

RS2WLAN

IoT Gateway

www.3wire.my



INTRODUCTION

3Wire RS2WLAN is an Industrial Grade WiFi/LAN IoT Gateway which connects your Serial and Ethernet devices, such as PLCs, meters and sensors to an IoT platform.

Your SCADA and BMS software will also be able to access the Serial and Ethernet devices from anywhere over WiFi or LAN.

RS2WLAN is able to poll the required data from your devices and send it as MQTT or HTTP Post over the connected WiFi or LAN. You can configure the connected devices thru the serial port, configuring and defining the required data and interval.

RS2WLAN can also operate as Modbus TCP Master, Modbus TCP Slave in Paired Mode or Bridge Mode with the data connection thru direct IP or Virtual COM to any SCADA & BMS system.

FEATURES & BENEFITS

- Links Serial and Ethernet devices to an IEEE 802.11b/g network; simultaneous access over Ethernet & WIFI
- MQTT and HTTP Post can be configured, to send data to IoT Platforms.
- DTL-645 & Modbus RTU parameters can be polled and converted to JSON format.
- Optical isolation of 1500V on RS485 / RS422 data lines; 2kV surge protection on Ethernet Port
- Supports baud rate of 1200bps ~ 115200bps, 5 ~ 9 bits and parity can be "None", "Odd", "Even", "Mark" & "Space"
- Serial port interface for RS232 / 485 / 422; terminal block for RS485 & RS422 and DB9 for RS232
- Supports 10/100 Mbps Ethernet
- Operates in STA Mode to connect to wireless router or AP Mode to connect to WIFI devices (including mobile phone)
- Power / Link / Active LED indicator
- Secure data access with WEP, WPA, WPA2
- Fast roaming for quick automatic switching between access points
- Upto 256 slaves connected on RS485 / 422 bus
- Multi-mode operation; TCP Server, TCP Client, UDP Mode, UDP Multicast
- Modbus TCP Gateway function (converts Modbus RTU to Modbus TCP)
- Supports 30 TCP clients at TCP Server and 7 destination IP as TCP Client
- Heartbeat & Keep Alive function ensures a reliable connection
- Virtual Port operation using 3Wire ComPort Emulator software
- Automatic discovery and configuration using provided 3Wire Device Management software or Web Browser configuration
- Wide voltage 9VDC ~48VDC with dual voltage input; Screw Terminal or DC-Jack
- Plug-in screw terminal wiring; accepts AWG12 ~AWG30 wires



SPECIFICATIONS

GENERAL SPECS	
Interface	RS485/422: Terminal; RS232: DB9
Power Supply	5.5mm Plug & 2 Way Plugable Terminal Block
Dimensions	94mm (L) x 65mm (W) x 25mm (H)

INTERFACE	
Ethernet	10M / 100M, 2kV Surge Protection
WIFI	802.11b/g
Serial	RS232 / 485 / 422 x 1: RXD, TXD, GND, CTS, RTS

