

DR5018S USER MANUAL

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- 2.DR5018S UART configuration**
- 3.DR5018S GPS**

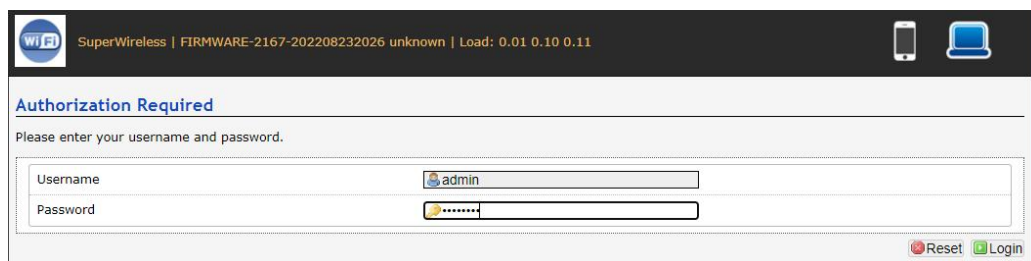
DR5018S



IPQ5018 UI setting

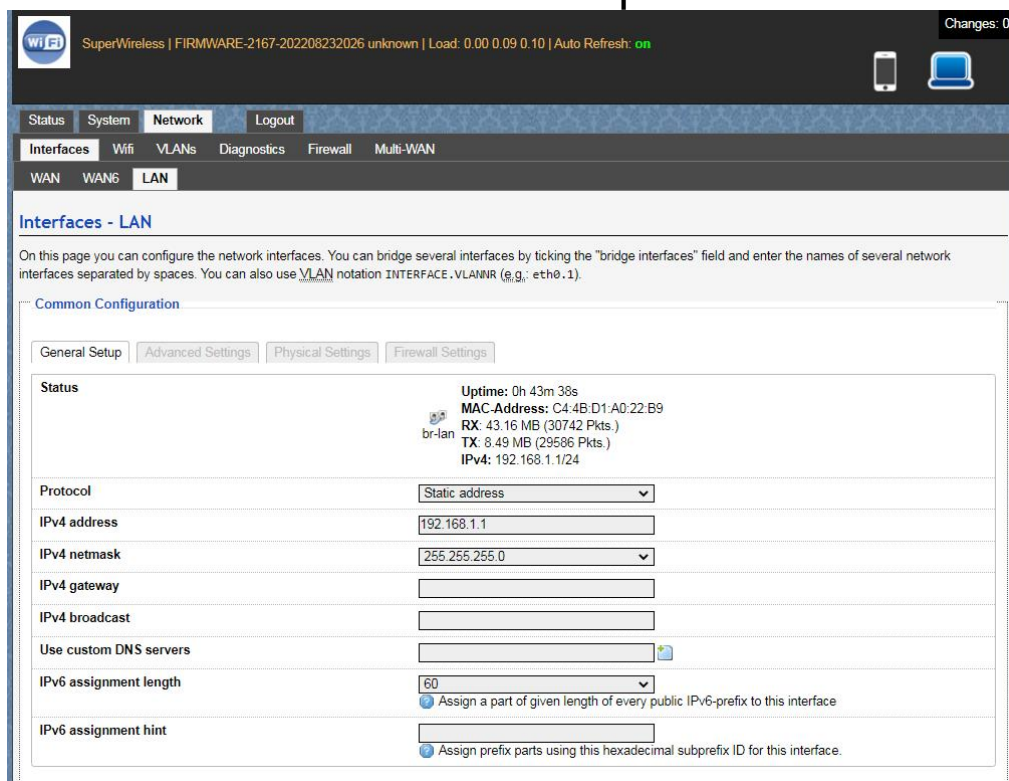
1. Input the IP 192.168.1.1 and login

2. Input the username “admin” password “password” then press the button “Login”



3. Network setting

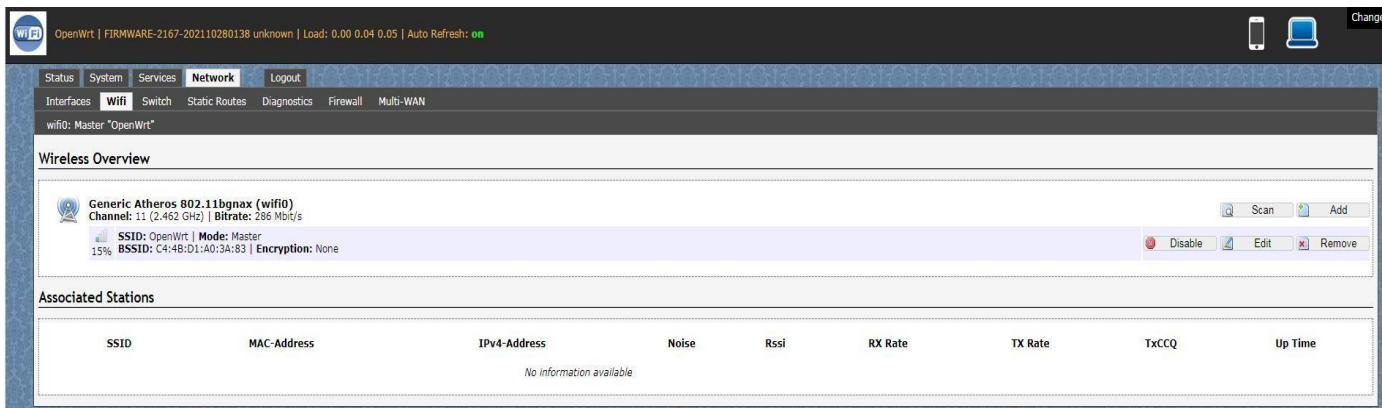
- IP Setting: setting IP in the path "network->Interfaces->LAN->IPV4 address"
- DHCP setting: DHCP and other protocol setting in the path network-> Interfaces-> LAN->protocol"



IPQ5018 UI setting

4. Wireless setting

login the path network->Interfaces->WIFI, then choose one wifi,we select the red marked as example,click the button ‘Edit’



OpenWrt | FIRMWARE-2167-202110280138 unknown | Load: 0.00 0.04 0.05 | Auto Refresh: on

Status System Services **Network** Logout

Interfaces **Wifi** Switch Static Routes Diagnostics Firewall Multi-WAN

wifi0: Master "OpenWrt"

Wireless Overview

Generic Atheros 802.11bgnx (wifi0)
Channel: 11 (2.462 GHz) | Bitrate: 286 Mbit/s

SSID: OpenWrt | Mode: Master
BSSID: C4:4B:D1:A0:3A:83 | Encryption: None

Scan Add Disable Edit Remove

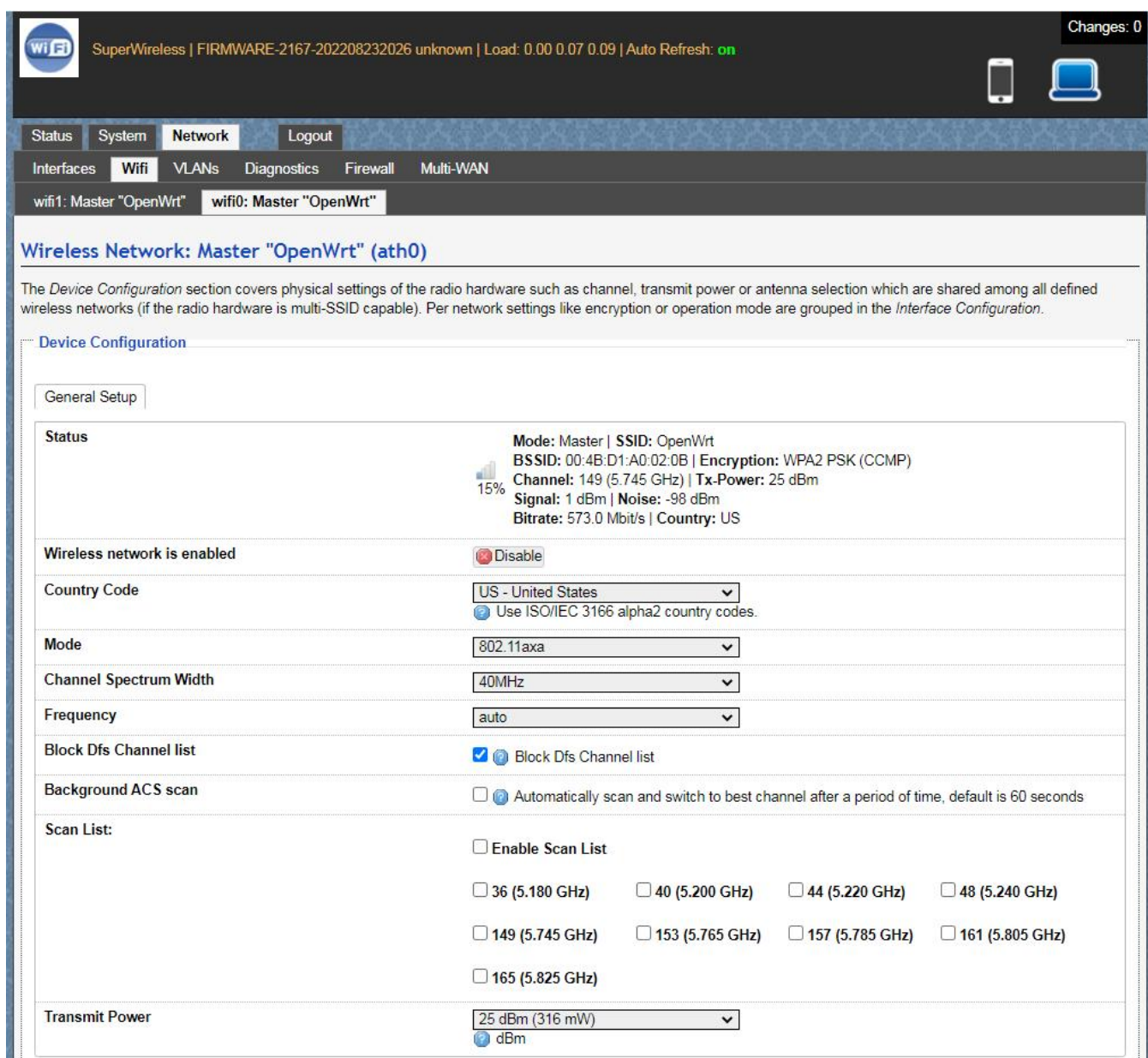
Associated Stations

SSID	MAC-Address	IPv4-Address	Noise	Rssi	RX Rate	TX Rate	TxCCQ	Up Time
No information available								

IPQ5018 UI setting

The detail information show in the picture as below:

- Channel:for channel select;
- Transmit Power:signal chain power setting; ESSID:for ID
- Mode:it support 4 mode AP,AP(WDS),client,client(WDS) Wireless
- Security: for Encryption setting



The screenshot displays the Wallys IPQ5018 web interface. At the top, there's a status bar with a Wi-Fi icon, the text "SuperWireless | FIRMWARE-2167-202208232026 unknown | Load: 0.00 0.07 0.09 | Auto Refresh: on", and a "Changes: 0" indicator. Below this is a navigation menu with tabs: Status, System, Network, and Logout. Under the Network tab, there are sub-tabs: Interfaces, Wifi, VLANs, Diagnostics, Firewall, and Multi-WAN. The "Wifi" sub-tab is active, showing "wifi1: Master 'OpenWrt'" and "wifi0: Master 'OpenWrt'".

The main content area is titled "Wireless Network: Master 'OpenWrt' (ath0)". A note states: "The Device Configuration section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the Interface Configuration."

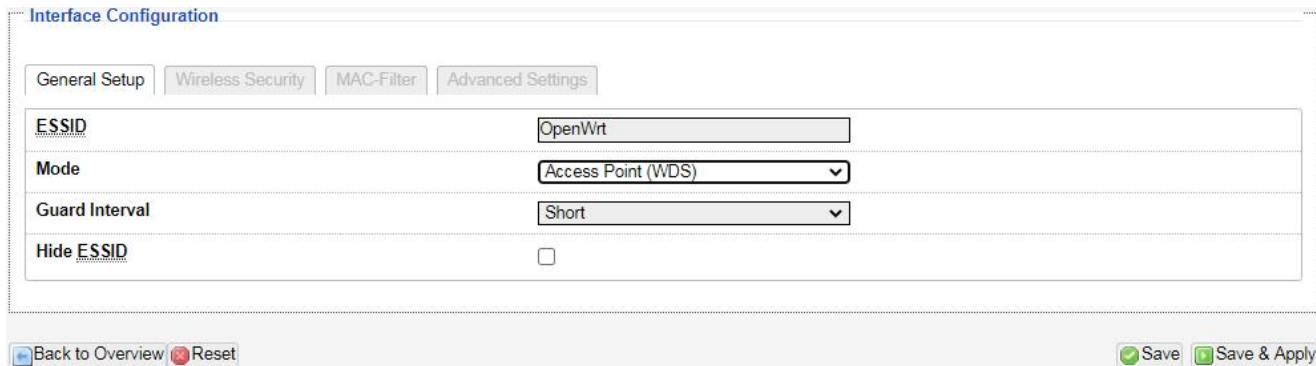
The "Device Configuration" section is expanded, showing the "General Setup" tab. It includes a "Status" section with a signal strength indicator at 15% and the following details: Mode: Master | SSID: OpenWrt, BSSID: 00:4B:D1:A0:02:0B | Encryption: WPA2 PSK (CCMP), Channel: 149 (5.745 GHz) | Tx-Power: 25 dBm, Signal: 1 dBm | Noise: -98 dBm, Bitrate: 573.0 Mbit/s | Country: US.

Below the status, there are several configuration options:

- Wireless network is enabled:** A toggle switch set to "Disable".
- Country Code:** A dropdown menu set to "US - United States" with a link to "Use ISO/IEC 3166 alpha2 country codes."
- Mode:** A dropdown menu set to "802.11axa".
- Channel Spectrum Width:** A dropdown menu set to "40MHz".
- Frequency:** A dropdown menu set to "auto".
- Block Dfs Channel list:** A checkbox labeled "Block Dfs Channel list" is checked.
- Background ACS scan:** A checkbox labeled "Automatically scan and switch to best channel after a period of time, default is 60 seconds" is unchecked.
- Scan List:** A section with a checkbox "Enable Scan List" (unchecked) and a list of frequency channels with checkboxes: 36 (5.180 GHz), 40 (5.200 GHz), 44 (5.220 GHz), 48 (5.240 GHz), 149 (5.745 GHz), 153 (5.765 GHz), 157 (5.785 GHz), 161 (5.805 GHz), and 165 (5.825 GHz).
- Transmit Power:** A dropdown menu set to "25 dBm (316 mW)" with a link to "dBm".

IPQ5018 UI setting

In advance setting you can select which chain do you need, which BW do you need and so on

A screenshot of the "Interface Configuration" web interface. It features a tabbed menu at the top with "General Setup", "Wireless Security", "MAC-Filter", and "Advanced Settings". The "General Setup" tab is active, showing four rows of configuration options: "ESSID" with a text input field containing "OpenWrt", "Mode" with a dropdown menu set to "Access Point (WDS)", "Guard Interval" with a dropdown menu set to "Short", and "Hide ESSID" with an unchecked checkbox. At the bottom left are "Back to Overview" and "Reset" buttons, and at the bottom right are "Save" and "Save & Apply" buttons.

Interface Configuration	
General Setup Wireless Security MAC-Filter Advanced Settings	
ESSID	OpenWrt
Mode	Access Point (WDS)
Guard Interval	Short
Hide ESSID	<input type="checkbox"/>


Back to Overview | Reset | Save | Save & Apply

In the end, you need click the button “Save & Apply”, and wait for 2 minutes, then you can enjoy it.

IPQ5018 UI setting

5. Backup archive

Login System->Backup/Flash Firmware;
Then click the button “Generate archive”
Then download the archive


SuperWireless | FIRMWARE-2167-202208232026 unknown | Load: 0.08 0.06 0.08
Changes: 0

Status
System
Network
Logout

System
Administration
Services
LED Configuration
Backup / Flash Firmware
Reboot

Flash operations

Actions
Configuration

LOGDUMP

Click LOGDUMP" to download log dumped file.

Download LOGDUMP: Generate logdump

Backup / Restore

Click "Generate archive" to download a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible with squashfs images).

Download backup: Generate archive

Reset to defaults: Perform reset

To restore configuration files, you can upload a previously generated backup archive here.

Restore backup: 选择文件 未选择任何文件 Upload archive...

Flash new firmware image

Upload a sysupgrade-compatible image here to replace the running firmware. Check "Keep settings" to retain the current configuration (requires an OpenWrt compatible firmware image).

Keep settings: ☒

Image: 选择文件 未选择任何文件 Flash image...

IPQ5018 UI setting

6.Update new image

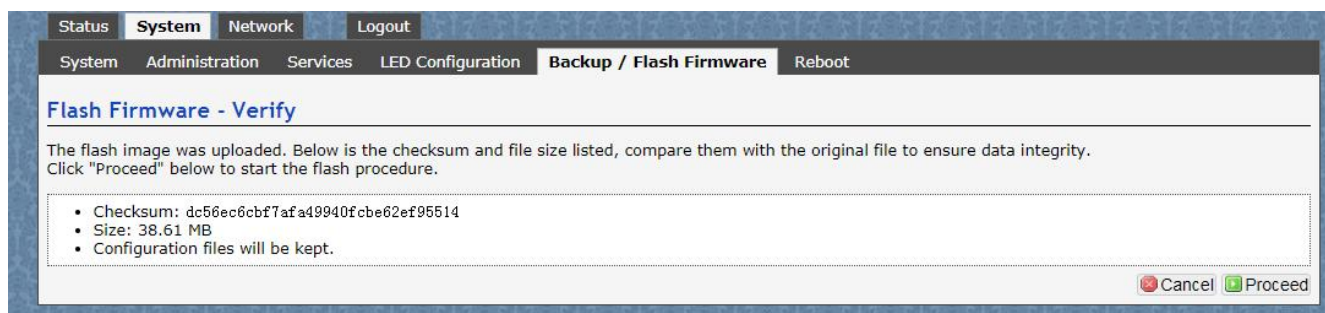
Login System->Backup/Flash Firmware;

Then click the button “ flash image”

Then click the button “Proceed” warning don't power off wait for about three minutes

Then the system will reboot automatic.

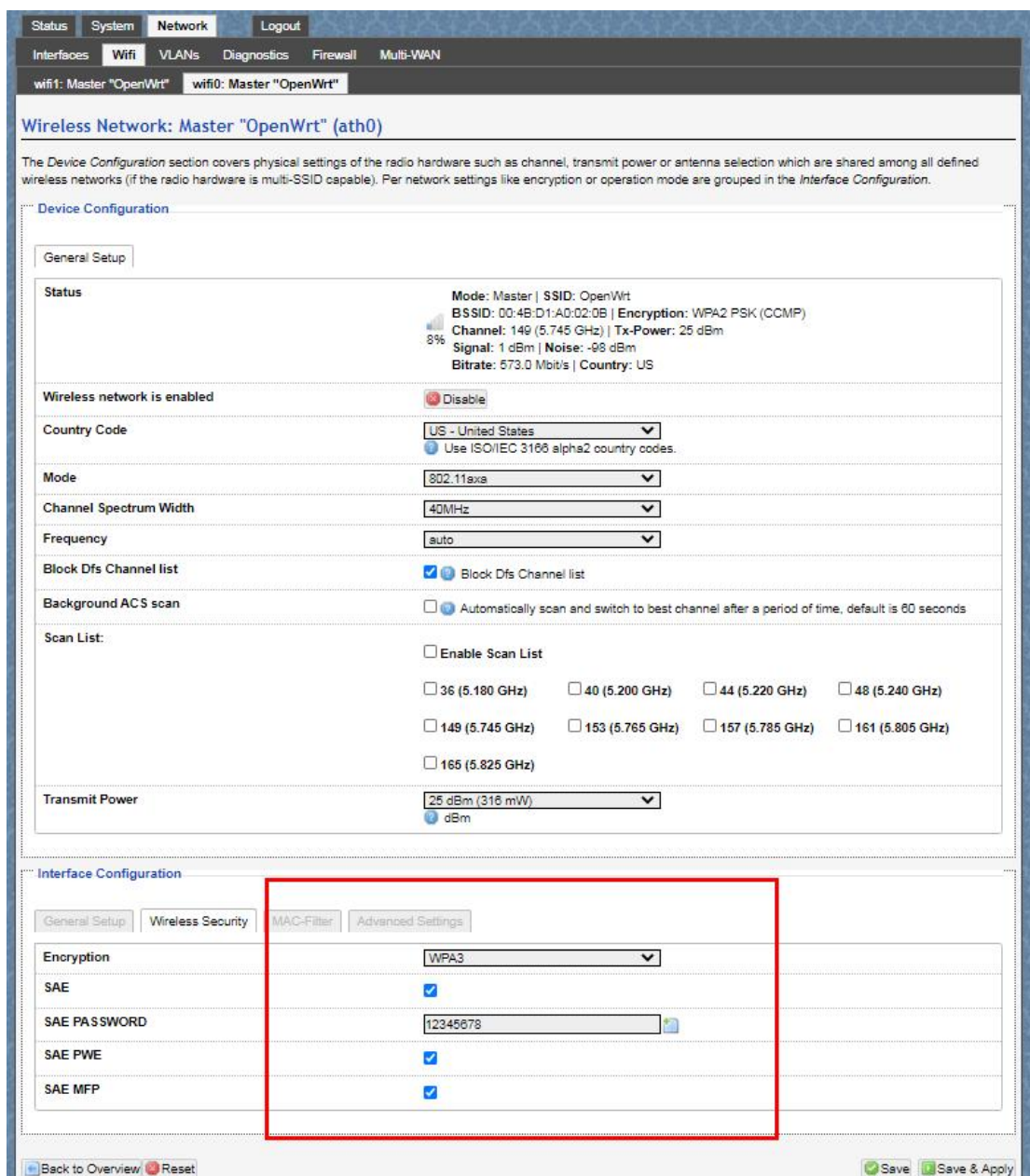
Then login again,you can enjoy it.



IPQ5018 UI setting

7. wireless encryption

Login System->Network/wifi/Edit->Choose 5G radio
 Country Coad choose “ US ” click the button“Wireless Security”
 Then choose “WPA3” and set password
Notice:SAE/SAE PWE/SAE MFP click “ ✓ ”



Wireless Network: Master "OpenWrt" (ath0)

The Device Configuration section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the *Interface Configuration*.

Device Configuration

General Setup

Status
 Mode: Master | SSID: OpenWrt
 BSSID: 00:4B:D1:A0:02:0B | Encryption: WPA2 PSK (CCMP)
 Channel: 149 (5.745 GHz) | Tx-Power: 25 dBm
 Signal: 1 dBm | Noise: -98 dBm
 Bitrate: 573.0 Mbit/s | Country: US

Wireless network is enabled ☐ Disable

Country Code: US - United States
 Use ISO/IEC 3166 alpha2 country codes.

Mode: 802.11axa

Channel Spectrum Width: 40MHz

Frequency: auto

Block Dfs Channel list: ☒ Block Dfs Channel list

Background ACS scan: ☐ Automatically scan and switch to best channel after a period of time, default is 60 seconds

Scan List:
☐ Enable Scan List
☐ 36 (5.180 GHz) ☐ 40 (5.200 GHz) ☐ 44 (5.220 GHz) ☐ 48 (5.240 GHz)
☐ 149 (5.745 GHz) ☐ 153 (5.765 GHz) ☐ 157 (5.785 GHz) ☐ 161 (5.805 GHz)
☐ 165 (5.825 GHz)

Transmit Power: 25 dBm (316 mW)
 dBm

Interface Configuration

Wireless Security

Encryption: WPA3

SAE: ☒

SAE PASSWORD: 12345678


SAE PWE: ☒



SAE MFP: ☒

Back to Overview Reset Save Save & Apply

IPQ5018 UI setting

7. wireless encryption


SuperWireless | FIRMWARE-2167-202208232026 unknown | Load: 0.01 0.04 0.07 | Auto Refresh: on
Changes: 0





StatusSystemNetworkLogout


InterfacesWifiVLANsDiagnosticsFirewallMulti-WAN

wifi1: Master "OpenWrt"wifi0: Master "OpenWrt"

Wireless Overview



Generic Atheros 802.11anacax (wifi0)
 Channel: 149 (5.745 GHz) | Bitrate: 573 Mbit/s


 SSID: OpenWrt | Mode: Master
 19% BSSID: 00:4B:D1:A0:02:0B | Encryption: WPA2 PSK (CCMP)


Scan

Add


Disable

Edit

Remove



Generic Atheros 802.11bgnax (wifi1)
 Channel: 1 (2.412 GHz) | Bitrate: 286 Mbit/s


 SSID: OpenWrt | Mode: Master
 45% BSSID: 00:4B:D1:A0:EE:E7 | Encryption: None

Scan

Add

Disable

Edit

Remove

Associated Stations

SSID	MAC-Address	IPv4-Address	Noise	Rssi	RX Rate	TX Rate	TxCCQ	Up Time
OpenWrt	A2:E9:FE:4A:58:12	192.168.1.243	-98 dBm	38(36,34)	275.3 Mbit/s	137.6 Mbit/s	0%	24 s

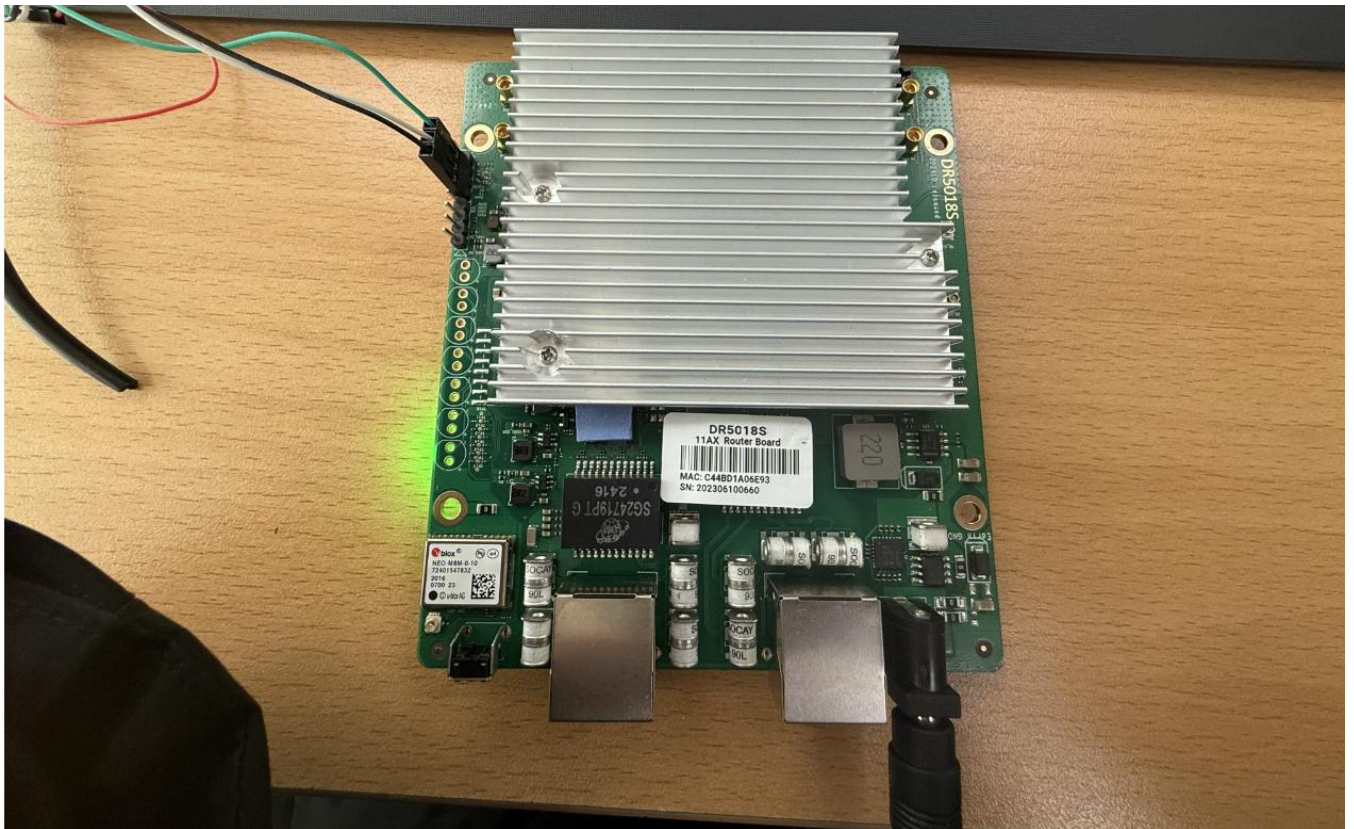
www.wallystech.com

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DR5018S UART configuration

1. Introduction

The photo below shows how to use the Uart for DR5018S



DR5018S UART configuration

2. Device connect

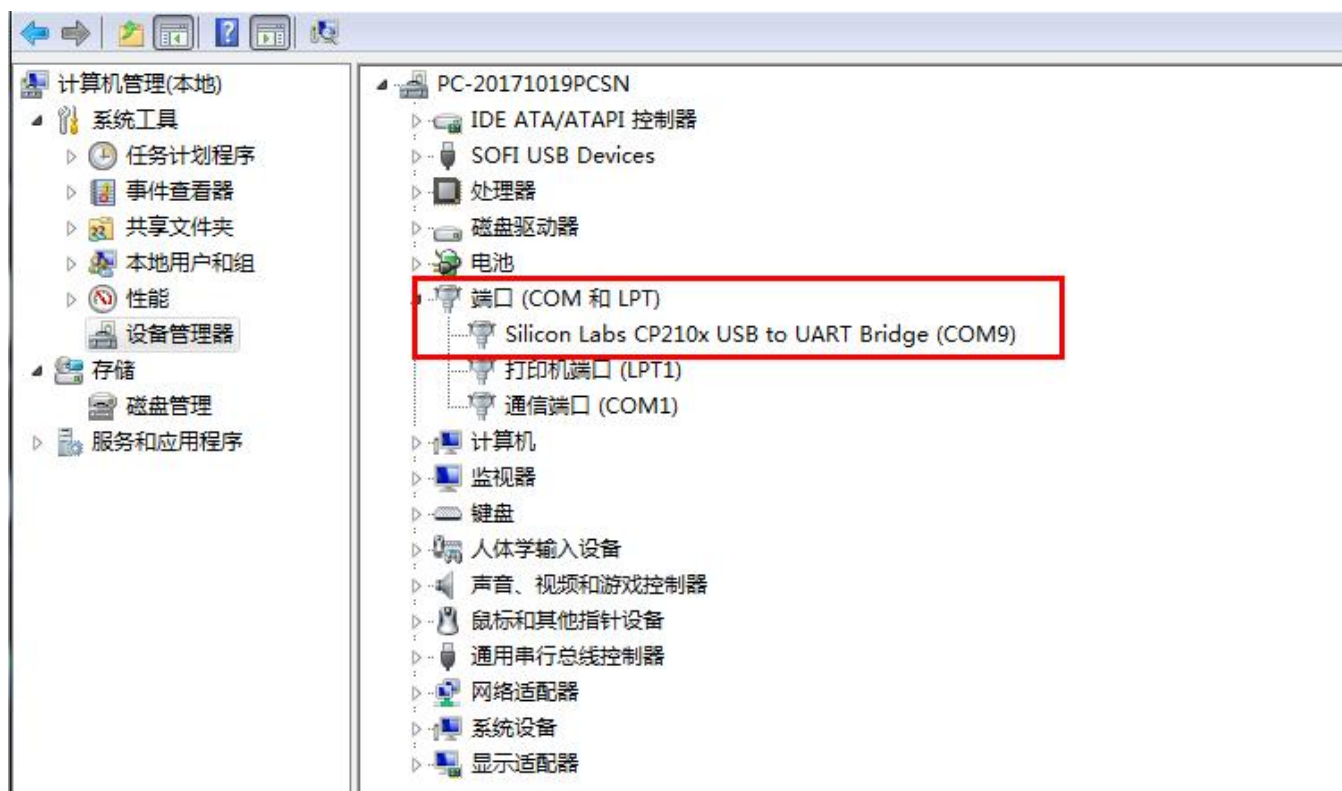
Step 1: Connect the cable to the DR5018S

As the picture as above, the sequence of the signal in the UART

Connector: GND, TX, RX, VCC, And we need use GND connect black cable, TX connect to white cable, RX connect to Green cable VCC don't use.

Step 2: Check the Com number on the PC

Connect the console board to the PC with USB connector, Then check the com number on the PC, the com number on the test PC is COM15



DR5018S UART configuration

2. Device connect

Step 3 Login with the software

You can use putty,Xshell or some others,enjoy it.

```

BusyBox v1.30.1 () built-in shell (ash)

      MM      NM      MMMMMM      M      M
    $MMMMM    MMMM    MMMMMMMMMMMM    MM    MM
    MMMMMMMM    MM MMMM.    MMMM:MMMM:    MM    MMMM
MMM== MMMMM    MM    MMM    MMMM    MMM    MMMMM    MM    MMMM'
MMM== MMMMM    MMMM    MM    MMMM    MMMM    MMM    MMMMMMMMM
MMM== MMMM    MMMMM    MMMM    MMMM    MMMM    MMMMMMMMM
MMM== MMMM    MMMMM    MMMM    MMMM    MMMM    MMMMMMMMM
MMM== MMMM    MMMM,    NMMMMMMMM    MMMM    MMMM    MMMMMMMMMMM
MMM== MMMM    MMMMM    MMMMMMMM    MMMM    MMMM    MMMM    MMMMM
MMM== MMMM    MM    MMM    MMMM    MMMM    MMMM    MMMM    MMMM
MMM$ ,MMMM    MMMM    MMMM    MMM    MMMM    MMMM    MMMM    MMMM
MMMMMM:    MMMMM    M    MMMMMMMMMMMM    MMMMM    MMMMMMM
MMMMMM    MMMM    M    MMMMMMMMM    MMMM    MMMM
MMM      M    MMMMM    M    M
M

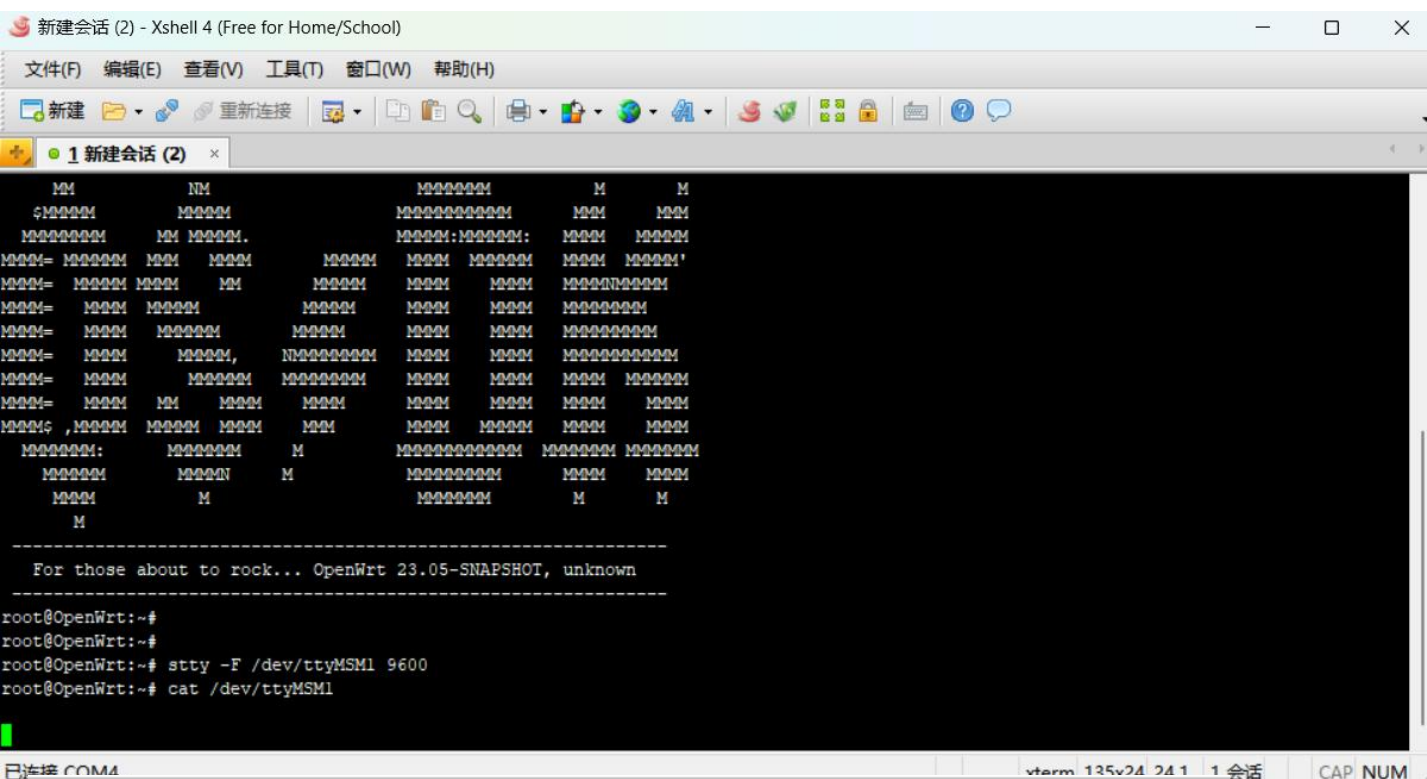
-----
For those about to rock... (Chaos Calmer, unknown)
-----
root@SuperWireless:~# █

```


DR5018S GPS

Identification command

```
stty -F /dev/ttyMSM1 9600
cat /dev/ttyMSM1
```



```

新建会话 (2) - Xshell 4 (Free for Home/School)
文件(F) 编辑(E) 查看(V) 工具(T) 窗口(W) 帮助(H)
新建 重新连接
1 新建会话 (2) x
MM      NM      MMMMMM      M      M
$MMMMM      MMMM      MMMMMMMMMMM      MM      MM
MMMMMMMM      MM      MMMM      MMMM:M:MMMM      MMMM
MMMM= MMMMM      MM      MM      MMMM      MMMM      MMMM'
MMMM= MMMM      MM      MM      MMMM      MMMM      MMMMMMMMMMM
MMMM= MMMM      MMMM      MMMM      MMMM      MMMM      MMMMMMMMM
MMMM= MMMM      MMMMMM      MMMM      MMMM      MMMM      MMMMMMMMM
MMMM= MMMM      MMMM,      MMMMMMMMM      MMMM      MMMM      MMMMMMMMMMMMM
MMMM= MMMM      MMMMMM      MMMMMMMMM      MMMM      MMMM      MMMM      MMMM
MMMM= MMMM      MM      MM      MMMM      MMMM      MMMM      MMMM      MMMM
MMMM,      MMMM      MMMM      MM      MMMM      MMMM      MMMM      MMMM
MMMMM:M:      MMMMMMM      M      MMMMMMMMMMM      MMMMMMM      MMMMMMM
MMMMM      MMMM      M      MMMMMMMMM      MMMM      MMMM
MMMM      M      MMMMMM      M      M
M
-----
For those about to rock... OpenWrt 23.05-SNAPSHOT, unknown
-----
root@OpenWrt:~#
root@OpenWrt:~#
root@OpenWrt:~# stty -F /dev/ttyMSM1 9600
root@OpenWrt:~# cat /dev/ttyMSM1
$GNTXT,01,01,01,NMEA unknown msg*46
$GNRMC,,V,,,,,,,,,N*4D
$GNVTG,,,,,,,,,N*2E
$GNTXT,01,01,01,NMEA unknown msg*46
$GNTXT,01,01,01,NMEA unknown msg*46
$GNTXT,01,01,01,NMEA unknown msg*46
$GNTXT,01,01,01,NMEA unknown msg*46

```

```

$GNTXT,01,01,01,NMEA unknown msg*46
$GNRMC,,V,,,,,,,,,N*4D
$GNVTG,,,,,,,,,N*2E
$GNTXT,01,01,01,NMEA unknown msg*46
$GNTXT,01,01,01,NMEA unknown msg*46
$GNTXT,01,01,01,NMEA unknown msg*46
$GNTXT,01,01,01,NMEA unknown msg*46

```



DR5018S USER MANUAL

DR5018S

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