



Supply Partners RS485WIFI-Pack Product Manual

1.1 Introduction

This manual provides instructions for pairing Supply Partners' RS485-WIFI-2 converters. When purchased as part of the RS485WIFI-PACK, they are pre-programmed for your convenience. Therefore, this guide is only necessary if the factory settings have been altered or require reconfiguration. If you need to configure the converters differently, or if you are working with other models, please contact Supply Partners for guidance and support.

Please read this manual in full **before** commencing installation, and ensure all instructions are followed carefully throughout the process.

If you are unsure about any aspect of the procedures or technical content outlined in this document, we recommend contacting Supply Partners for further guidance or clarification.

The information presented in this manual was accurate at the time of publication. However, product specifications may change without notice. Additionally, illustrations included are intended to clarify configuration concepts and installation steps; actual components at your installation site may vary slightly from the diagrams shown.

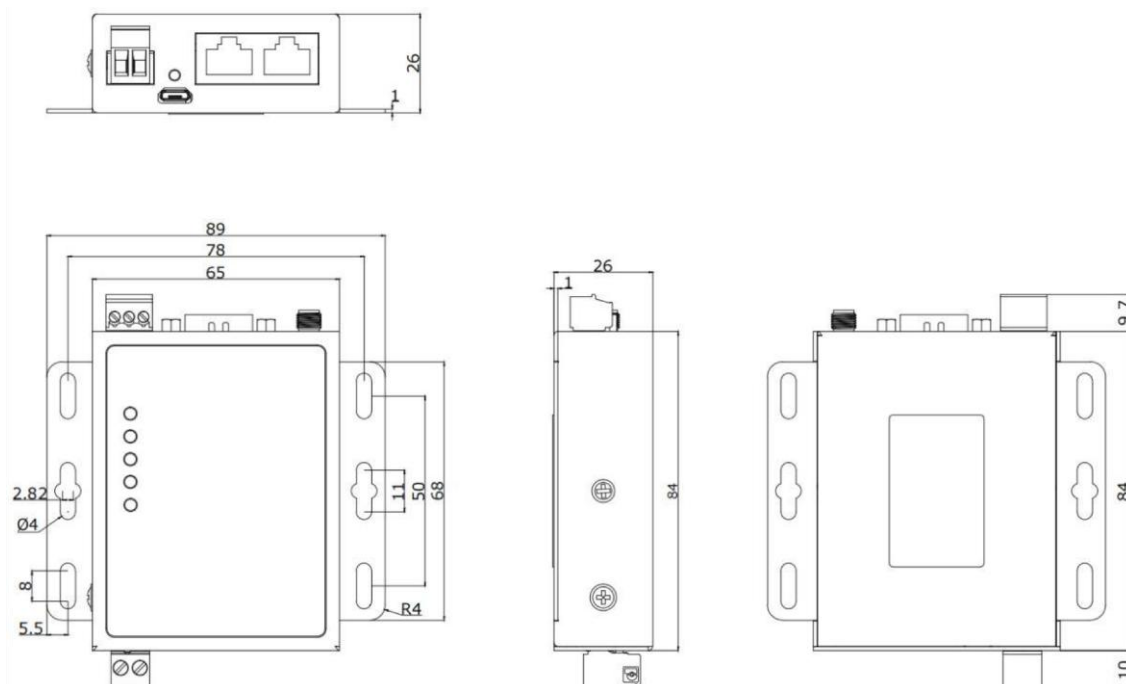
1.2 Warranty

This product is supplied with a 12 month back-to-base manufacturer warranty.

1.3 RS485 to Wi-Fi Converter Usage

Many inverters, monitoring devices, and metering components communicate using the Modbus RTU protocol over RS485. RS485 to Wi-Fi converters enable these communication links to be established wirelessly, effectively replacing a segment of traditional two-wire RS485 cabling.

Dimensions



Specifications

1.4 RS485-WIFI-2 (Qualcomm Variant)

Parameter		Value
Wi-Fi	Wireless standards	IEEE 802.11b/g/n
	Frequency Range	2.412GHz - 2.484GHz
	Wi-Fi mode	AP/STA/AP+STA/Bridging/Routing
	Number of client connections	8
	Data rate	300 Mbps
	MIMO	2x2
	Power out	HT20 (18dBm) ; HT40(17dBm)
	Wi-Fi Connector	SMA Female
DTU	Socket mode	TCPS/TCPC/UDPS/UDPC/MODBUS/MQTT/HTTP/
		Alibaba Cloud/AWS/PUSAR CLOUD
	Heartbeat package/	Support
	Registration package	
	Serial port baud rate	RS232 interface: 1200/2400/4800/9600/19200/38400/57600/115200/230400
		RS485 interface: 1200/2400/4800/9600/19200/38400/57600/115200/230400
	Data bits	7, 8
	Stop bit	1, 2
	Parity bit	NONE, ODD, EVEN
Characteristics	Serial port type	1*RS232/1*RS485
	Operating temperature	-25°C~ +70°C
	Storage temperature	-40°C~+125°C
	Operating humidity	5%~95%RH (no condensation)
	Storage humidity	1%~95%RH (no condensation)
	Service voltage	9-36V DC
	Adapter	12V/1A
	Working Current	Average current 155 mA (12V DC)
		Max current 270 mA at (12V DC)
	Dimensions (L x W x H)	89 x 103.7 x 26mm
	Installation method	Wall mount / horizontal mount
	EMC class	Grade 3
	Interfaces	1*WAN/LAN+1*LAN
		RJ45 interface: 10/100Mbps adaptive, compliant with IEEE802.3
	Indicator light	POWER、WORK、WLAN、RS485、RS232
	Power interface	2P terminal, size 5.08mm* 2P, with reverse polarity protection
	Terminal interface	RS232 interface: DB9
		RS485 interface: 3P Phoenix terminal
	Reset Button	Press and hold for 3 - 15 seconds and then release to restore the factory settings
	Ground protection	Ground screw