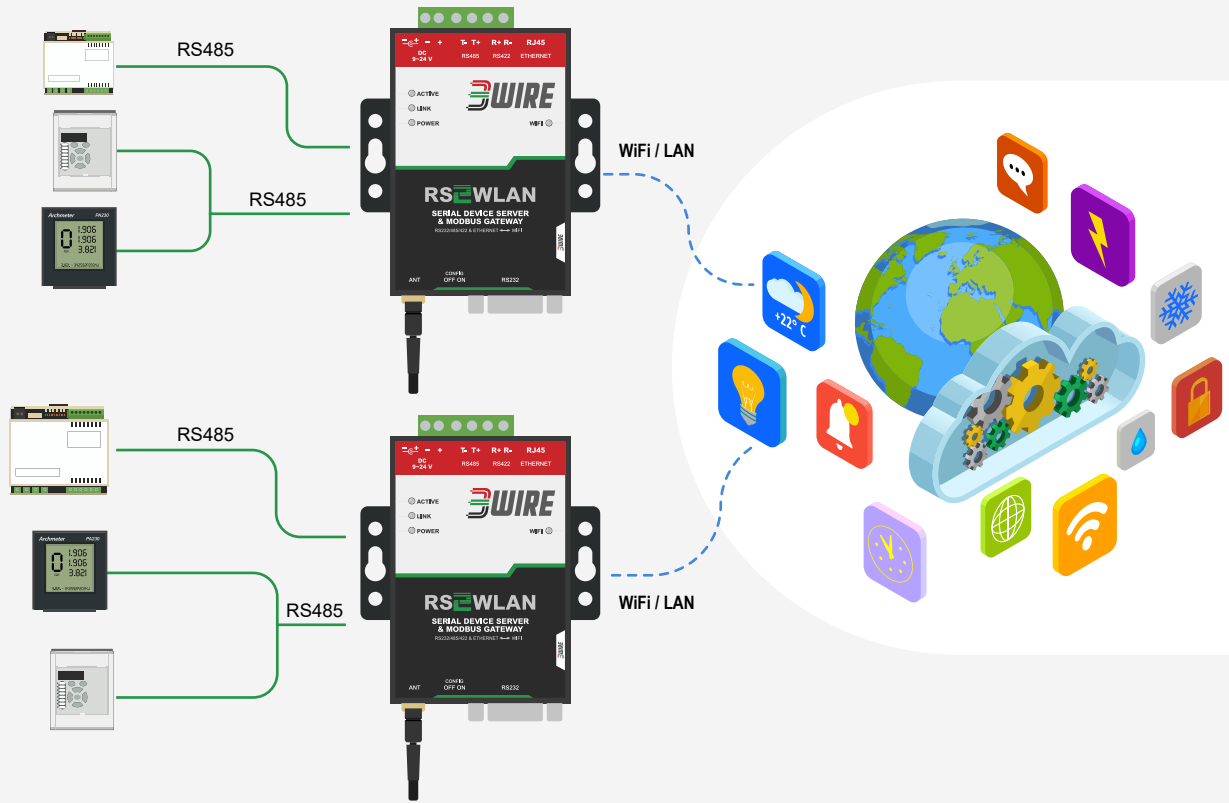
SERIAL PARAMETERS	
Baud Rate	1200 ~ 115200bps
Data Bits	5 bits ~ 9 bits
Parity	None, Odd, Even, Mark, Space
Flow	RTS / CTS, XON / XOFF, NONE

COMMUNICATION	
Protocol	ETHERNET, IP, TCP, UDP, HTTP, ARP, ICMP, DHCP, DNS
Configuration	3Wire Device Management Software & WEB Browser
Net Communication	Direct TCP/IP, Virtual Serial Port
Mode	TCP Server, TCP Client, UDP, UDP Multicast

