WiFi RS-422/485 Serial Adapter
Model: S2W485IV2 (Internal antenna)
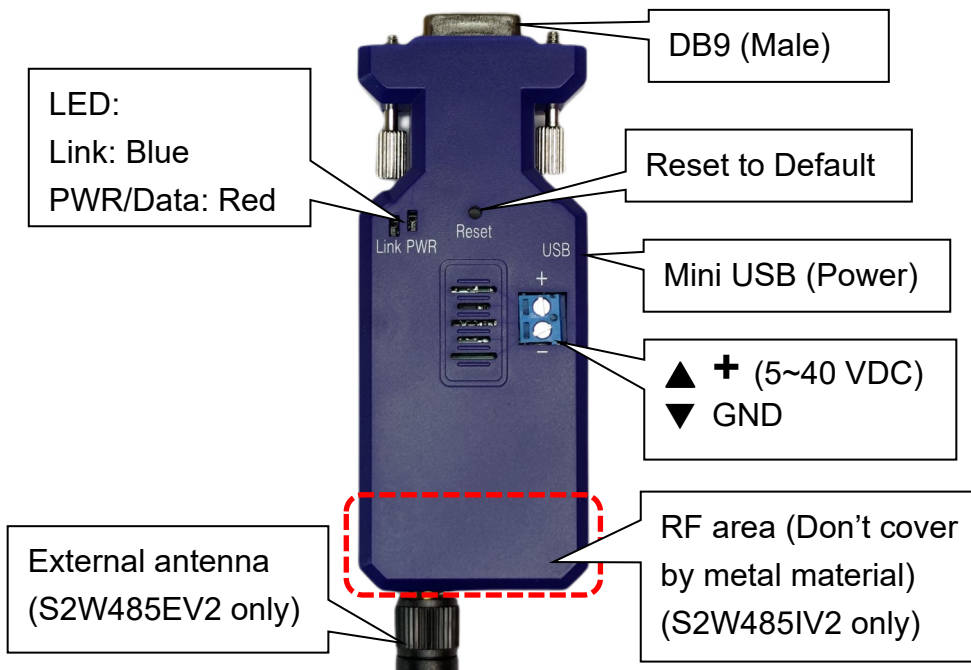## Model: S2W485EV2 (External antenna)

1. Package content:

WiFi RS-485 adapter White Box Dimension: 11 x 6 x 5 (cm) Total Package Weight: 108 g (Internal antenna); 116 g (External antenna) 	Package Contents: ● WiFi RS-485 adapter x 1 ● A4 User manual x 1 ● Mini USB Cable x 1 ● 6P Terminal block x 1 The antenna is for S2W485EV2 only.

2. Profile:

2.1 Top view:

DB9 (Male)

LED:
Link: Blue
PWR/Data: Red

Reset to Default

Mini USB (Power)

▲ **+** (5~40 VDC)
▼ GND

External antenna
(S2W485EV2 only)

RF area (Don't cover by metal material)
(S2W485IV2 only)

2.2 Rear Side:

Slide switch for RS-422 or RS-485

2.3 DB9 connector (Male) & 6P Terminal block
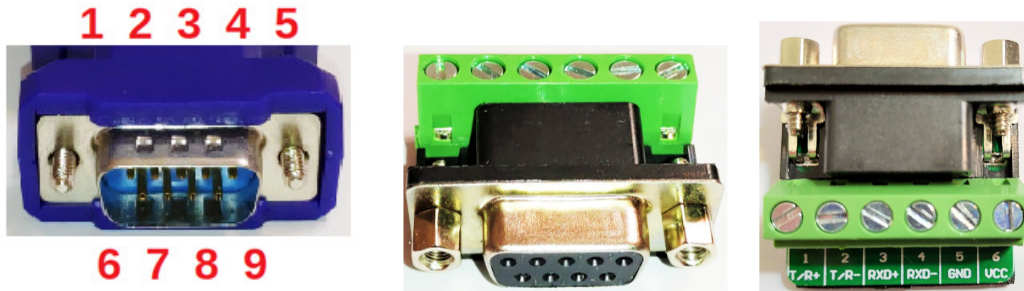
No.	Function	Remark
1	A (RX+)	D+, A=Y (RS-485)
2	B (RX-)	D-, B=Z (RS-485)
3	Y (TX+)	
4	Z (TX-)	
5	GND	
6	Vin-1	5-40VDC, Vin-1 or Vin-2 choose one
7	N/A	
8	N/A	
9	Vin-2	5-40VDC, Vin-1 or Vin-2 choose one

3. Power supply:

3.1 Voltage: 5~40 VDC, **Don't exceed the limit.**

3.2 There're 3 ways to power the adapter: Mini USB, 2P Terminal Block (Blue) and pin9 of DB9, please choose one. **Don't power the adapter by more than one source.**