Specifications

1.5 AMXW-2400-14E High Gain Antenna

Parameter		Value
Electrical	Frequency range (MHz)	2400 - 2500
	Bandwidth (MHz)	100
	Gain (dBi)	14
	Half-power beam width (°)	H: 30 V: 30
	V.S.W.R.	≤1.5
	Input Impedance (Ω)	50
	Polarization	Vertical
	Maximum input power (W)	50
	Lightning protection	DC Ground
	Cable	80CM RG58-96 Copper
	Input connector type	SMA-MALE
Mechanical	Dimensions (H x W x D)	2f20 x 173 x 25mm
	Weight	0.65kg
	Operating temperature (°C)	-40 ~ 60
	Rated Wind Velocity (m/s)	60
	Radome material	ABS
	Radome colour	White
	Waterproof Standard	IP65
	Installation Method	Pole / Mast Mount
	Mounting hardware (mm)	φ 35 ~ φ 50

1.6 ANT-MOUNT Universal Antenna Mount / Mast

Parameter	Value
Installation Method	Wall / Surface Mount
Dimensions (H x W x D)	439 x 182 x 125mm
Wall Thickness	1.5mm
Material	Galvanized 38mm Steel pipe with White powder coating
Adjustments	Full 90-degree tilt

Important! If extremely high wind speeds are expected at the installation location, a heavy-duty mast should be utilized instead



Before You Begin

1.7 Installation Prerequisites

Ensure the following items are available before beginning the configuration process:

- A laptop, smartphone or tablet with Wi-Fi capability
 - For Mac users, Google Chrome is recommended
 - PC users may use any standard compatible web browser
- An active web browser for accessing the configuration interface

Important Note on RS485 Cabling:

- **Twisted Pair Cable** - Do **not** connect a ground wire.
- **Coaxial Shielded Cable** - Connect the cable shield to **earth ground** to maintain signal integrity and reduce electrical noise.

1.8 Bill of Materials

Component	Quantity
RS485-WIFI-2 Converter	2
12V DC 1.0A AC/DC Power Supply	2
200mm Wi-Fi Omni-Directional Antenna 5 dBi	2
AMXW-2400-14E Wi-Fi Outdoor Directional High Gain Antenna 14 dBi (Recommended)	2
ANT-MOUNT Universal Antenna Mount / Mast	2

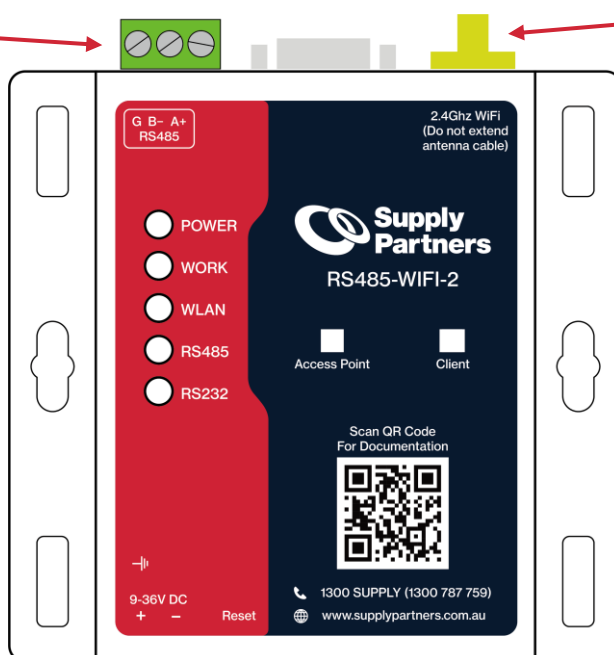
1.9 Connections

RS485
Connection
A = Data (+)
B = Data (-)

SMA Female Connector
For Antenna Connection
**(Do not extend antenna
cable)**

Power Supply
Connection
(9-36V DC)

Device Reset -
Press and hold for 3 - 15
seconds and then release to
restore the factory settings



2.0 Factory Settings

When using the RS485-WIFI-2 for the first time, you can configure the device by either:

- Connecting your PC to the LAN port of the RS485-WIFI-2 (Ensure your PC's IP address is set within the same IP range of the RS485-WIFI-2), or
- Connecting your PC to the RS485-WIFI-2's Wi-Fi network

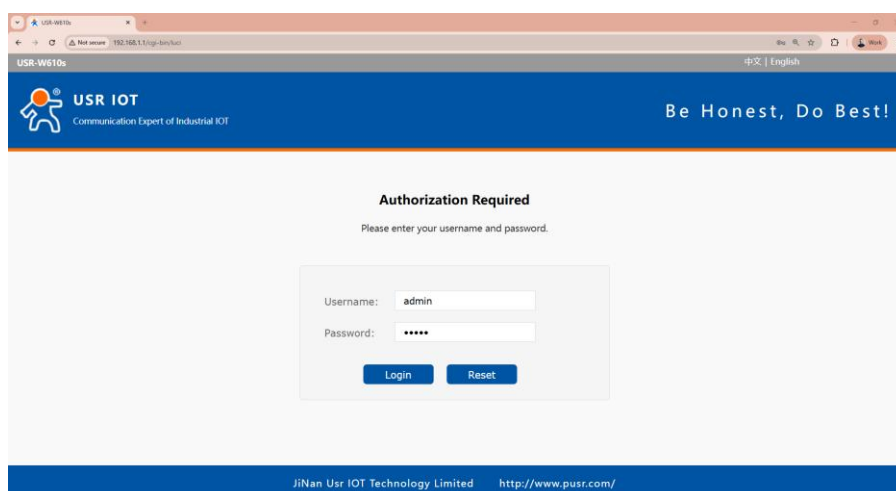
Once connected, access the web management interface via a web browser to complete the configuration process. This interface allows you to set parameters such as the SSID, IP addresses, usernames, and passwords.

Parameter	Default Setting
2.4G SSID	USR-W610s-XXXX
Default IP Address	192.168.1.1
username	admin
password	admin
wireless password	None

Warning! The converters included in the RS485WIFI-PACK are pre-programmed by Supply Partners for your convenience. This manual should only be used if the default settings have been modified or require adjustment due to incorrect configuration.

2.1 Access Point Device Programming

1. Power on one converter only. Ensure the second converter remains powered off during the initial setup process.
2. Reset to factory settings. Press and hold the Reset button on the powered converter for 3 to 15 seconds, then release. This will restore the device to its factory default settings.
3. Connect to the converter's Wi-Fi network. Using a Wi-Fi enabled device (smartphone, PC, or tablet), connect to the wireless network named: USR-W610S-XXXX (Note: The "XXXX" represents a unique identifier for the device.) It is also recommended if using a smartphone to turn-off cellular data.
4. Access the web management interface. Open a web browser and enter the following IP address in the address bar: 192.168.1.1. Enter the username **admin** and password **admin**. This will load the configuration interface for the converter.



Programming

5. In the web management interface, navigate to the **left-hand menu** and click on **“Network”**, then select **“2.4G Wireless AP”** to access the wireless access point settings.
6. Configure the following parameters:
 - **SSID:** RS485WIFI
 - **Encryption:** WPA-PSK (TKIP)
 - **Key (Password):** 12345678
 - **HW Mode:** 11g
 - **Region:** 00 – World
7. Once all fields are correctly configured, click **“Save”** to save the settings.
8. You will be disconnected from the device as your device will now broadcast the new Wi-Fi network **“RS485WIFI”**. Reconnect your smartphone, PC, or tablet to this new SSID.
9. After reconnecting, **refresh your web browser** to continue configuration.

The screenshot shows the USR IOT web management interface. The left-hand menu is expanded to 'Network', and '2.4G Wireless AP' is selected. The main configuration area displays the following settings:

- Enable: ☒
- Hide SSID: ☐
- SSID: RS485WIFI
- Encryption: WPA-PSK(TKIP)
- Key: 12345678
- HW Mode: 11g
- Channel: auto
- HT Mode: HT20
- Regions: 00 - World
- Tx Power: 27

Below the Tx Power field, a note states: "10-27 dbm Attention: The specific transmission power is limited by national codes and channel limitations."

10. Press **“LAN”** in the left-hand menu, and then press **“Edit”**.

The screenshot shows the USR IOT web management interface. The left-hand menu is expanded to 'Network', and 'LAN' is selected. The main configuration area displays the LAN Overview page with the following information:

Network	Status	Actions
LAN br-lan [PORTS: LAN1 WIFI]	Uptime: 23h 34m 35s MAC-Address: D4:AD:20:B9:83:23 RX: 30.57 MB (545830 Pkts.) TX: 54.46 MB (544980 Pkts.) IPv4: 192.168.2.1/24 IPv6: fda6:82bc:2cb4::1/60	Connect Edit

The 'Edit' button is highlighted with a red box.

Programming

11. Ensure “Static address” is enabled and enter the following IPv4 address “**192.168.2.1**” and IPv4 netmask “**255.255.255.0**” and then press “**Save**”.
12. You will be once again be disconnected from the device due to the change in IP address. Reconnect your smartphone, PC, or tablet to this new address (Ensure your PC’s IP address is updated to be within the newly updated IP range of the RS485-WIFI-2).

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AUTO REFRESH ON 中文 | English

USR-W610s

Common Configuration

General Setup

Status

br-lan

Uptime: 23h 37m 57s
MAC-Address: D4:AD:20:B9:83:23
RX: 31.30 MB (559647 Pkts.)
TX: 55.44 MB (556978 Pkts.)
IPv4: 192.168.2.1/24

Protocol: Static address

IPv4 address: 192.168.2.1

IPv4 netmask: 255.255.255.0

IPv4 gateway

IPv4 broadcast

Use custom DNS servers: 8.8.8.8, 223.6.6.6

13. Press “**Serial Server**” in the left-hand menu, then select “**Serial Port Settings.**” Under “**Basic Configuration**” for **COM1-485**, set the **Baud Rate** (typically **9600**) and leave all other settings unchanged. Click “**Apply**” to save.

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USR-W610s

Serial Port Settings

Serial port basic Settings, the package time can be set in the range of 0-1000 ms (0 indicates automatic packaging), package length can be set in the range of 5-1460 bytes.

Basic Configuration

Name	Baud Rate	Data Bits	Stop Bits	Parity	Packaging Interval	Packaging Length
COM1-485	9600	8	1	NONE	0	1000
COM2-232	115200	8	1	NONE	0	1000

485 collision prevention Configuration

485 collision prevention: OFF

Programming

14. Press “**Communication**” in the left-hand menu, then enter “**TCPServer**” for the name, “**TCPS**” for the protocol and ensure Enable is set to “**ON**”. Once done, press “**Add and edit**”.

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- > System Status
- > Network
- > Serial Server
 - Serial Port Settings
 - Communication**
 - Advanced Settings
- > Services Function
- > System
- > Logout

Communication configuration

Communication configuration

Name	Protocol	Enable	Description
This section contains no values yet			

New Channel:

Name	Protocol	Enable	Description
TCPServer	TCPS	ON	Description

[Add and edit...](#)

[Apply](#)

15. Enter “**8899**” in the Local Port field, set the Transmission Mode to “**Pass-Through**” and ensure “**COM1-485**” is selected for the Bind dropdown box. Press “**Apply**” once completed.

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- > System Status
- > Network
- > Serial Server
 - Serial Port Settings
 - Communication
 - Advanced Settings
- > Services Function
- > System
- > Logout

TCPServer - Communication configuration

Communication configuration

Configuration

Enable: ON

Name: TCPServer

Description: TCPServer_1

Local Port: 8899

Maximum Sockets Supported: 8

Exceeding Maximum: KICK

Transmission Mode: Pass-Through

bind: COM1-485

Offline Data Cache: OFF

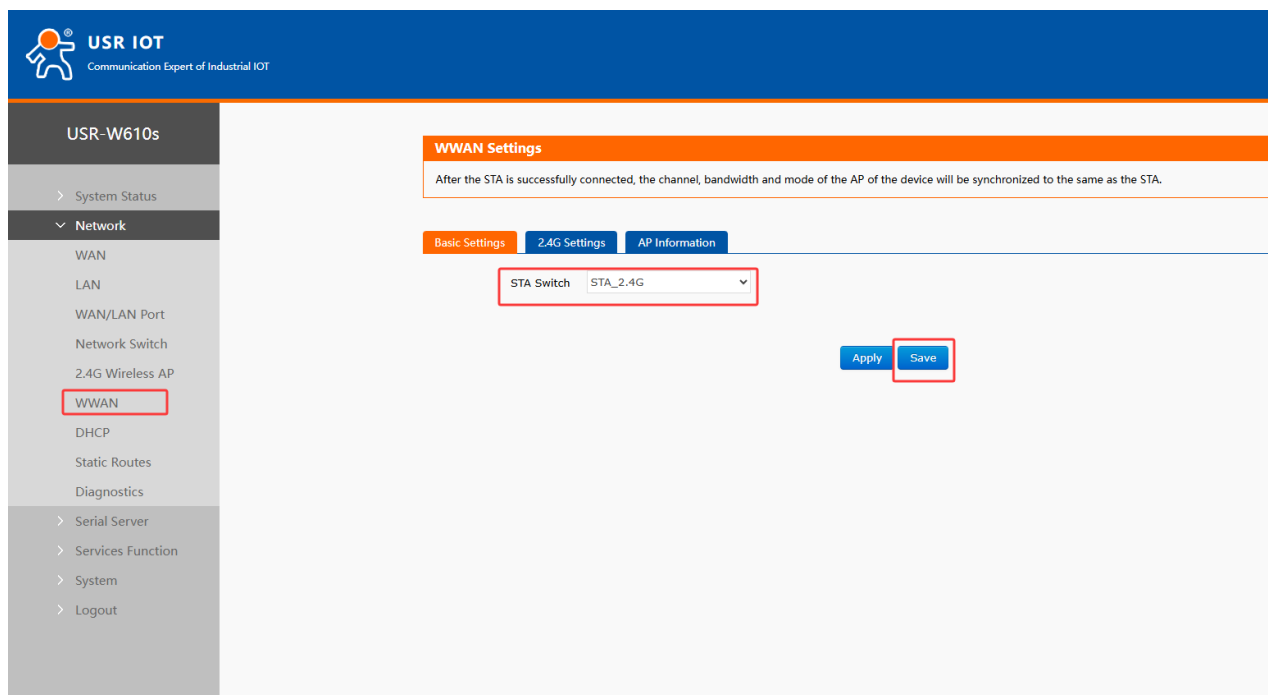
[Back to Overview](#)

[Apply](#) [Save](#)

16. Lastly, press “**Advanced Settings**” in the left-hand menu and scroll down to the “**No Data Configuration**” section. Select “**ON**” for Network Reconnect Without Data, “**3600**” for Reconnect Detection Intervals, “**ON**” for Network Restarting Without Data, “**36000**” for Restart Detection Interval(s) and “**OFF**” for Serial Restarting Without Data. Press “**Apply**” once completed.

2.2 Client Device Programming

1. Ensure the Access Point device is remains powered on and then power on the second converter.
2. Reset to factory settings. Press and hold the Reset button on the powered converter for 3 to 15 seconds, then release. This will restore the device to its factory default settings.
3. Connect to the converter's Wi-Fi network. Using a Wi-Fi enabled device (smartphone, PC, or tablet), connect to the wireless network named: RS485-WIFI-2-XXXX (Note: The "XXXX" represents a unique identifier for the device.) It is also recommended if using a smartphone to turn-off cellular data.
4. Access the web management interface. Open a web browser and enter the following IP address in the address bar:192.168.1.1. Enter the username **admin** and password **admin**. This will load the configuration interface for the second converter.
5. Press "**WWAN**" in the left-hand menu, then in the Basic Settings tab select "**STA_2.4G**" in the STA Switch drop down box. Once done, press "**Apply**".



Programming

- Under the 2.4G Settings tab press the “Scan” button and once done, select “**RS485WIFI**” from the dropdown menu next to SSID. Select “**WPA/WPA2-PSK(TKIP,CCMP)**” Encryption and enter “**12345678**” for the Key. Once done, press “**Apply**”.

The screenshot shows the USR-W610s web interface. The left sidebar lists various settings, with 'Network' expanded. The '2.4G Settings' tab is selected. A red box highlights the configuration fields: SSID (RS485WIFI), BSSID (MAC binding, 00:00:00:00:00:00), Encryption (WPA/WPA2-PSK(TKIP,CCMP)), and Key (12345678). Below these, the network is set to wwan0. The Tx Power is 27. The 'Enable Ping Check' checkbox is unchecked. The 'Apply' and 'Save' buttons are at the bottom right.

- Press “**WAN**” in the left-hand menu and then press “**Edit**” at the right side of the WWAN0 box.

The screenshot shows the WAN Overview page. The left sidebar lists various settings, with 'WAN' selected. The 'WAN Overview' table shows two entries: WAN_WIRED and WWAN0. The WWAN0 entry is highlighted with a red box, and the 'Edit' button next to it is also highlighted. The table columns are Network, Status, and Actions.

- Ensure “Static address” is enabled and enter the following IPv4 address “**192.168.2.2**”, IPv4 netmask “**255.255.255.0**”, IPv4 gateway “**192.168.2.1**” and then press “**Save**”.

The screenshot shows the WAN - WWAN0 General Setup page. The left sidebar lists various settings, with 'WAN' selected. The 'General Setup' tab is selected. A red box highlights the configuration fields: Protocol (Static address), IPv4 address (192.168.2.2), IPv4 netmask (255.255.255.0), and IPv4 gateway (192.168.2.1). The 'Status' section shows the client name 'WIFI-STA' and MAC address 00:00:00:00:00:00. The 'IPv4 broadcast' and 'Use custom DNS servers' fields are empty. The 'Save' button is at the bottom right.

Programming

- You will be once again be disconnected from the device due to the change in IP address. Reconnect your smartphone, PC, or tablet to this new address (**192.168.2.2**).
- Press “**Serial Server**” in the left-hand menu, then select “**Serial Port Settings.**” Under “**Basic Configuration**” for **COM1-485**, set the **Baud Rate** (typically **9600**) and leave all other settings unchanged. Click “**Apply**” to save.

The screenshot shows the USR IOT web interface. The left-hand menu is expanded to 'Serial Server', and 'Serial Port Settings' is selected. The main content area is titled 'Serial Port Settings' and contains a 'Basic Configuration' table. The table has columns: Name, Baud Rate, Data Bits, Stop Bits, Parity, Packaging Interval, and Packaging Length. There are two rows: COM1-485 and COM2-232. The Baud Rate for COM1-485 is set to 9600. Below the table is a '485 collision prevention Configuration' section with a dropdown menu set to 'OFF'.

Name	Baud Rate	Data Bits	Stop Bits	Parity	Packaging Interval	Packaging Length
COM1-485	9600	8	1	NONE	0	1000
COM2-232	115200	8	1	NONE	0	1000

- Press “**Communication**” in the left-hand menu, then enter “**TCPClient**” for the name, “**TCPC**” for the protocol and ensure Enable is set to “**ON**”. Once done, press “**Add and edit**”.