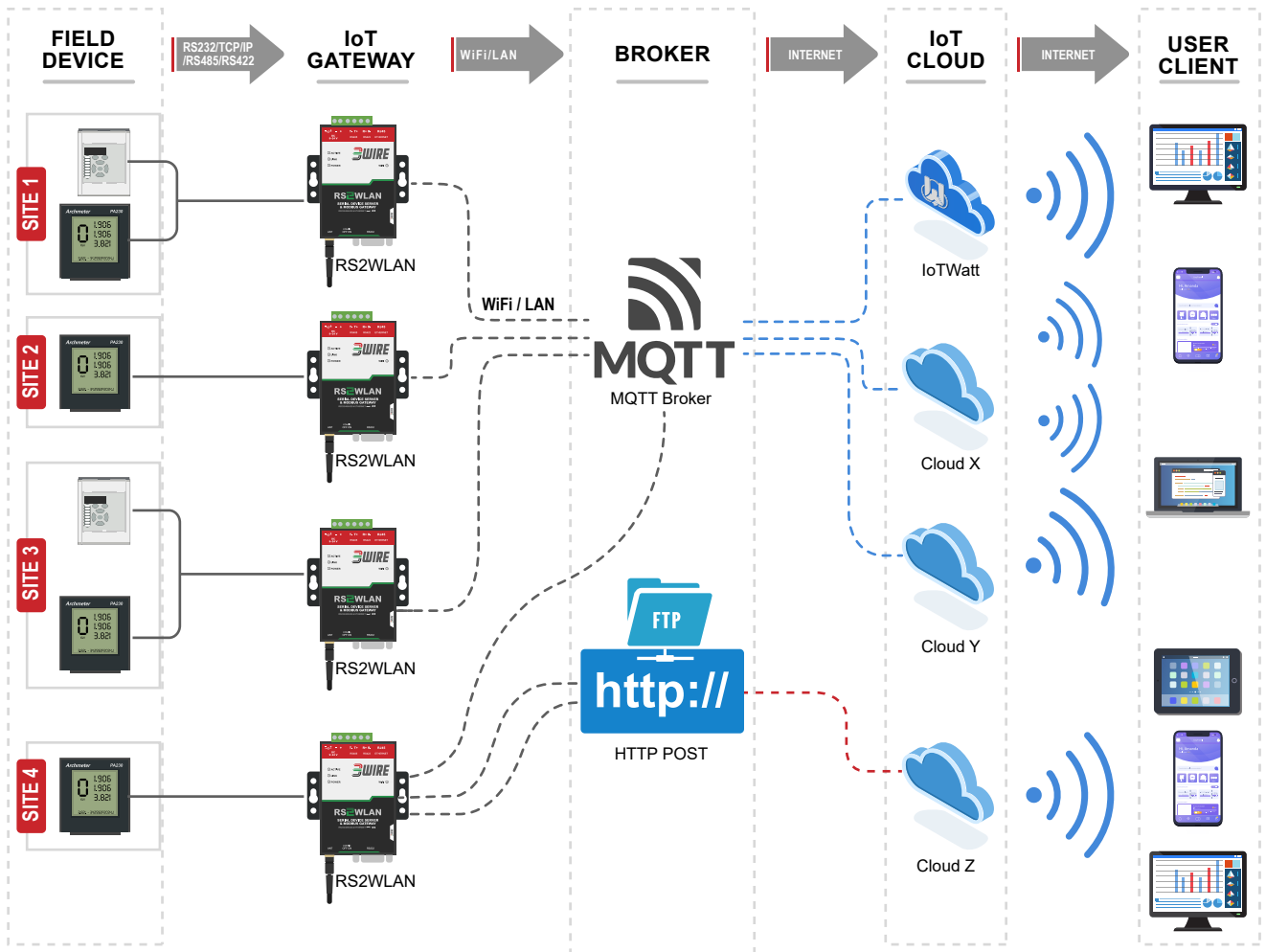
POWER REQUIREMENT	
	9 ~ 48V DC. 80mA@12V : 40mA@24V : 20mA@48V

ENVIRONMENT	
Operation Temperature	-40°C ~ 85°C
Storage Temperature	-45°C ~ 125°C
Humidity	5 ~ 95% RH

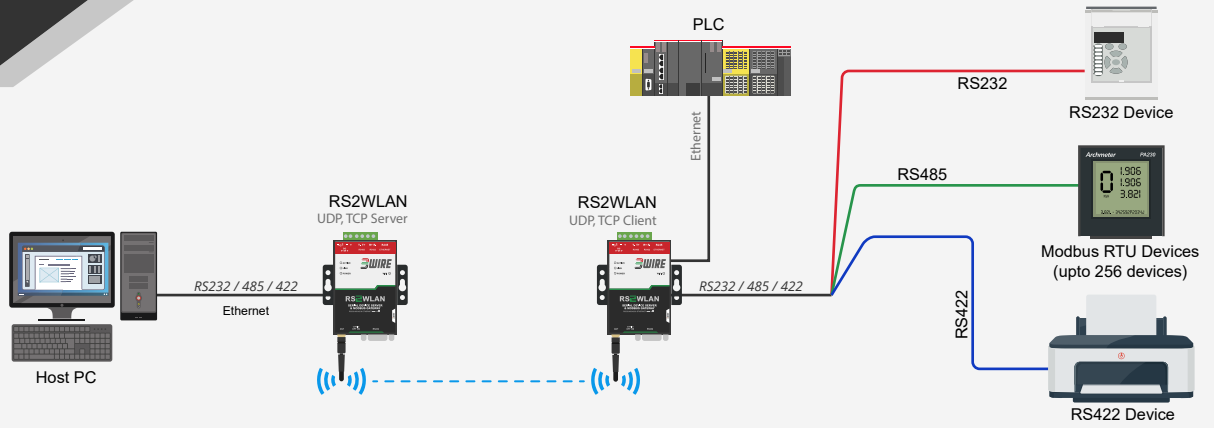
RS2WLAN @ IOT GATEWAY



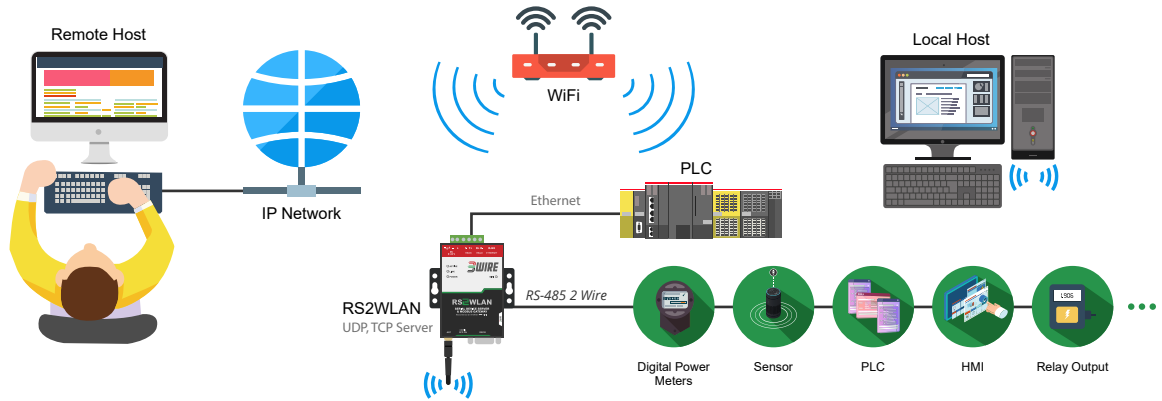
RS2WLAN ~ IOT GATEWAY WITH MQTT & HTTP POST/GET



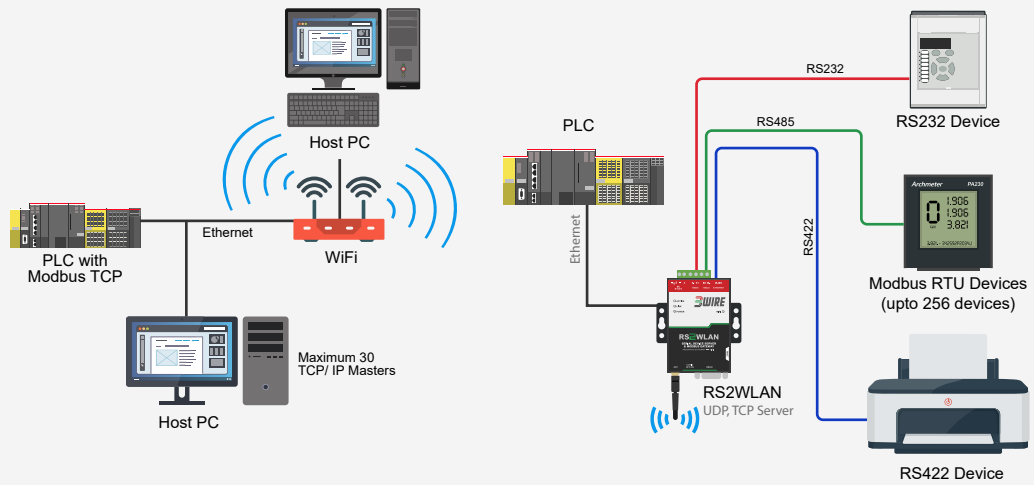
**RS2WLAN
@PAIR MODE**



**RS2WLAN
@BRIDGE MODE**



**RS2WLAN
@MODBUS TCP MASTER
TO SERIAL SLAVE MODE**



**RS2WLAN
@MODBUS TCP SLAVE
TO SERIAL MASTER MODE**