3.3 The mini USB to type A cable is inside the standard package.

4. Specifications:

4.1 Default value:

- Baud rate: 9,600 bps
- Data bit: 8
- Parity: none
- Stop bit: 1
- Flow control: none
- SSID: S2W232-abcd (abcd means the last 4 code of the Mac. address)
- Configuration Webpage IP: 192.168.0.3
- Socket: TCP server, Port: 5000
- Log in ID: admin, PWD: admin

4.2 Serial Port:

- Baud Rate: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400 bps
- Data bit: 5,6,7,8

- Parity: none, even, odd
- Stop bit: 1,1.5,2
- Flow control: None, RTS, CTS, RTS+CTS

4.3 Support Wi-Fi 2.4 GHz 802.11b/g/n

4.4 Transmit Power:

802.11b: +19dBm(Max.@11Mbps，CCK)

802.11g: +18dBm(Max.@54Mbps，OFDM)

802.11n: +16dBm(Max.@HT20，MCS7)

4.5 Receive Sensitivity:

802.11b: -85 dBm(@11Mbps，CCK)

802.11g: -70 dBm(@54Mbps，OFDM)

802.11n: -68 dBm(@HT20，MCS7)

4.6 Operating Current (work with 3.3V power supply)

AP: 74mA (average), 285mA (peak)

STA: 32mA (average), 196mA (peak)

4.7 Support WPA/WPA2 security mode.

4.8 Socket: TCP Server, TCP Client, UDP Server, UDP Client

4.9 Wireless Network Type: AP, Station, AP+Station

4.10 Security: WPA-PSK/WPA2-PSK

4.11 Encryption: TKIP, AES

4.12 User Configuration: Webpage setting

4.13 Support TCP Server/Client, Http Client, Https Client

4.14 Operation Temperature: –20 ℃ to +85 ℃

4.15 Dimensions: 81.6 mm (L) x 31.75 mm (W) x 17 mm (H), Antenna: 10 cm

4.16 Antenna Gain: max. 2 dB (default)

Remark: All contents are subject to change without notice.
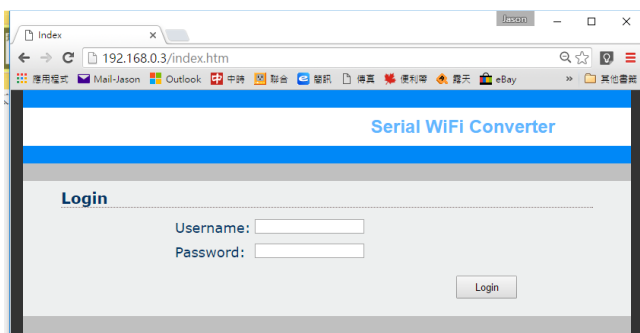

5. Configuration:

Step1: Connect the SSID of the adapter named "S2W232-abcd"

Step2: http://192.168.0.3 on browser

Step3: Log in

Username: admin

Password: admin

Serial WiFi Converter

Logout

| Basic | Advanced | WiFi | WiFi Wizard | Status |

Serial Settings

Device Name:	DSM1

Device name can be up to 16 characters.

Data Baud Rate:	9600
Data Bits:	8
Data Parity:	None
Stop Bits:	1
Flow Control:	None

Serial to Network Settings

Server/Clinet mode:	Enable
Operation Mode:	Socket
Connection Type:	TCP
Server/Client Mode:	Server
Server Listening Port:	5000

Please enter an integer between 10~65535.

TCP Server Connections:	3

This is effective only for TCP server under Socket or VCOM mode.

| Save | Apply |

230400
115200
57600
38400
19200
9600
4800
2400
1200

Baud rate

5
6
7
8

Data bits

None
Odd
Even

Parity

1
1.5
2

Stop bit

None
RTS
CTS
RTS+CTS

Flow control

Operation Mode:	Socket
Connection Type:	TCP
Server/Client Mode:	Client
Client Destination Host Name/IP:	192.168.0.2

Please enter host name or IP address(e.g. google.com or 10.4.1.100).

Client Destination Port:	5000

Please enter an integer between 1024~65535.

Connection Type:	TCP
	TCP
	UDP
	Http client

TCP Server Connections:	3 ⌄
	1
	2
	3
	4

Operation Mode:	Socket ⌄
Connection Type:	UDP ⌄
Server Listening Port:	5000
	Please enter an integer between 10~65535.
Client Destination Host Name/IP:	192.168.0.2
	Please enter host name or IP address(e.g. google.com or 10.4.1.100).
Client Destination Port:	5000
	Please enter an integer between 1024~65535.

HTTP client request method:	POST ⌄
	GET
	POST

HTTP client request content-type:	multipart/form-data ⌄
	application/x-www-form-urlencoded
	application/json
	multipart/form-data
	text/xml

HTTP client request transport type:	HTTP_TRANSPORT_OVER_TCP ⌄
	HTTP_TRANSPORT_OVER_TCP
	HTTP_TRANSPORT_OVER_SSL

Firmware upgrade:

Serial WiFi Converter

Logout

| Basic | Advanced | WiFi | WiFi Wizard | Status |

Firmware Upgrade

Image url:

Please inpute the image url path for firmware upgrade.