The screenshot shows the USR IOT web interface. The left-hand menu is expanded to 'Serial Server', and 'Communication' is selected. The main content area is titled 'Communication configuration' and contains a table with columns: Name, Protocol, Enable, and Description. The table is empty, and a message below it says 'This section contains no values yet'. Below the table is a 'New Channel:' section with a table that has columns: Name, Protocol, Enable, and Description. The 'Name' field is set to 'TCPClient', the 'Protocol' is set to 'TCPC', and the 'Enable' dropdown is set to 'ON'. The 'Description' field is empty. There is an 'Add and edit...' button next to the 'Description' field. Below the table is an 'Apply' button.

Name	Protocol	Enable	Description
TCPClient	TCPC	ON	

Programming

14. Ensure the below settings are set and then press **“Apply”** :

- Name **“TCPClient”**
- Description **“TCPC_1”**
- Server Address **“192.168.2.1”**
- Server Port **“8899”**
- Local Port **“0”**
- Transmission Mode **“Pass-Through”**
- Bind **“COM1-485”**
- TLS **“OFF”**

USR-W610s

- > System Status
- > Network
- > Serial Server
 - Serial Port Settings
 - Communication
 - Advanced Settings
- > Services Function
- > System
- > Logout

TCP - Communication configuration

Communication configuration

Configuration

Enable: ON

Name: TCPClient

Description: TCPC_1

Server Address: 192.168.2.1

Server Port: 8899

Local Port: 0

Heartbeat Packet: OFF

Registry Packet: NONE

Transmission Mode: Pass-Through

bind: COM1-485

TLS: OFF

Offline Data Cache: OFF

15. Lastly, press **“Advanced Settings”** in the left-hand menu and scroll down to the **“No Data Configuration”** section. Select **“ON”** for Network Reconnect Without Data, **“3600”** for Reconnect Detection Intervals, **“ON”** for Network Restarting Without Data, **“36000”** for Restart Detection Interval(s) and **“OFF”** for Serial Restarting Without Data. Press **“Apply”** once completed.

16. Confirm that both devices now have solid **“POWER”** LED's and flashing **“WORK”** LED's. The device that was programmed as a station should also have a Green flashing **“WLAN”** LED.

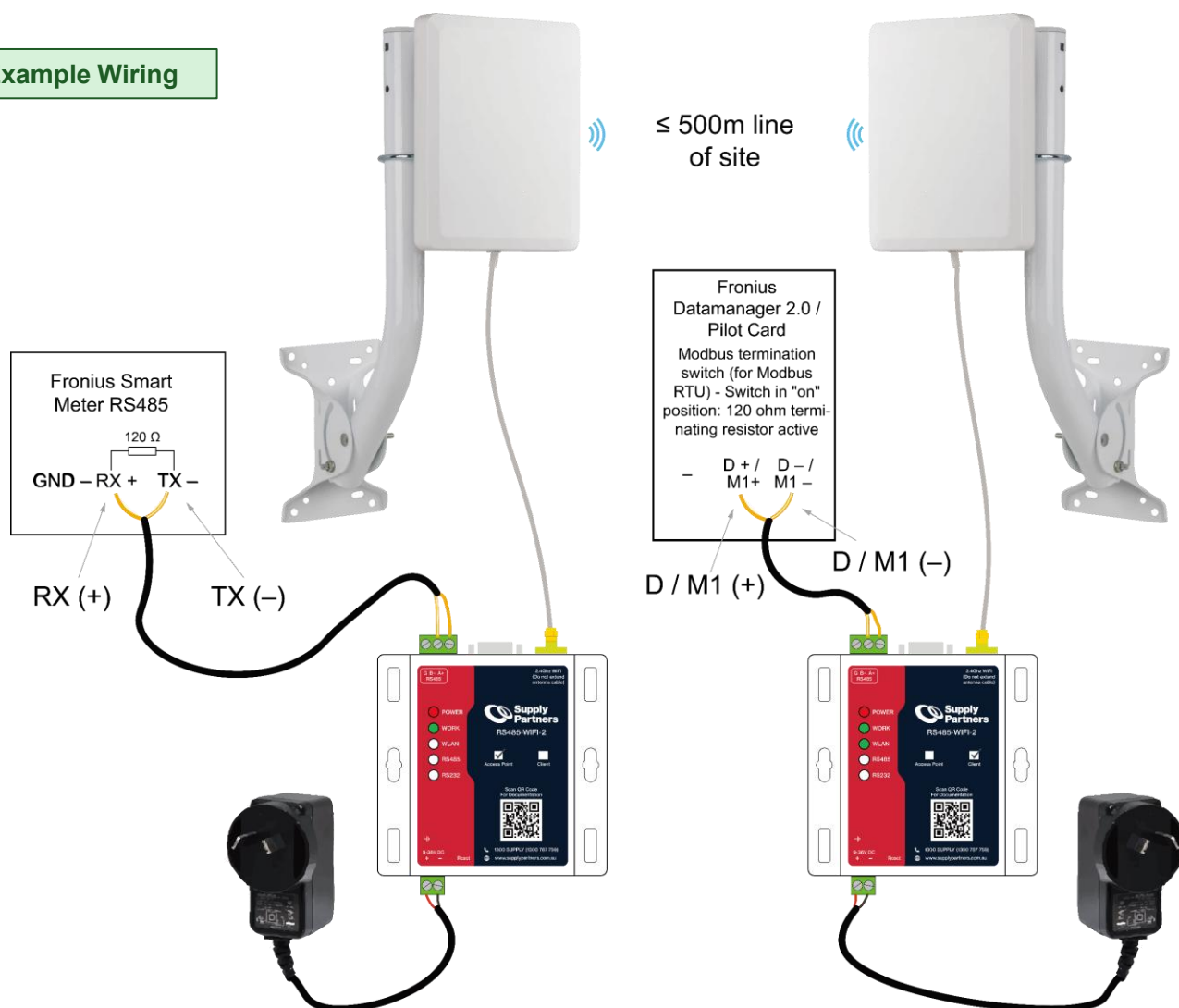


Completing Installation

3.0 Wiring

- Once the two **RS485-WIFI-2** converters are successfully paired, connect the RS485 input cables to both units according to the inverter and meter manufacturer's documentation. Be sure to observe the below wiring and ensure all connections are secure. Double-check polarity to void communication issues
 - RS485 +** should be connected to the converter's **RS485 A** terminal
 - RS485 -** should be connected to the converter's **RS485 B** terminal
 - The **RS485 G** terminal on the converter is **not required** and can remain unconnected
- Securely screw the **SMA Male connector** of the antenna onto the **SMA Female connector** of each RS485-WIFI-2 converter. If using the **AMXW-2400-14E** Wi-Fi Outdoor Directional High Gain Antenna (14 dBi) recommended and included by Supply Partners - do not extend the included 800mm RG58 coaxial cable, as doing so may degrade performance and affect reliability. Instead, Supply Partners strongly recommends extending the RS485 communication cable and/or the power supply cable to meet installation distance requirements.

Example Wiring



	63A/1PH	63A/3PH	50kA-3	IP	WR
RX +	33	A	33	M+	D+
RX -	34	B	34	M-	D-

Completing Installation

3.1 Antenna Placement

Precise alignment is critical when installing the AMXW-2400-14E 14 dBi directional antenna, as it features a narrow 30° horizontal and vertical beamwidth. To achieve optimal signal strength and long-term reliability, follow the guidance below:

Alignment Accuracy

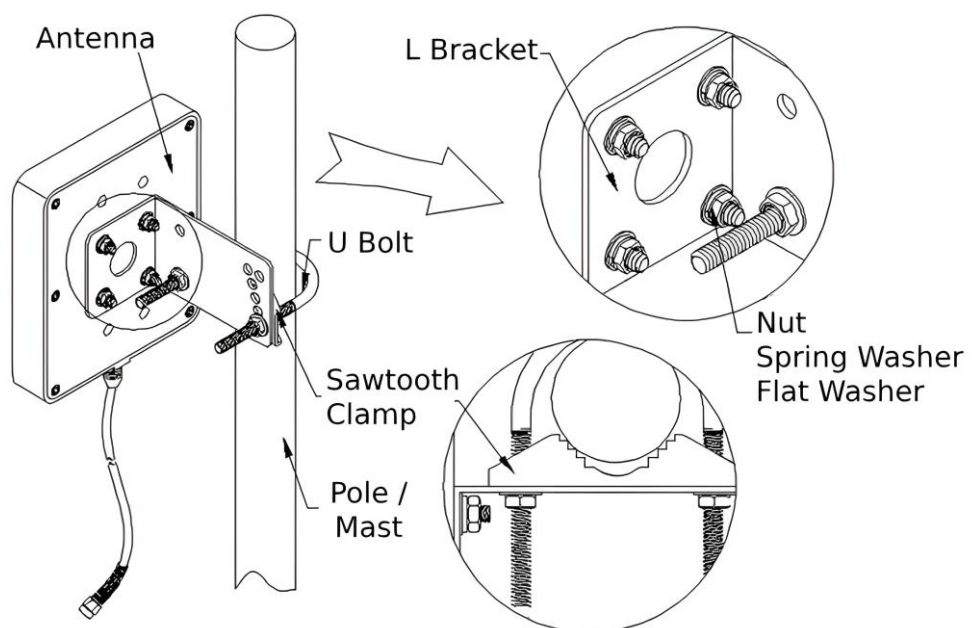
- Aim with precision: The narrow beamwidth requires careful directional targeting to ensure a stable wireless link.
- Use the WLAN LED on the Client-side RS485-WIFI-2 converter as a real-time signal strength indicator to assist with fine-tuning the antenna direction during installation.

Avoiding Multipath Interference

- For optimum performance, mount the antenna at least 2–3 m above ground level to reduce signal reflection from the ground and surrounding structures.
- Ensure clear line-of-sight between antennas. Obstructions such as trees, buildings, or metallic surfaces can cause signal degradation or dropouts.

