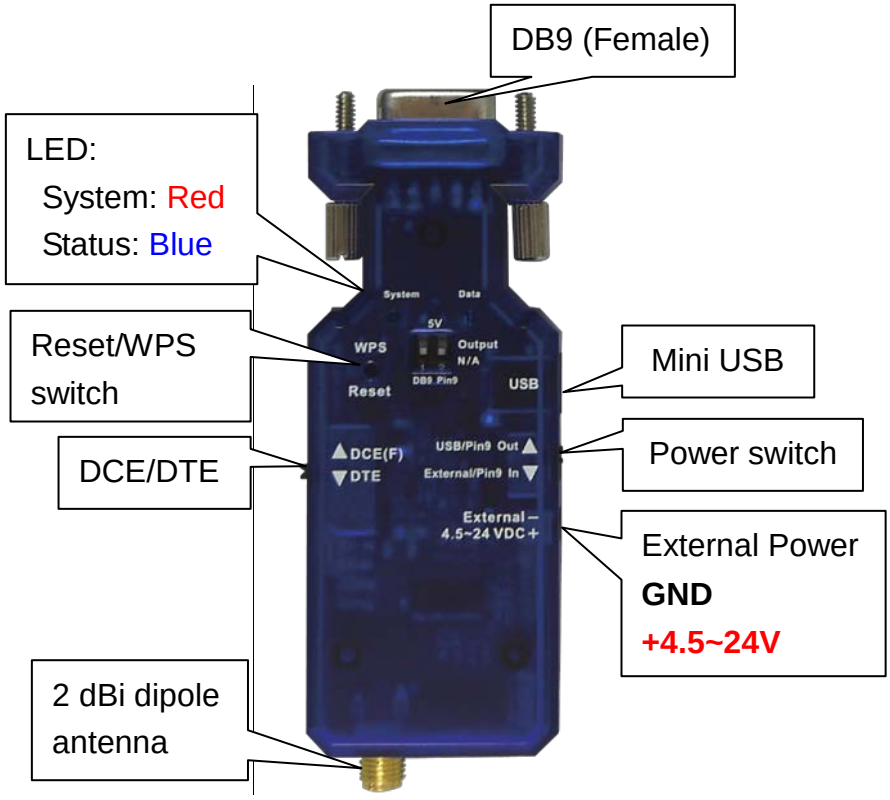
# WiFi to RS-232 adapter user manual

| WiFi to RS-232 adapter | Package Contents: |
|---|---|
|  <br>White Box Dimension: 11 x 6 x 5 (cm)<br>Total Package Weight: 126 g | ● WiFi RS-232 adapter x 1<br>● 2 dBi dipole antenna x 1<br>● A4 User manual x 1<br>● USB Cable x 1<br>● Power cable x 1<br>  |

1. Product profile:




2. Start to use the adapter

2.1 Please fasten the external antenna to the adapter.

2.2 Power input: Mini USB cable (5VDC) or DB9 connector Pin 9 (5VDC) or **external power supply (4.8~24VDC, 1.0 A Max.)**, please choose 1 source.

2.3 COM port default setting:

- Baud rate: 115,200 bps
- Data bit: 8
- Parity: none
- Stop bit: 1
- Flow control: none

2.4 Network default setting:

- Simple AP with DHCP server
- SSID: Serial2WiFi_ab_cd (“ab” and “cd” is the last 4 code of Mac address)
- Security(WPA2): 12345678
- IP: 192.168.10.1
- Socket port: 8080
- Channel: 6
- Log in ID: admin
- Log in password: admin

2.5 DCE/DTE switch: DCE side. The switch will swap TX,RX,CTS,RTS of the COM port. Generally, DCE side for PC or NB setup. The user will test and switch to the correct side for the remote device.

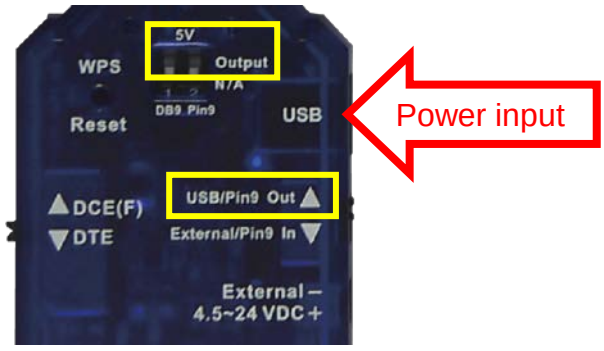
3. DB9 Pin9 Power Input or Output:

3.1 External Power input or DB9 Pin 9 Power input: The two DIP switches toward N/A side by default. **Please do not switch any DIP switch toward the 5V side when the power switch is in the “External/Pin9 In” side.**


Remark: The power cable is used for the external power input which support larger range of voltage, 4.5~24VDC.