[Upgrade]

Site survey for station configuration:

Serial WiFi Converter

Logout

| Basic | Advanced | WiFi | **WiFi Wizard** | Status |

Welcome to the WiFi Setup Wizard

Use site survey tool to join a WiFi AP.

ID	BSSID	SSID	TYPE	CH	SIGNAL	SECURITY
0	d4:5d:64:9d:52:d8	ASUS_D8_2G	Infra	11	-24	WPA2_PSK
1	40:9b:cd:a9:65:56	CHT48617	Infra	1	-54	WPA2_PSK
2	f8:1d:0f:3b:53:28	liao	Infra	6	-87	WPA_WPA2_PSK
3	78:44:76:de:cf:08	flyflyhomewifi	Infra	11	-89	WPA2_PSK
4	40:9b:cd:16:c6:63	.1.Free Wi-Fi	Infra	10	-94	OPEN
5	40:9b:cd:16:c6:61	CHT Wi-Fi(HiNet)	Infra	10	-95	OPEN
6	bc:4d:fb:65:eb:f8	ruel ying	Infra	11	-98	WPA_WPA2_PSK

Status: Scanning...OK

[Scan]   [Next]

WiFi setting list:

Serial WiFi Converter

Logout

| Basic | Advanced | WiFi | WiFi Wizard | **Status** |

System Status

Device Type:	WiFi to RS232
WiFi Mode:	AP mode
WiFi Connect SSID:	-
Network Mode:	TCP Server
Firmware Version:	0.0.0.8
WiFi MAC address(Hex):	84:cc:a8:60:ba:45
Client 1 IP & MAC:	IP: 192.168.0.4 , MAC: 68:14:01:8c:5f:e5
Client 2 IP & MAC:	-
Client 3 IP & MAC:	-
Client 4 IP & MAC:	-
Client 5 IP & MAC:	-

Serial WiFi Converter

Logout

| Basic | Advanced | **WiFi** | WiFi Wizard | Status |

System Settings

Network Mode:	AP
Max connect device:	8
AP Channel:	8
Service Area Name/SSID:	S2W23260ba45 Hide SSID: ☐
Security Mode:	Open

AES/TKIP Encryption Key Settings

AES/TKIP Passphrase:	12345678
	Please enter a string between 8~63 digits in length.

Static IP Settings

Static IP Address:	192.168.0.3
Static Default Gateway:	192.168.0.3
Static Subnet Mask:	255.255.255.0
Static DNS Server:	168.95.1.1

DHCP Settings

DHCP:	Disable

[Save]   [Apply]

Network Mode: AP
- Station
- AP

Network Mode: AP
Max connect device: 8
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Security Mode: Open
- Open
- WPA PSK
- WPA2 PSK
- WPA2 AES PSK

AP Channel: 8
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

6. Network topology
6.1 AP mode (Default)
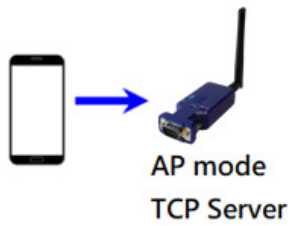
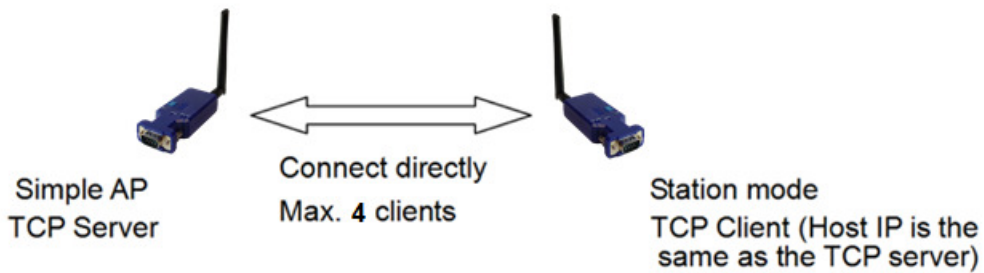## 6.2 Station mode

6.3 TCP Client

6.4 One to up to 4 broadcast

7. 3rd party test software

7.1 Teraterm: TCP client, COM port (ASCII only)
   https://ttssh2.osdn.jp/index.html.en

7.2 AccessPort: COM port (Hex, ASCII)
   http://www.sudt.com/en/ap/

7.3 Sockettest: TCP server or Client
   https://sourceforge.net/projects/sockettest/

7.4 Virtual COM port driver-1

https://www.virtual-serial-port.org/

7.5 Virtual COM port driver-2

http://www.eterlogic.com/Products.VSPE.html

8. Test APP: The APP is used for the configuration and the data transmission test.
Download:

| **Android APP** | **iOS APP** |

Android:

https://play.google.com/store/apps/details?id=com.ucconnect.uctcpipadapter_hex

iOS:

https://apps.apple.com/us/app/tcp-ip-to-serial-terminal/id1238054234?l=zh&ls=1

Screenshot of the APP: