<i>Total Channel</i>	4
<i>Output Type</i>	Relay dry contact
<i>Arrangement</i>	One common output for all 4-output channel
<i>Current Rating</i>	Each channel 5A Max. Total channel 5A Max.

NTC Channel

<i>Total Channel</i>	1
<i>Input Type</i>	NTC Temperature Sensor B3950/20K
<i>Tolerance</i>	+/-1°C

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

Ethernet Specification (For E version)

<i>Speed</i>	RJ45, 10/100 Mbps
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Backend Server Connectivity

<i>Server Connection</i>	MQTT Broker with TCP, TCP-TLS, Web-Socket Connection
<i>Server Port</i>	User Definable
<i>Encryption/Security</i>	Public CA, Self-Signed Certificate
<i>Messaging Format</i>	JSON
<i>Other</i>	NTP auto RTC update

Device Outer Dimension