3.2 DB9 Pin 9 Power output:

The DB9 Pin9 will power the external device by 5VDC via DB9 Pin9 when the power input comes from USB only. **Please choose the USB adapter which will power larger than 1000mAh and do not power the external device which will consume exceed 100 mAh.**




3.3 The RS-232 temperature/humidity sensor, active RFID reader or other sensors will be powered by the DB9 pin9 directly without extra power supply. If you need the options, please contact the suppliers.

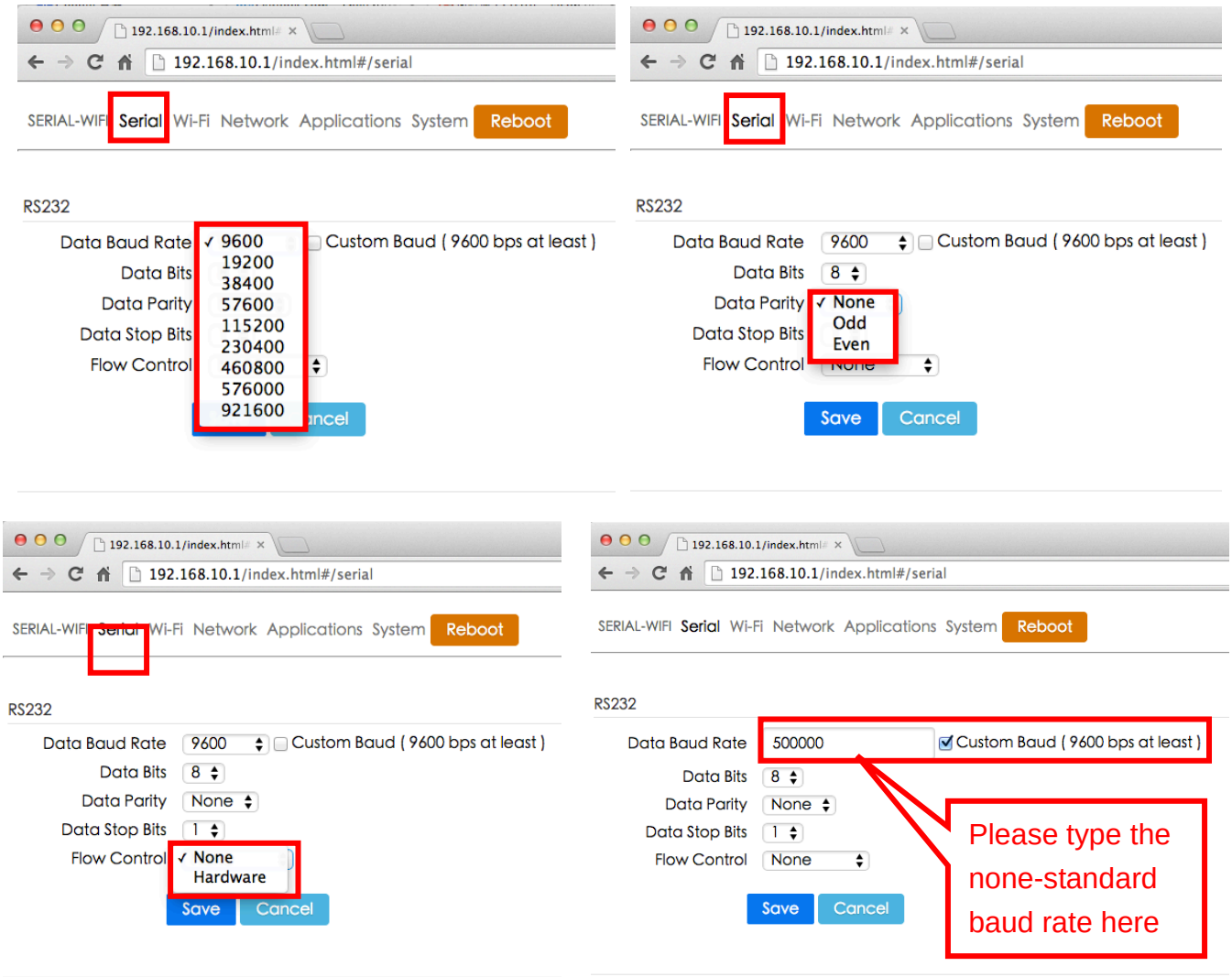
# 4. Configuration:

## 4.1 Log in:

- Connect with the WiFi RS-232 adapter by PC,NB or Mobile terminal
- SSID: Serial2WiFi_ab_cd (abcd: Last 4 code of the Mac address)
- Security code: 12345678
- Execute browser, type IP address: 192.168.10.1
- ID: admin
- Password: admin

## 4.2 Serial setting:

- Baud Rate: 9600~921600 bps
- Data Bits: 8 only
- Parity: None, Odd, Even
- Stop Bits: 1 only

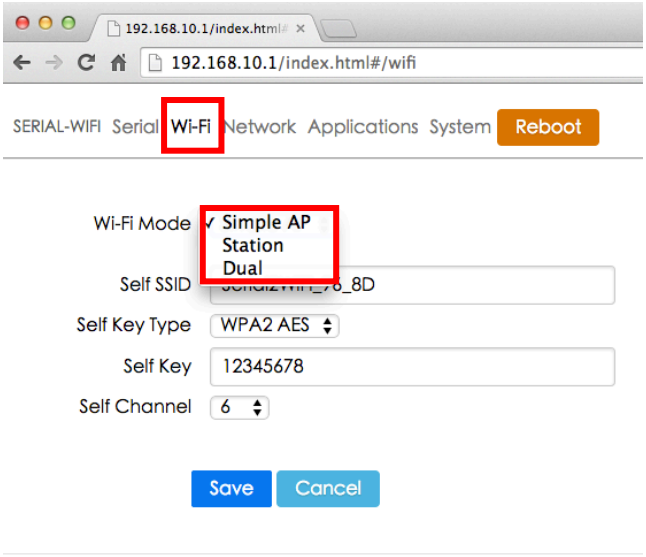


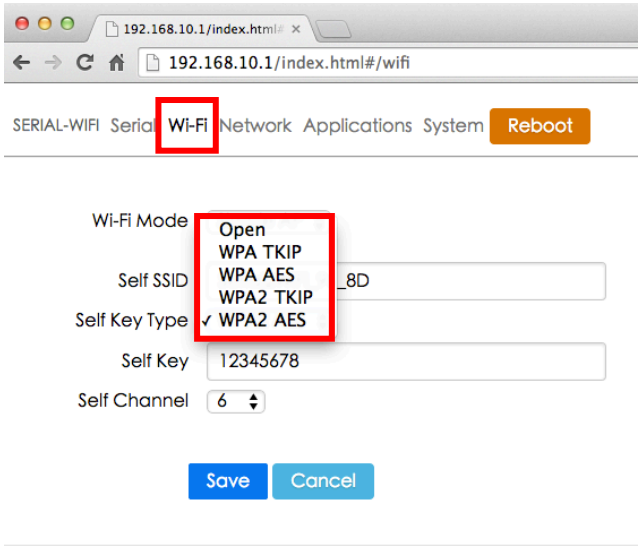

## 4.3 WiFi setting:

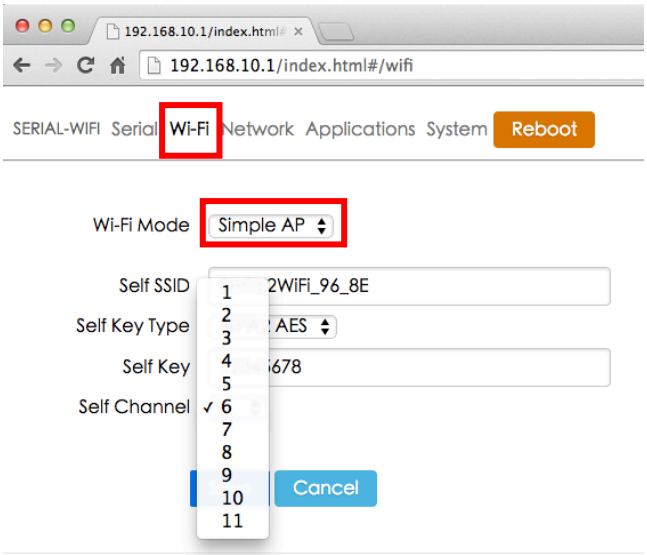
Mode: Simple AP, Station, Dual (AP & Station)

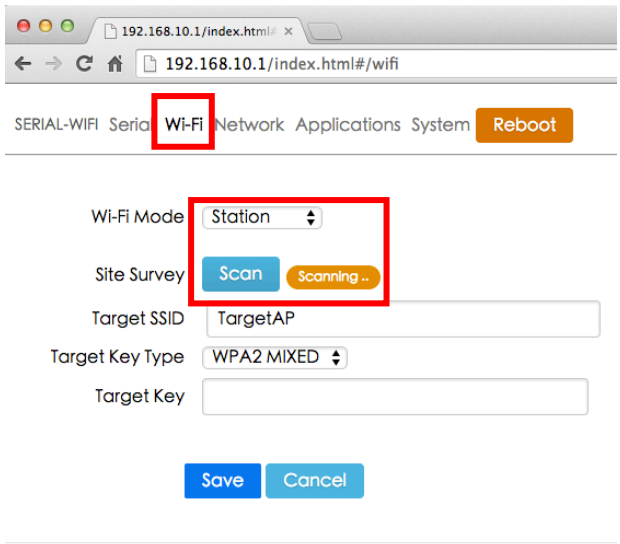
Encryption: Open, WPA TKIP, WPA AES, WPA2 TKIP, WPS2 AES

Channel: auto,1~11, 6 (default)

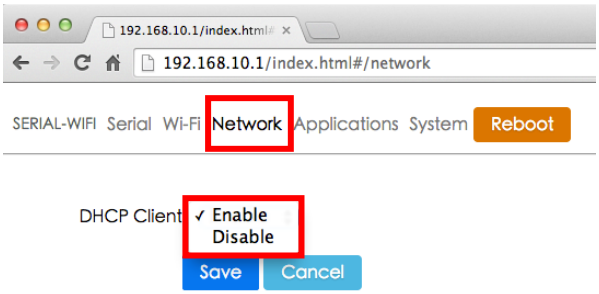


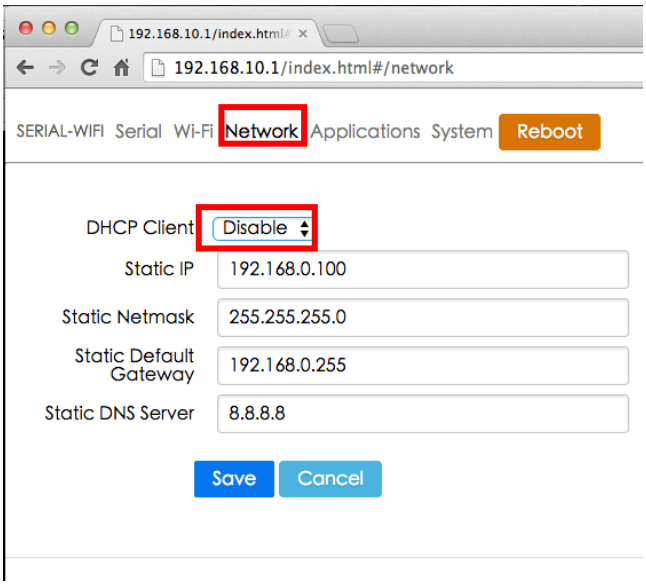




## 4.4 Network setting:

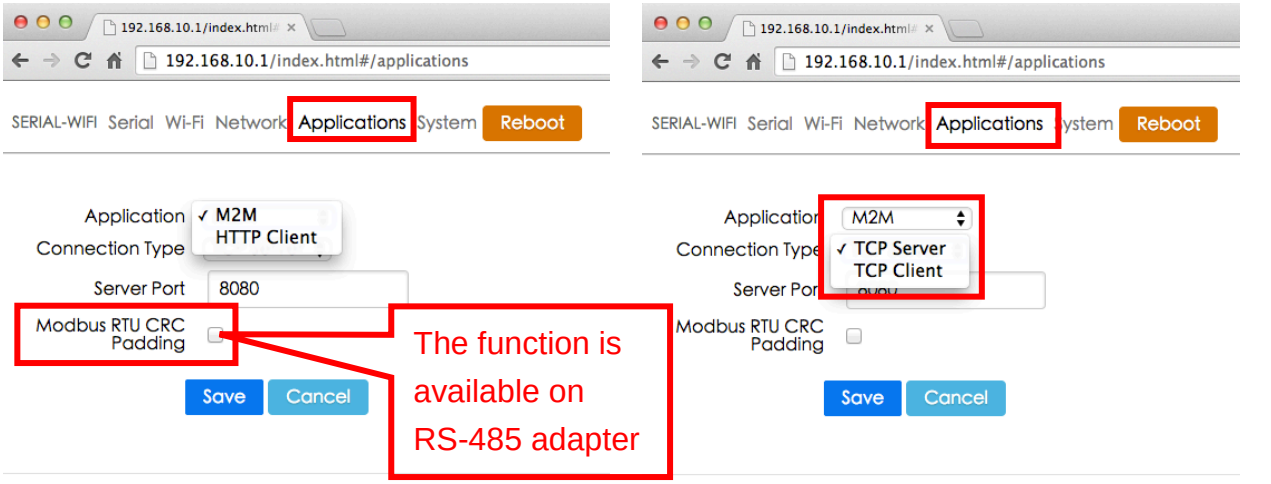


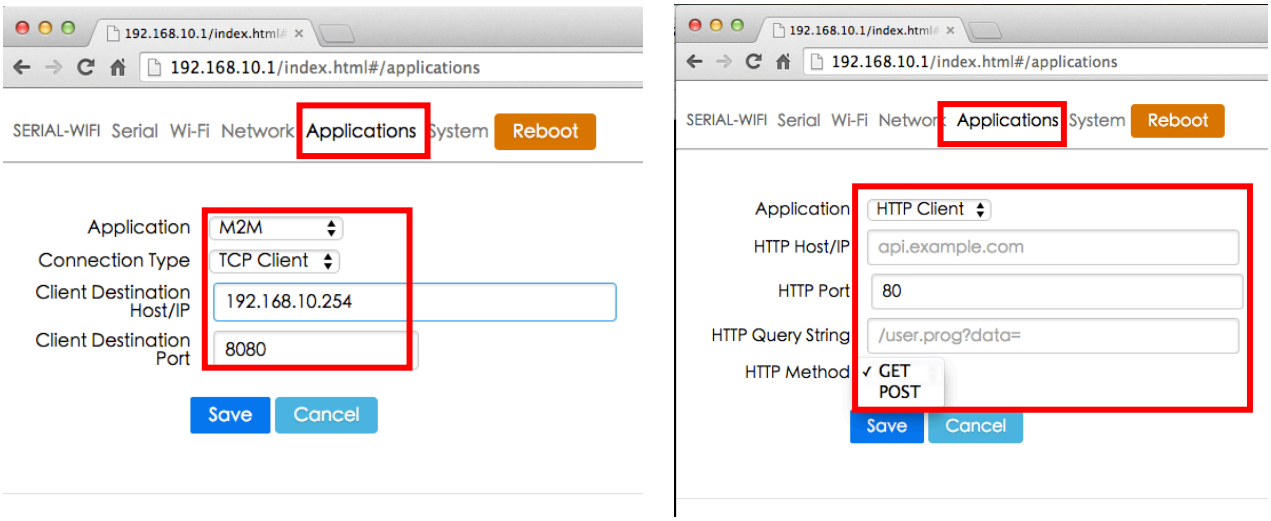




## 4.5 Applications:

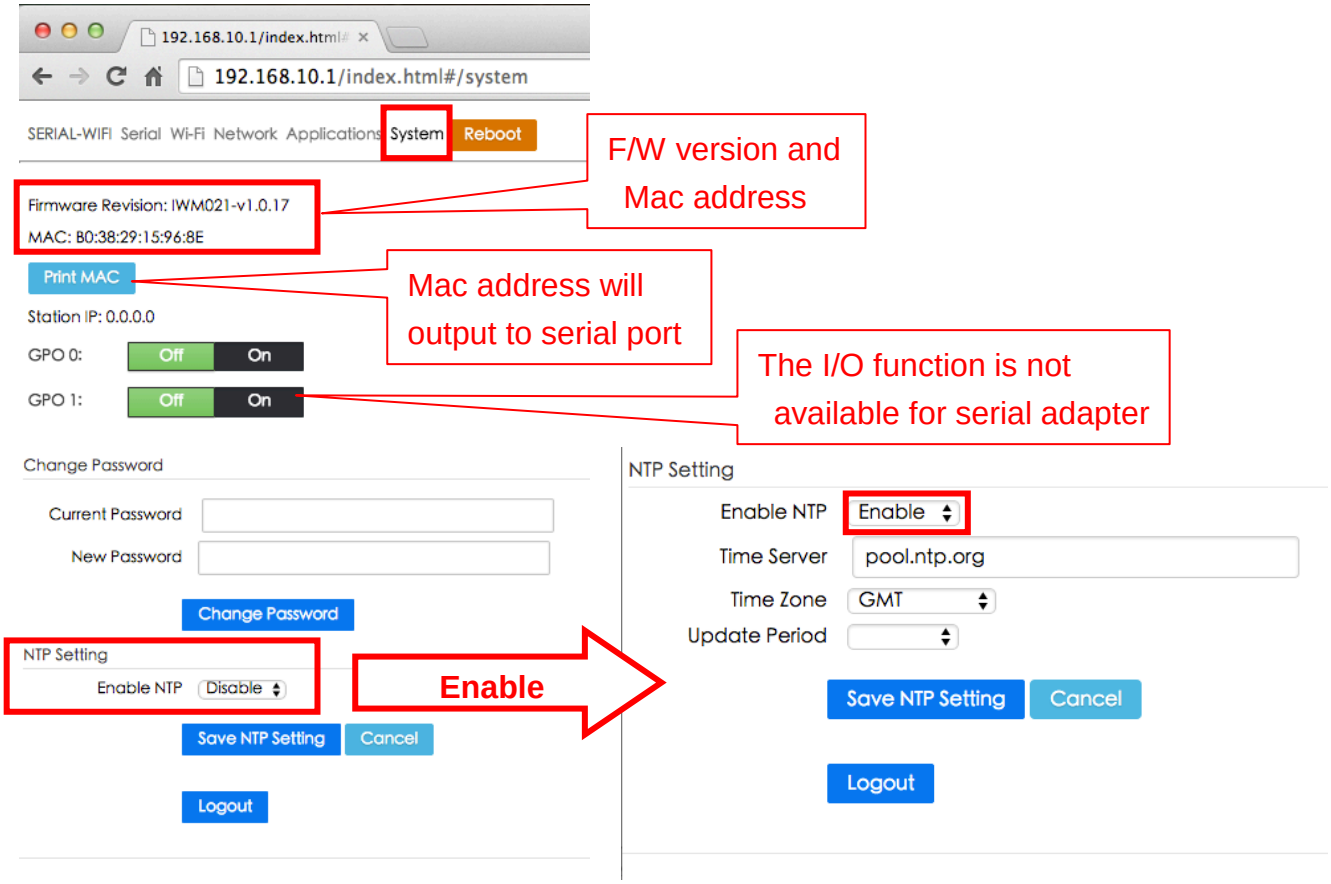
### 4.5.1 M2M: TCP Server and TCP Client

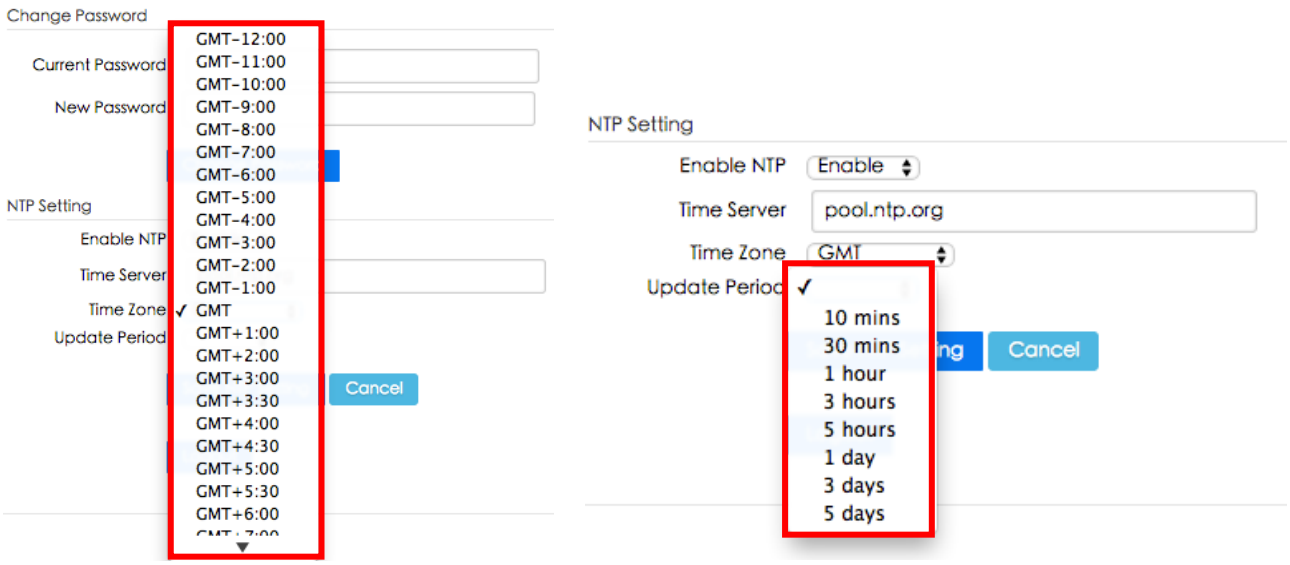
### 4.5.2 HTTP Client: GET and POST


192.168.10.1/index.html#/applications
SERIAL-WIFI Serial Wi-Fi Network Applications System Reboot
Application M2M
Connection Type HTTP Client
Server Port 8080
Modbus RTU CRC Padding
Save Cancel
TCP Server
TCP Client
The function is available on RS-485 adapter


192.168.10.1/index.html#/applications
SERIAL-WIFI Serial Wi-Fi Network Applications System Reboot
Application M2M
Connection Type TCP Client
Client Destination Host/IP 192.168.10.254
Client Destination Port 8080
Save Cancel
Application HTTP Client
HTTP Host/IP api.example.com
HTTP Port 80
HTTP Query String /user.prog?data=
HTTP Method GET POST
Save Cancel

## 4.6 System:


192.168.10.1/index.html#/system
SERIAL-WIFI Serial Wi-Fi Network Applications System Reboot
Firmware Revision: IWM021-v1.0.17
MAC: B0:38:29:15:96:8E
F/W version and Mac address
Print MAC
Station IP: 0.0.0.0
Mac address will output to serial port
GPO 0: Off On
GPO 1: Off On
The I/O function is not available for serial adapter
Change Password
Current Password
New Password
Change Password
NTP Setting
Enable NTP Disable
Save NTP Setting Cancel
Logout
Enable
NTP Setting
Enable NTP Enable
Time Server pool.ntp.org
Time Zone GMT
Update Period
Save NTP Setting Cancel
Logout




Remark: The NTP data will be bundled with the sensor data for the application of IOT, Internet of Things. If you need the function, the F/W will be modified.

5. LED indication:

| LED | Status |
|---|---|
| Red | Indicates system ready |
| Blue | Solid On: WiFi connected<br>Flash: data is transmitted through WiFi |

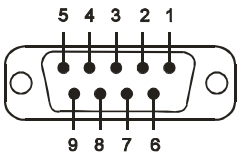
6. WPS/Reset button: Please put the paperclip or small pin into the hole for pressing the button.

6.1 WPS: Press the button in short time which is not longer than 3 seconds.

6.2 Reset to default setting: Press the button over 5 seconds, the WiFi adapter will reset to default value. The LEDs will be off for some time and then reboot to the default value.

7. RS232 Interface: DB9 Female with Nut

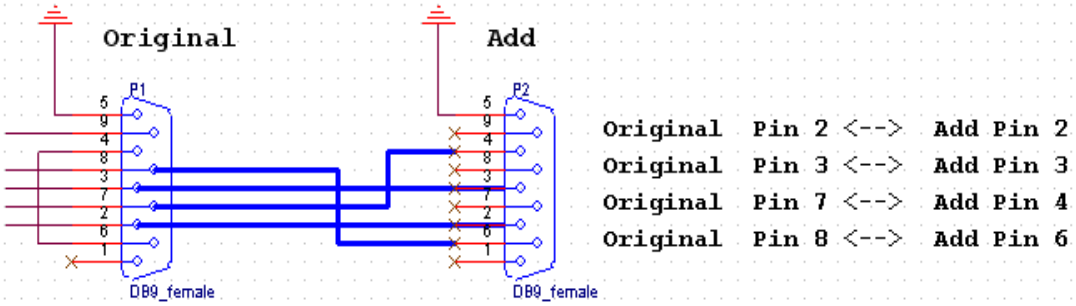
7.1 Pin-out:




7.2 Signals:

| Pin | Signal | DTE Direction | DCE Direction | Description |
|---|---|---|---|---|
| 1 | CD | Input | Output | Not connected |
| 2 | TxD | Output | Input | Transmitted data |
| 3 | RxD | Input | Output | Received data |
| 4 | DSR | Input | Output | Contact manufacturer to set this |
| 5 | GND | N/A | N/A | Signal ground |
| 6 | DTR | Output | Input | Contact manufacturer to set this |
| 7 | CTS | Input | Output | Clear to send |
| 8 | RTS | Output | Input | Request to send (Default) |
| 9 | Vcc | Input | Input | External Power supply (Remark 1) |

7.3 DSR/DTR Connection:

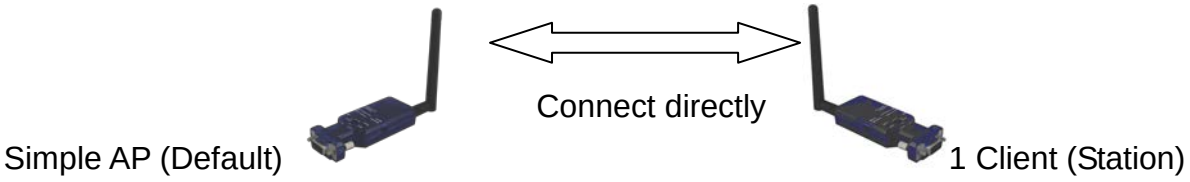



8. Command set: Not Available

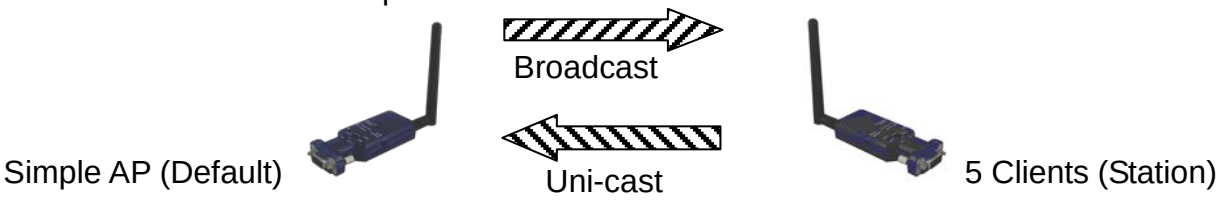
| ITEM | FUNCATION | COMMAND |
|---|---|---|
| 1 | Inquire the setting of the adapter | |
| 2 | Set the COM port parameters | |

9. Network:

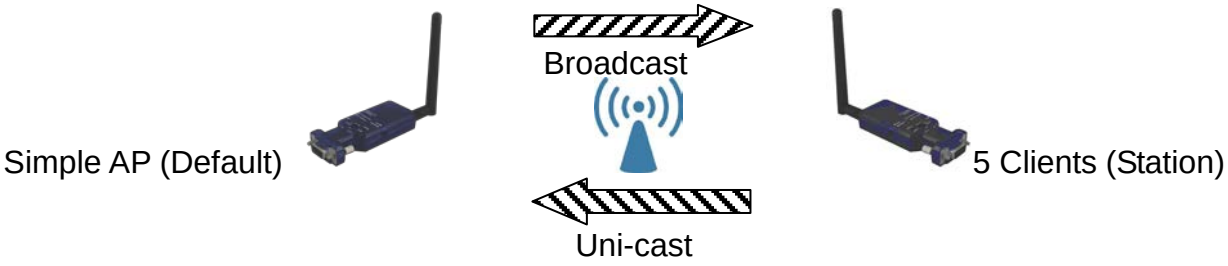
9.1 One to one connection: The two WiFi adapters will be connected directly without access point.




9.2 One to 5 connection via Simple AP

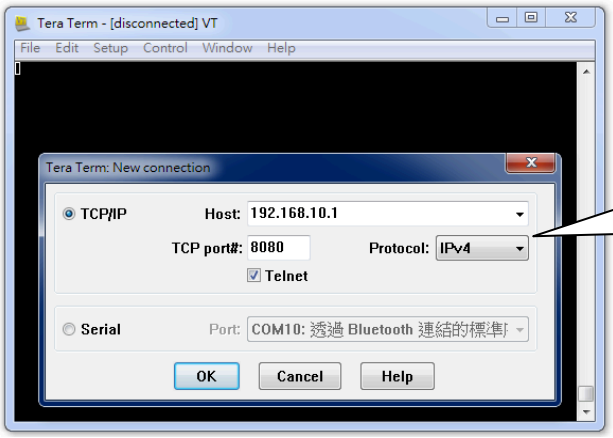



9.3 One to 5 connection via other Access Point:



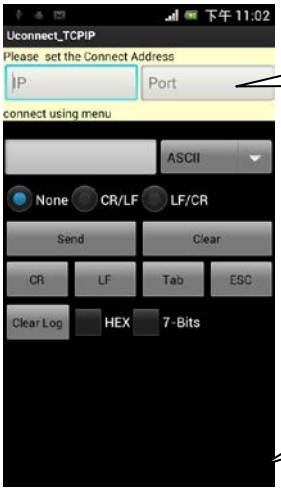
10. Virtual COM port
10.1 Factory Mac bundled Virtual Serial Port (VSP) Driver (Will be available soon)
10.2 Reference Driver: www.eterlogic.com

11. Test software:
11.1 Teraterm: ASCII code terminal emulator for TCP/IP socket and COM Port. Please search "teraterm" on Google searching and install the main program.




IP: 192.168.10.1 (Default)
TCP Port: 8080 (Default)
Protocol: IPV4, Telnet

11.2 Android APP: Android terminal emulator of TCP/IP socket. Support ASCII or Binary format. Please search "uconnect" on Google Play site choose the TCP/IP type.




IP: 192.168.10.1 (Default)
TCP Port: 8080 (Default)

Click the menu on the corner
Select "Connect"

12. Options: Please contact the vendors.
12.1 RS-232 Temperature and Humidity Sensor
12.2 RS-232 Bluetooth BLE Active RFID Reader
12.3 RS-232 Gas, CO, CO2, Smoke Sensor
12.4 IR Temperature Sensor
12.5 IR Remote controller
12.6 Power Plug Remote controller
12.7 LED Light DAC Remote controller
12.8 Home Gateway
12.9 Indoor Real Time Location System (RTLS)

Remark: All contents are subject to change without notice.