Important! Mounting Considerations

- After aligning the antenna, double-check all nuts and fasteners on the L-bracket and mounting hardware to ensure they are firmly secured.
- For sites exposed to high wind conditions, Supply Partners recommends installing the antenna on a heavy-duty mast to enhance mechanical stability.
- Avoid modifying or extending the supplied 800 mm RG58 coaxial cable, as doing so may significantly impact performance. If extended reach is needed, extend the RS485 or power cabling instead.
- The AMXW-2400-14E antenna is IP65 rated and suitable for outdoor installation, however the RS485-WIFI-2 converters are not and should be installed in a suitably rated enclosure/switchboard using appropriate cable glands or grommets to prevent moisture ingress.



4.0 LED Indicator Reference Table

LED	State	Description
POWER	Solid Red	Device is powered on
WORK	Flashing Green	Device is operating normally
WLAN	OFF	Programmed as an Access Point rather than a client
	Solid Green	Connected to access point, RSSI > -60 dBm, no data being communicated
	Flashing Green	Connected to access point, RSSI > -60 dBm, data is being communicated
	Solid Red	Connected to access point, RSSI < -60 dBm, no data being communicated
	Flashing Red	Connected to access point, RSSI < -60 dBm, data is being communicated
RS485	Flashing Red	Uplink data is being transmitted from the converter to external RS485 device
	Flashing Green	Downlink data is being received from the external RS485 device to the converter

4.1 Common Faults and Troubleshooting Steps

RS485 LED Is Not Rapidly Flashing Green & Red

Possible Causes:

- A. Incorrect RS485 cable wiring.
- B. Wireless devices programmed with incorrect Modbus parameters.
- C. Inverter requires commissioning
- D. Inverter compatibility issue

Resolution:

- A:
- Ensure the RS485 A+ and B- terminals of the RS485-WIFI-2 converters are used for RS485 connection, do not use the RJ45 connections.
 - A shielded twisted pair (STP) should be used – if using cable with multiple pairs, ensure to use colours from the same pair. I.e. Blue/White (+) and Solid Blue (0).
 - On the RS485-WIFI-2 converters, 'RS485 A' = + and 'RS485 B' = -, ensure these are connected to the corresponding terminals on the inverter and smart meter – refer to the manufacturers documentation.
 - Ensure the RS485 cables are fitted securely into the terminals. Try re-terminating your connections and utilise bootlace terminals.
 - Refer to the smart meter installation guide and ensure any termination resistors/dip switches are fitted and/or enabled at the smart meter and inverter (if required).
- B:
- Ensure that the baud rate programmed into each RS485-WIFI-2 converter matches the baud rate of the inverter. By default Supply Partners programs the converters with a baud rate of 9600. To confirm this, Log into the Wi-Fi interface of the RS485WIFI SSID and access each device by browsing to 192.168.2.1 and 192.168.2.1

C:

- Many inverters will not commence sending and receiving data until during the inverter commissioning process, this is the case such as all Fronius inverters and the Sungrow CX series.
- If the energy meter is unable to be detected during commissioning, follow all other troubleshooting steps accordingly.

D:

- Supply Partners strongly recommends using approved brands and models with the RS485WIFI-PACK. While compatibility is essential, it is equally important to confirm that the inverter manufacturer permits the use of wireless communication devices.
- For a current list of validated and supported inverter brands and models, or for further guidance on wireless integration, please contact Supply Partners directly

WLAN LED Not Illuminating Green

Possible Causes:

- A. Not programmed as a Client.
- B. Poor Wireless Signal

Resolution:

A:

- Each RS485WIFI-PACK includes two RS485-WIFI-2 converters: One unit is pre-configured and marked as an "Access Point", the other as a "Client".
- To identify the roles during installation, the Access Point unit will not display an illuminated WLAN LED and the Client unit should have an active WLAN LED, indicating its Wi-Fi status (as described in the LED Indicator Table).
- If both units have unlit WLAN LEDs, it is likely that both have been incorrectly programmed as Access Points. Reprogram one unit as a Client by following the steps outlined in Section 2.2 of this manual.
- Once reconfigured, the Client's WLAN LED should illuminate according to its connection status.

B:

- A red WLAN LED on the Client RS485-WIFI-2 converter indicates a weak or degraded wireless signal (RSSI worse than -60 dBm). This can negatively impact communication reliability and data throughput.
- Ensure that the correct antennas are selected for the application and that a clear, unobstructed line-of-sight exists between both antenna units. Physical obstructions such as walls, metallic surfaces, or dense vegetation can cause signal attenuation or multipath interference.
- The included high-gain AMXW-2400-14E directional antennas feature a 30° horizontal and vertical beamwidth, making precise alignment essential. If poor signal quality is detected, reposition the antennas using the alignment guidance provided in Section 3.1 to achieve optimal orientation and link stability.
- Once adjustments are made, you can evaluate wireless performance by logging into the RS485WIFI SSID via a web browser. From the interface, monitor the Signal-to-Noise Ratio (SNR) and Received Signal Strength Indicator (RSSI) values to verify that conditions meet the recommended thresholds for stable operation.

Additional Support



**Supply Partners Pty Ltd
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