



Contents [[hide](#)]

- [1 WIZnet WizFi630S Modular Transmitter Application](#)
- [2 Summary of this guide](#)
- [3 Product overview](#)
- [4 Product Features](#)
- [5 Evaluation Board](#)
- [6 Operation Mode](#)
- [7 Configuration Methods](#)
- [8 Network Settings](#)
- [9 STATEMENT](#)
- [10 Frequently Asked Questions](#)
- [11 Documents / Resources](#)
 - [11.1 References](#)



WIZnet WizFi630S Modular Transmitter Application



Summary of this guide

This guide provides the information needed to configure, use, and update the WizFi630S on the WizFi630S-EVB. It is intended for software developers and system integrators who are embedding this product into their designs.

Included chapters

- Product overview: Main features of the WizFi630S and an Evaluation board
- Operation mode
- Configuration methods: Instruction for accessing methods, Web manager and CLI
- Network setting: Instruction for configuring network using Web Manager and CLI method
- System setting: Introduction for adding new software and updating new firmware

Product overview

WizFi630S is a gateway module that includes the UART protocol and TCP/IP protocol into IEEE802.11 b/g/n wireless LAN protocol. WizFi630S enables a device with serial interface to connect to LAN or WLAN for remotely control, measuring, and administration. WizFi630S can also work as an IP router because of its internally embedded switch.

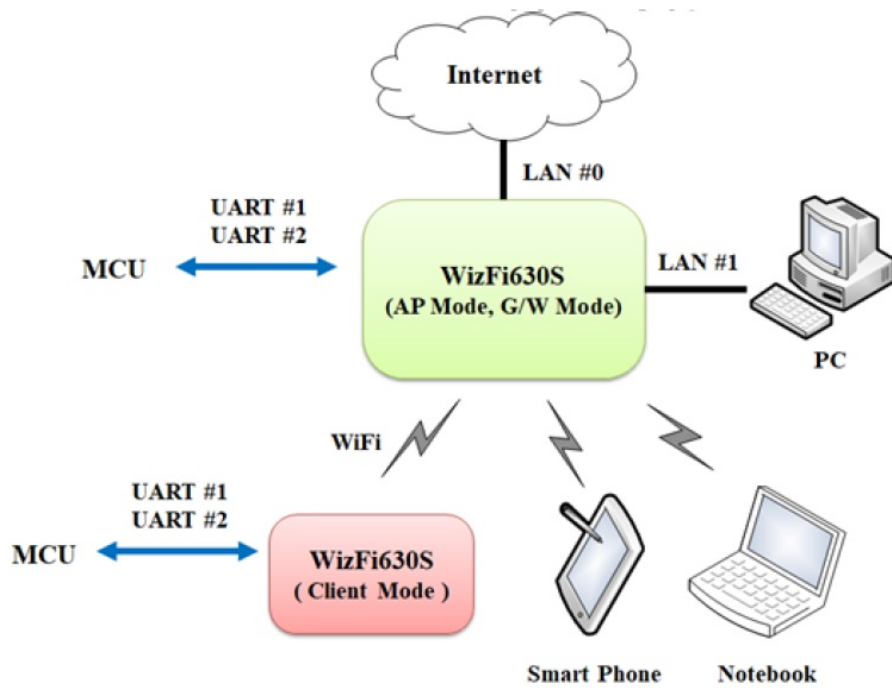
WizFi630S uses interfaces like Serial(UART), LAN, Wi-Fi(WLAN) to perform functions such as Serial(UART)-To-Wi-Fi, Serial-To-Ethernet, Ethernet-To-Wi-Fi. Users can connect to WizFi630S's internal web server or use serial commands for simple Wi-Fi

settings; not only serial devices but 8/16/32 bit micro controllers can also use UART for simple Wi-Fi settings.

WizFi630S can significantly reduce the processes for wireless module design, testing, and certification. Therefore, WizFi630S can be the best solution for users who lack wireless network experience. WizFi630S follows the 802.11b/g/n standard and support up to 150Mbps speed in wireless interface. WizFi630S provides a test board, pc software, and documents so that anyone can develop a wireless solution.

Product Features

- WizFi630A Pin compatible
- 580MHz Clock
- 16-bit DDR2 128Mbytes SRAM, 32Mbytes SPI Flash
- Complies with IEEE802.11b/g/n.
- Gateway/AP(Bridge)/AP-Client/Client(Station)/Ad-hoc Mode , WDS/Repeater supports
- 1T1R RF Interface (2.4G only)
- Physical link rate up to 150Mbps
- Built-in 3 Ethernet Ports
- 2 Serial Ports supports
- Working as Wi-Fi Router
- WEP 64/128bit, WPA/WPA2-PSK TKIP, AES
- Router and Firewall function supports



Wireless Features

Type	Description
Wireless Standard	IEEE802.11b/g/n
Frequency Range	802.11b: 2412 ~2462 MHz 802.11g: 2412 ~2462 MHz 802.11n HT20: 2412 ~2462 MHz 802.11n HT40: 2422 ~2452 MHz
Operating Channels	802.11b: 13 Channels 802.11g: 13 Channels 802.11n HT20: 13 Channels 802.11n HT40: 9 Channels

Output Power (Tolerance(+/-1dBm))	802.11b: 11dBm@1Mbps 802.11g: 10dBm@6Mbps 802.11n HT20: 9.5dBm@MCS0 802.11n HT40: 7dBm@MCS0
Receive Sensitivity	802.11b: -48dBm@4% PER
Data Rates	802.11b: 1,2,5.5,11Mbps 802.11g: 6,9,12,18,24,36,48,54Mbps 802.11n: 29.5,86.5,115,130,144,150Mbps
Modulation Type	802.11b: DSS(CCK, QPSK, BPSK) 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) 802.11n HT20: OFDM(64QAM, 16QAM, QPSK, BPSK) 802.11n HT40: OFDM(64QAM, 16QAM, QPSK, BPSK)
Antenna	u.FL (EVB : 1T1R 2dBi)
Encryption	64/128Bit WEP, WPA, WPA2, TKIP, AES, WAPI

HW Features

Type	Description
Interface	Serial port : 2 EA (optional 3EA) LAN port : 3 EA USB 2.0 Host : 1 EA I2S : 1EA I2C : 1EA PWM : 4EA

	U.FL(wireless)
Temperature	Operating: -25°C~+80°C
Humidity	TBD
Serial	Baud Rate : 115200(default)
	Stop bits: 1, 2
	Parity: None, Odd, Even
	Flow Control: Not supported
Input Power	DC 3.3V / 1A
Power Consumption	TBD
Dimension	33mm X 43mm X 3mm
Weight	

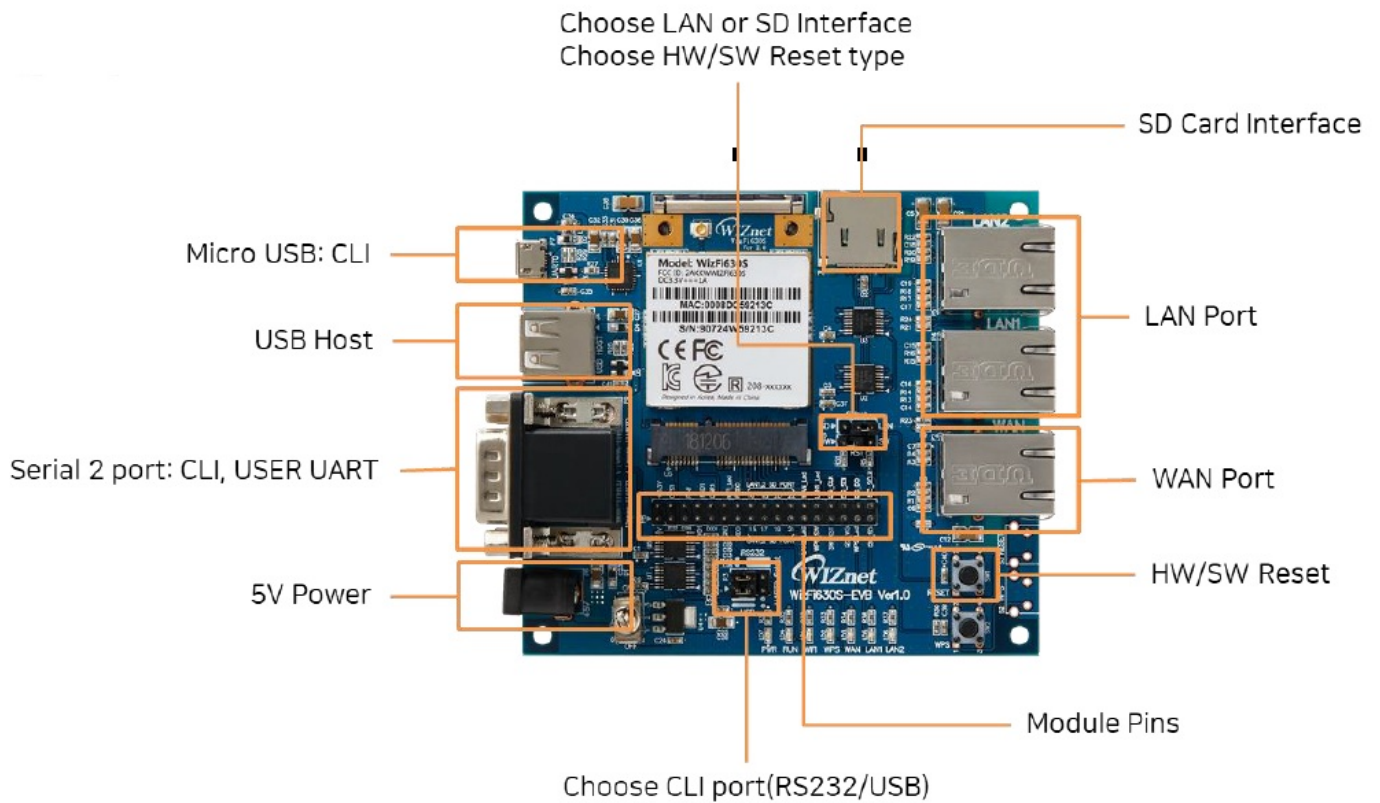
SW Features

Software features related to OpenWRT features




Type	Description
Operation Mode	Access Point(Bridge), Client(Station), AP-Client
Wireless	Radio Enable/Disable
	SSID Hidden
	Multi SSID
	Rate Control
	TX Power Control
	Beacon Interval

	DTIM Period
	Fragment Length
Protocol	TCP, UDP, ARP, ICMP, DHCP, PPPoE, HTTP
Security	WEP 64/128bit
	WPA/WPA2-PSK
	MAC Address Filtering / Limiting
Network	Port Forwarding(UDP and/or TCP)
	DHCP Client / Server
	WDS(Wireless Distribution System) Support
	NAT
	VLAN
Management	Administrator ID / PWD
	Station & AP Association Information
	SSH(Secure Shell) Support
	Web based Configuration / Serial Command Configuration
	Upgrade through WEB UI
Serial To Wi-Fi	2 Serial Port supports

Evaluation Board



User have to prepare below parts their own to use WizFi630S and WizFi630S-EVB.

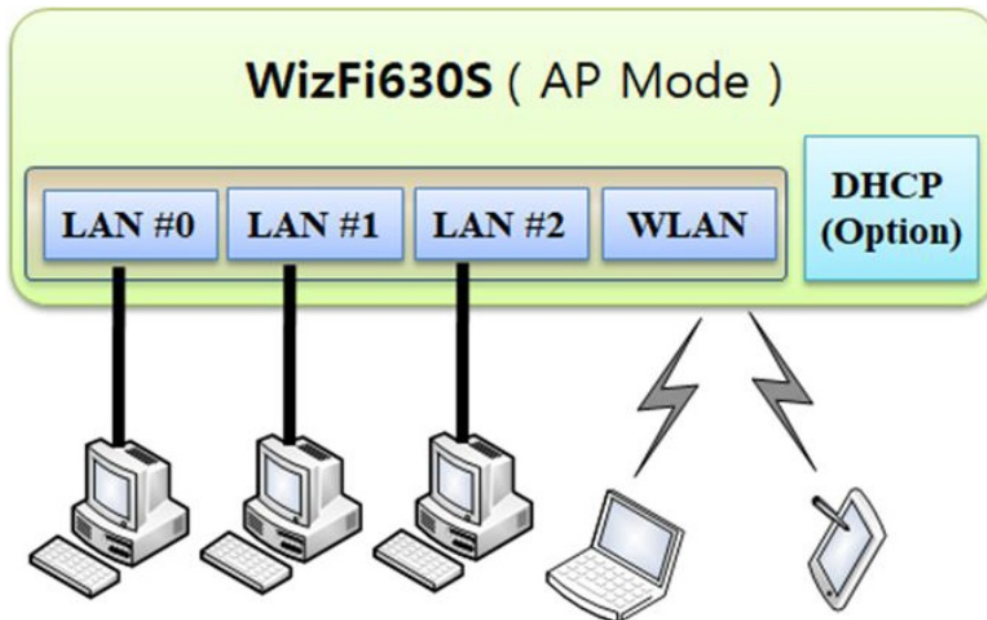
Power source & serial command line	Wireless	Ethernet
		

Operation Mode

Access Point

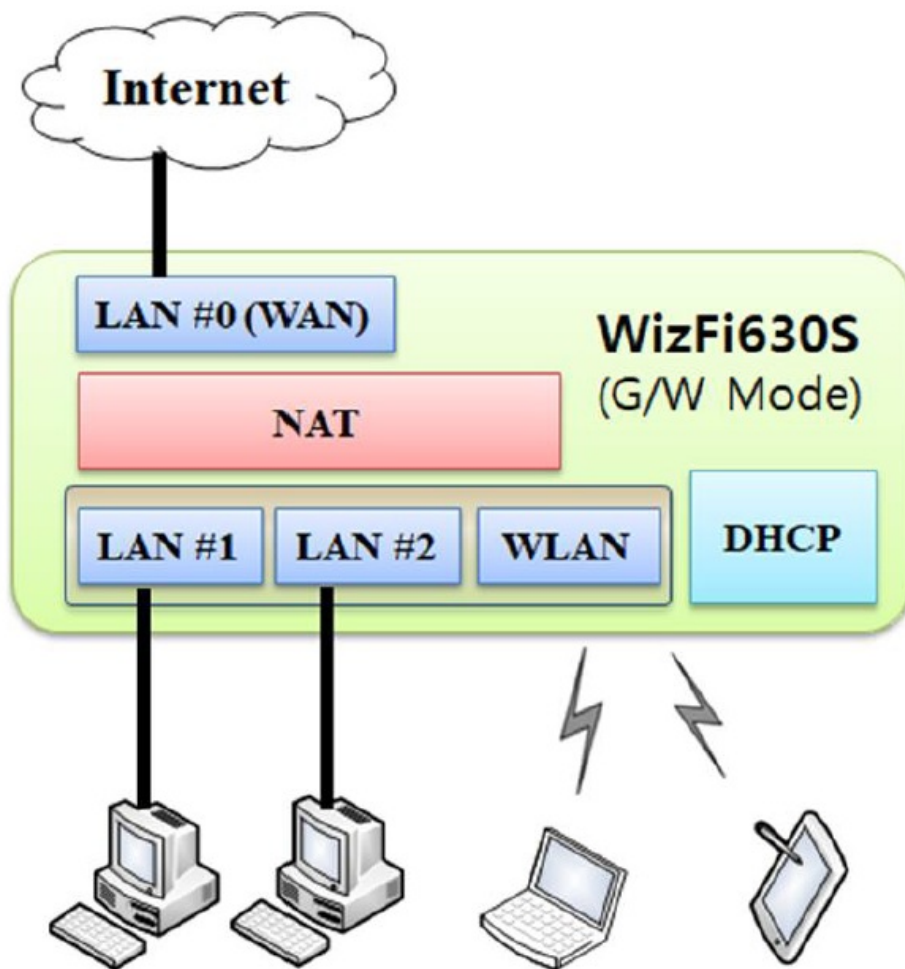
In this mode, all Ethernet ports and the wireless interface are bridged together.

Wired/Wireless interface has the same IP address space with its top mesh. DHCP Server function is disabled and WizFi630S does not assign an IP. Wireless (LAN Port included) sending periodic Broadcast Packet to Station and maintains a connection with Station



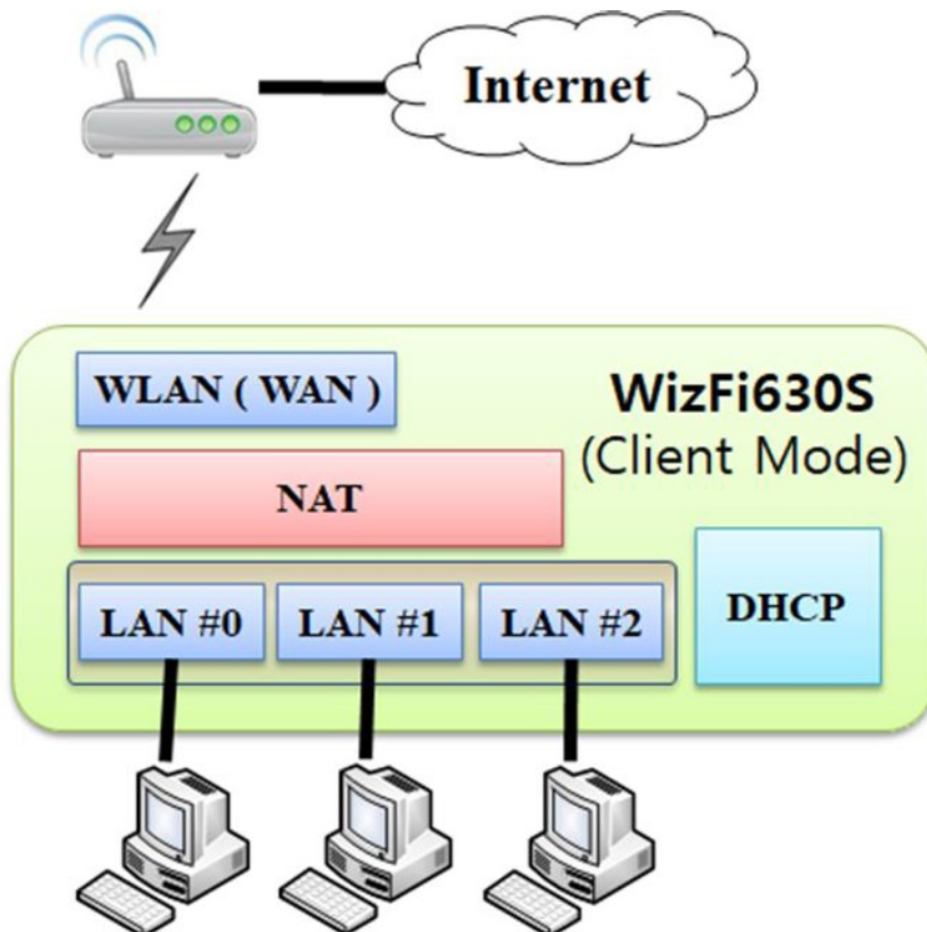
Gateway

When operating in router mode, interfaces are separated into WAN I/F (Internet Network), LAN I/F (Sub Private Network: 192.168.16.xxx), and Wireless I/F (Sub Private Network: 192.168.16.xxx). Port#0 will be assigned to the WAN Port. WizFi630S periodically sends Broadcast Packet to Sub-LAN (LAN Port included) and maintains connection with Station



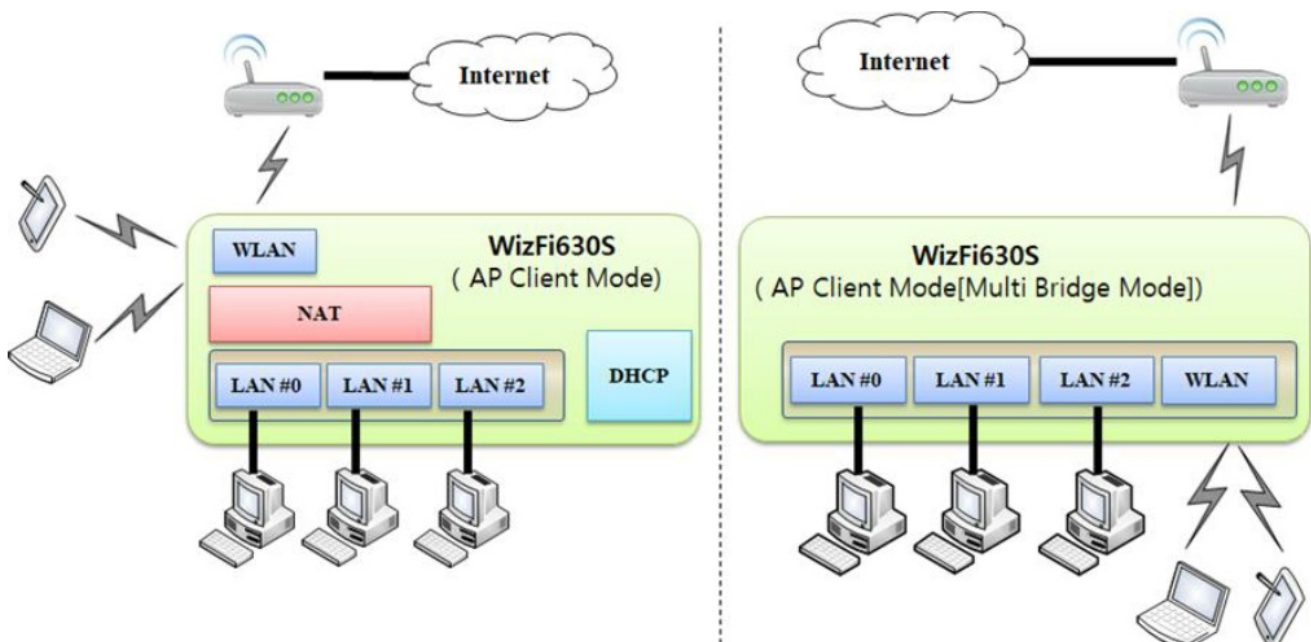
Client (Station)

Wireless I/F is assigned as WAN Port and all Ethernet Ports are bound to LAN Port. Set the profile and the WizFi630S is automatically connected to the AP when re-booting in the future. Devices that are connected through the LAN port are assigned a private IP. WizFi630S periodically sends PING Packet to AP Gateway and maintains connection with AP.



AP-Client mode

Wireless I/F is assigned as WAN Port and all Ethernet Ports are bound to LAN Port. This mode is similar to Station mode, however the difference is that the Wireless I/F will operate as client with AP simultaneously. WizFi630S periodically sends Broadcast Packet to Sub-LAN (LAN Port included) and maintains connection with Station.



Configuration Methods

There are 2 basic methods for logging into the WizFi630S module and setting up the operating modes and other configurable settings.

- Web Manager: View and configure all settings easily through a web browser.
- Command Mode: There are a few methods for accessing Command Mode (CLI). making a SSH connection, or connecting a PC or other host running a terminal emulation program to the unit's serial port.

Configuration using Web Manager

To use the Web Manager of WizFi630S, a network connection must be established between the PC and the module. There are two ways to connect to the network.

- Wireless: PC is connected to WizFi630S AP using Wi-Fi
- Wired: Connect the WizFi630S-EVB's Ethernet interface to the same network as your PC.

After connecting between the devices, you can access the Web Manager using a standard web browser.

- If your PC get a IP address from the WizFi630S module, you can access to Web Manager page through 192.168.1.1 or <http://wizfi630s/>

The screenshot displays the web interface of the WizFi630S module. At the top, a black status bar shows 'wizfi630s | OpenWrt SNAPSHOT r9850-2101002b3d | Load: 0.00 0.00 0.00'. Below this, a yellow warning box states 'No password set!' and advises configuring a root password. A button labeled 'Go to password configuration...' is located in the bottom right of this box. The main section is titled 'Authorization Required' and prompts the user to enter their username and password. The 'Username' field contains the text 'root', and the 'Password' field is empty. At the bottom right of the form are 'Login' and 'Reset' buttons.

wizfi630s | OpenWrt SNAPSHOT r9850-2101002b3d | Load: 0.00 0.00 0.00

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

[Go to password configuration...](#)

Authorization Required

Please enter your username and password.

Username

Password

[Login](#) [Reset](#)

The password is not set by default. Click Login without password to go to the setting screen, or click “Go to password configuration...” to set the password.

The initial screen is shown below. Through Web Manager, you can check the status of the device and make system and network related settings.

wizfi630s | Open/Wrt SNAPSHOT r9850-2101002b3d | Load: 0.77 0.21 0.07 | Auto Refresh: on

Status

Overview

Firewall

Routes

System Log

Kernel Log

Processes

Realtime Graphs

System

Network

Logout

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

[Go to password configuration...](#)

Status

System

Hostname	wizfi630s
Model	WIZnet WIZFi630S
Architecture	MediaTek MT7688 ver:1 eco:2
Firmware Version	OpenWrt SNAPSHOT r9850-2101002b3d / LuCI Master (f139fc93)
Kernel Version	4.14.111
Local Time	Wed Aug 21 01:00:55 2019
Uptime	23h 7m 13s
Load Average	0.48 0.20 0.07

Memory

Total Available	99.52 MB / 121.97 MB (81%)
Free	97.09 MB / 121.97 MB (79%)
Buffered	2.43 MB / 121.97 MB (1%)

Network

Active Connections: 269 / 16384 (1%)

Active DHCP Leases

Hostname	IPv4-Address	MAC-Address	Leasetime remaining
DANIEL-NB	192.168.1.179	58:00:E3:47:C6:A9	11h 50m 20s

Active DHCPv6 Leases

Host	IPv6-Address	DUID	Leasetime remaining
DANIEL-NB	fdfe:7a58:b4d1::509:128	0001000120539421fc45964c4e97	11h 59m 22s

Wireless

radio0

Type: 802.11bg
Channel: -
Bitrate: -

SSID: MyRouter
Mode: Client
Wireless is disabled

SSID: WIZFi630S-AP_67895E
Mode: Client
ESSID: 00:00:00:00:00:00
Encryption: -
Associations: -

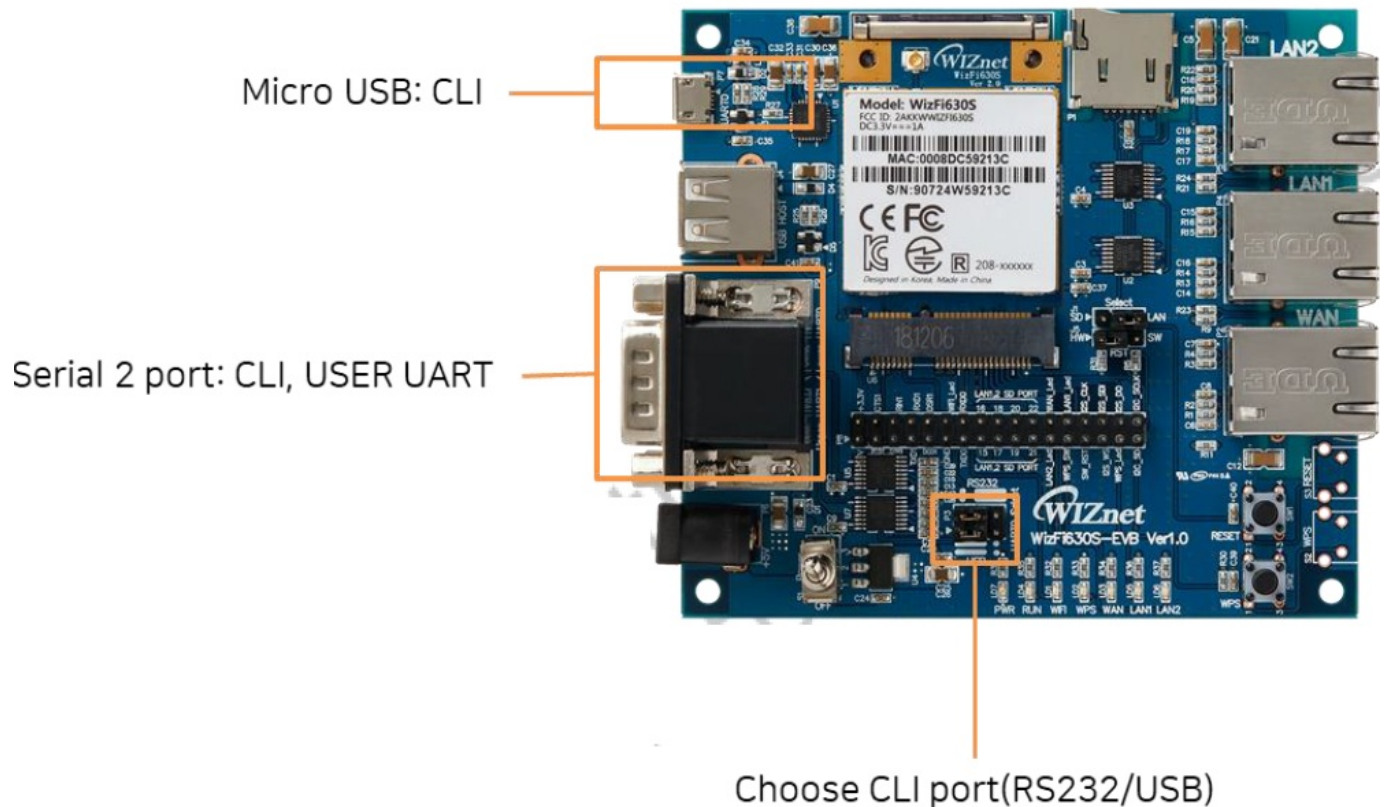
Associated Stations

Network	MAC-Address	Host	Signal / Noise	RX Rate / TX Rate
No information available				

Configuration using Command mode

The Command Line Interface settings allow you to control how users connect to and interact with the command line of the WizFi630S module. It is possible to configure access SSH protocol, in addition to CLI options using Serial port.

To connect CLI to using Serial port. refer to the following image.



- Default Baud rate: 115200
- Default Data size: 8bit
- Default Parity: none
- Default Flow control: none (not supported)

After connecting between the devices, you can access the CLI using a terminal emulation program.


```
U-Boot 1.1.3 (Aug 1 2019 - 11:25:14)

Board: Ralink APSoC DRAM: 128 MB
relocate_code Pointer at: 87fb8000
flash manufacture id: ef, device id 40 19
find flash: W25Q256FV
flash address mode: 4B
[WizFi630S] MAC: 00:08:dc:57:98:5e
=====
Ralink UBoot Version: 4.3.0.0
-----
ASIC 7628_MP (Port5<->None)
DRAM component: 1024 Mbits DDR, width 16
DRAM bus: 16 bit
Total memory: 128 MBytes
Flash component: SPI Flash
Date:Aug 1 2019 Time:11:25:14
=====
icache: sets:512, ways:4, linesz:32 ,total:65536
dcache: sets:256, ways:4, linesz:32 ,total:32768

##### The CPU freq = 580 MHZ #####
estimate memory size =128 Mbytes
RESET MT7628 PHY!!!!!!
Please choose the operation:
  1: Load system code to SDRAM via TFTP.
  2: Load system code then write to Flash via TFTP.
  3: Boot system code via Flash (default).
  4: Entr boot command line interface.
  7: Load Boot Loader code then write to Flash via Serial.
  9: Load Boot Loader code then write to Flash via TFTP.
0

3: System Boot system code via Flash.
## Booting image at bc050000 ...
Image Name: MIPS OpenWrt Linux-4.14.111
Image Type: MIPS Linux Kernel Image (lzma compressed)
Data Size: 1583627 Bytes = 1.5 MB
Load Address: 80000000
```

Then press Enter key to activate Serial CLI.

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

_ _ _ _ _ . _ _ _ _ _ . _ _ _ _ _ | _ _ _ _ _ . _ _ _ _ _ | _ _ _ _ _
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|___| W I R E L E S S   F R E E D O M

-----
OpenWrt SNAPSHOT, r9850-2101002b3d
-----
=== WARNING! =====
There is no root password defined on this device!
Use the "passwd" command to set up a new password
in order to prevent unauthorized SSH logins.
-----
root@wizfi630s:/#
root@wizfi630s:/#
```

Network Settings

The Network Settings show the status of the WizFi630S module's interface/link and lets

you configure the settings on the device. Interface settings are related to the configuration of the IP and related protocols.

The WizFi630S module contains two interfaces. The Ethernet interface is called eth0, and the WLAN interface is called ra0, apcli0.

Some settings require a reboot to take effect.

Interfaces

Sections of the interfaces declare logical networks serving as containers for IP address settings, aliases, routes, physical interface names they play a central role within the network configuration concept.

Web Manager

If WizFi630S connects to an existing network using the WAN port, configure it on the WAN tab.

If your Existing network supports DHCP Server, set “Protocol” to “DHCP Client” as shown below.

The screenshot shows the Web Manager interface for the WizFi630S module. The top status bar indicates the device is running OpenWrt SNAPSHOT r9850-2101002b3d with a load of 0.31 0.20 0.11 and auto refresh is on. The left sidebar contains navigation links: Status, System, Network (selected), Interfaces, Wireless, Switch, DHCP and DNS, Hostnames, Static Routes, Diagnostics, Firewall, and Logout. The main content area is titled 'Interfaces - WAN' and has tabs for LAN, WAN (selected), WANS, and WWAN. A yellow warning box at the top states 'No password set!' and provides instructions to configure a root password. Below this, the 'Common Configuration' section is active, showing the 'General Setup' tab. The 'Status' field displays device information: Device: eth0.2, MAC: 00:08:DC:57:98:5F, RX: 0 B (0 Pkts), and TX: 129.78 KB (394 Pkts). The 'Protocol' dropdown is set to 'DHCP client', and the 'Hostname to send when requesting DHCP' is set to 'wizfi630s'. At the bottom, there are buttons for 'Back to Overview', 'Save & Apply', 'Save', and 'Reset'.

If the Existing network does not support DHCP Server or if you want to use defined IP address, set “Protocol” to “Static address” and enter the IP information of the Existing network as below.

wizfi630s | OpenWrt SNAPSHOT r8850-2101002b3d | Load: 0.08 0.08 0.08 | Auto Refresh: on Unsaved Changes

Status
System
Network
Interfaces
Wireless
Switch
DHCP and DNS
Hostnames
Static Routes
Diagnostics
Firewall
Logout

LAN | WAN | **WAN6** | WWAN

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

[Go to password configuration...](#)

Interfaces - WAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation (INTERFACE.VLANID (e.g.: eth0.1)).

Common Configuration

General Setup | Advanced Settings | Physical Settings | Firewall Settings

Status

Device: eth0.2
MAC: 00:08:DC:57:98:5F
RX: 0 B (0 Pkts.)
TX: 139.01 KB (421 Pkts.)

Protocol: Static address

IPv4 address:

IPv4 netmask: -- Please choose --

IPv4 gateway:

IPv4 broadcast:

Use custom DNS servers:

IPv6 assignment length: disabled

☒ Assign a part of given length of every public IPv6-prefix to this interface

IPv6 address: Add IPv6 address...

IPv6 gateway:

IPv6 routed prefix:

☒ Public prefix routed to this device for distribution to clients.

IPv6 suffix:

☒ Optional. Allowed values: 'oui64', 'random', fixed value like '::1' or '::1:2'. When IPv6 prefix (like 'a:b:c:d::') is received from a delegating server, use the suffix (like '::1') to form the IPv6 address (a:b:c:d::1) for the interface.

DHCP Server

General Setup | IPv6 Settings

Ignore interface: ☒

☒ Disable DHCP for this interface.

[Back to Overview](#) [Save & Apply](#) [Save](#) [Reset](#)

Command mode

to make the same we just did with Web Manager above, see below for more detailed explanation of the steps.

You can show what is set using command below.

uci show network.wan

```
root@wizfi630s:/# uci show network.wan
network.wan=interface
network.wan.ifname='eth0.2'
network.wan.proto='dhcp'
root@wizfi630s:/#
```

DHCP Client

1. type `uci set network.wan.proto='dhcp'` and press Enter
2. type `uci commit && service network restart` (this will save the changes and restart network interfaces)
3. now you can connect the network cable from the WizFi630S's WAN port to your existing network (the other router's LAN ports usually)
4. connect again to the WizFi630S at its new address as assigned from dhcp server

Static address

1. type `uci set network.wan.proto='static'` and press Enter
2. type `uci set network.wan.ipaddr='ip-address-here'` and press Enter
3. type `uci set network.wan.netmask='subnet-mask-here'` and press Enter
4. type `uci commit && service network restart` (this will save the changes and restart network interfaces)
5. now you can connect the network cable from the device's WAN port to your existing network (the other router's LAN ports usually)
6. connect again to the device at its new address as defined above

Other Tabs

Wi-Fi devices need to modify Interface-> LAN in order to connect to WizFi630S as Wired.

Also, in order for WizFi630S to connect wirelessly to the existing network, you need to set Interface-> WWAN.

The screenshot shows the OpenWrt web interface for a WizFi630S device. The top navigation bar includes tabs for LAN, WAN, WANS, and WWAN. The left sidebar contains a menu with options like Status, System, Network, Interfaces, Wireless, Switch, DHCP and DNS, Hostnames, Static Routes, Diagnostics, Firewall, and Logout. The main content area is titled 'Interfaces - LAN' and contains a 'Common Configuration' section with tabs for General Setup, Advanced Settings, Physical Settings, and Firewall Settings. The 'General Setup' tab is active, showing fields for Protocol (Static address), IPv4 address (192.168.1.1), IPv4 netmask (255.255.255.0), IPv4 gateway, IPv4 broadcast, Use custom DNS servers, IPv6 assignment length (60), IPv6 assignment hint, and IPv6 suffix (1). A 'DHCP Server' section is also visible with tabs for General Setup, Advanced Settings, and IPv6 Settings. The 'General Setup' tab for DHCP shows fields for Ignore interface, Start (100), Limit (150), and Lease time (12h). The bottom of the page has 'Save & Apply', 'Save', and 'Reset' buttons.

WizFi630S | OpenWrt SNAPSHOT | r9850-2101002b3d | Load: 0.01 0.05 0.06 | Auto Refresh: on

Unsaved Changes

LAN | WAN | WANS | WWAN

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

[Go to password configuration...](#)

Interfaces - LAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use `VLAN` notation `INTERFACE.VLANID` (e.g.: `eth0.1`).

Common Configuration

General Setup | Advanced Settings | Physical Settings | Firewall Settings

Status

Device: br-lan
Uptime: 0h 22m 0s
MAC: 00:08:DC:57:99:80
RX: 406.41 KB (5528 Pkts.)
TX: 1.24 MB (4703 Pkts.)
IPv4: 192.168.1.1/24
IPv6: fdfe:7a98:b4d1:1/60

Protocol: Static address

IPv4 address: 192.168.1.1

IPv4 netmask: 255.255.255.0

IPv4 gateway:

IPv4 broadcast:

Use custom DNS servers:

IPv6 assignment length: 60

IPv6 assignment hint:

IPv6 suffix: 1

DHCP Server

General Setup | Advanced Settings | IPv6 Settings

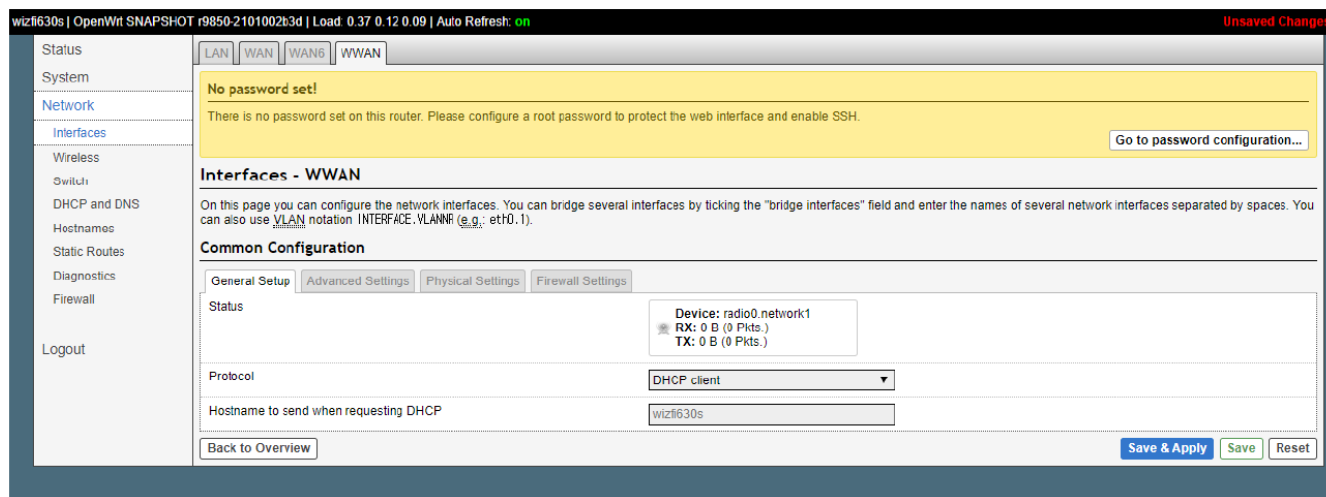
Ignore interface:

Start: 100

Limit: 150

Lease time: 12h

[Back to Overview](#) [Save & Apply](#) [Save](#) [Reset](#)



Wireless

Sections of the Wireless declare logical networks serving as containers for wifi-device, wifi-interface. The wifi-device refer physical radio properties present on the system such as channel or country code. And the wifi-interface refer complete wireless configurations such as ssid, key, encryption

Web Manager

If you want to connect to an existing Wi-Fi network with wireless, refer to the WWAN interface in 5.1. First, click “Enable” button on the “Wireless network is disabled” of Device Configuration-> General Setup tab to activate the Station Mode. The PC may be disconnected from the WizFi630S because the Network Interface of WizFi630S is restarted.

Enter the SSID of the Wi-Fi network to be connected to the ESSID in the Interface Configuration-> General Setup tab, and enter the security settings in the Interface Configuration-> Wireless Security tab.

wizfi630s | OpenWrt SNAPSHOT r9850-2101002b3d | Load: 0.18 0.11 0.09 | Auto Refresh: on Unsaved Changes:

Status
System
Network
Interfaces
Wireless
Switch
DHCP and DNS
Hostnames
Static Routes
Diagnostics
Firewall

Logout

radio0: Client "MyRouter" radio0: Client "WizFi630S_AP_57985E"

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

[Go to password configuration...](#)

Wireless Network: Client "MyRouter" (radio0.network1)

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: Client | SSID: MyRouter
0% Wireless is disabled

Wireless network is disabled Enable

Operating frequency Mode Band Channel Width

Interface Configuration

General Setup Wireless Security

Mode Client

ESSID MyRouter

BSSID

Network wwan:

Choose the network(s) you want to attach to this wireless interface or fill out the create field to define a new network.

Back to Overview Save & Apply Save Reset

In the Wireless Network: Client In the “WizFi630S_AP_XXXXXX” (ra0) setting page, you can make settings for the AP mode of the WizFi630S. Basically, it operates in AP mode with SSID of “WizFi630S_AP_XXXXXX”.

wizfi630s | OpenWrt SNAPSHOT r9850-2101002b3d | Load: 0.12 0.10 0.09 | Auto Refresh: on Unsaved Changes:

Status
System
Network
Interfaces
Wireless
Switch
DHCP and DNS
Hostnames
Static Routes
Diagnostics
Firewall

Logout

radio0: Client "MyRouter" radio0: Client "WizFi630S_AP_57985E"

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

[Go to password configuration...](#)

Wireless Network: Client "WizFi630S_AP_57985E" (ra0)

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: Client | SSID: WizFi630S_AP_57985E
BSSID: 00:06:DC:57:98:5E
Encryption: -
Channel: 6 (0.000 GHz)
Tx Power: 0 dBm
Signal: 0 dBm | Noise: 0 dBm
Bitrate: 150.0 Mbit/s | Country: 00

Wireless network is enabled Disable

Operating frequency Band Channel Width

Interface Configuration

General Setup Wireless Security

Mode Access Point

ESSID WizFi630S_AP_57985E

BSSID

Network lan:

Choose the network(s) you want to attach to this wireless interface or fill out the create field to define a new network.

Back to Overview Save & Apply Save Reset

Command mode

to make the same we just did with Web Manager above, see below for more detailed explanation of the steps.

You can show what is set using command below.

uci show wireless.sta

```
root@wizfi630s:/# uci show wireless.sta
wireless.sta=wifi-iface
wireless.sta.device='radio0'
wireless.sta.mode='sta'
wireless.sta.network='wwan'
wireless.sta.ifname='apcli0'
wireless.sta.encryption='psk2'
wireless.sta.disabled='1'
wireless.sta.ssid='MyRouter'
wireless.sta.key='MyPassword'
root@wizfi630s:/#
```

uci show wireless.ap

```
root@wizfi630s:/# uci show wireless.ap
wireless.ap=wifi-iface
wireless.ap.mode='ap'
wireless.ap.network='lan'
wireless.ap.ifname='ra0'
wireless.ap.ssid='WizFi630S_AP_57985E'
wireless.ap.device='radio0'
wireless.ap.encryption='none'
wireless.ap.disabled='0'
root@wizfi630s:/#
```

Station Mode

1. type uci set wireless.sta.disabled='0' and press Enter
2. type uci set wireless.sta.ssid='ap-ssid-here' and press Enter
3. type uci set wireless.sta.key='ap-password-here' and press Enter
4. type uci set wireless.sta.encryption='encryption-type-here' and press Enter
5. type uci commit && service network restart (this will save the changes and restart network interfaces)
6. now you can connect your WizFi630S to your Wi-Fi network

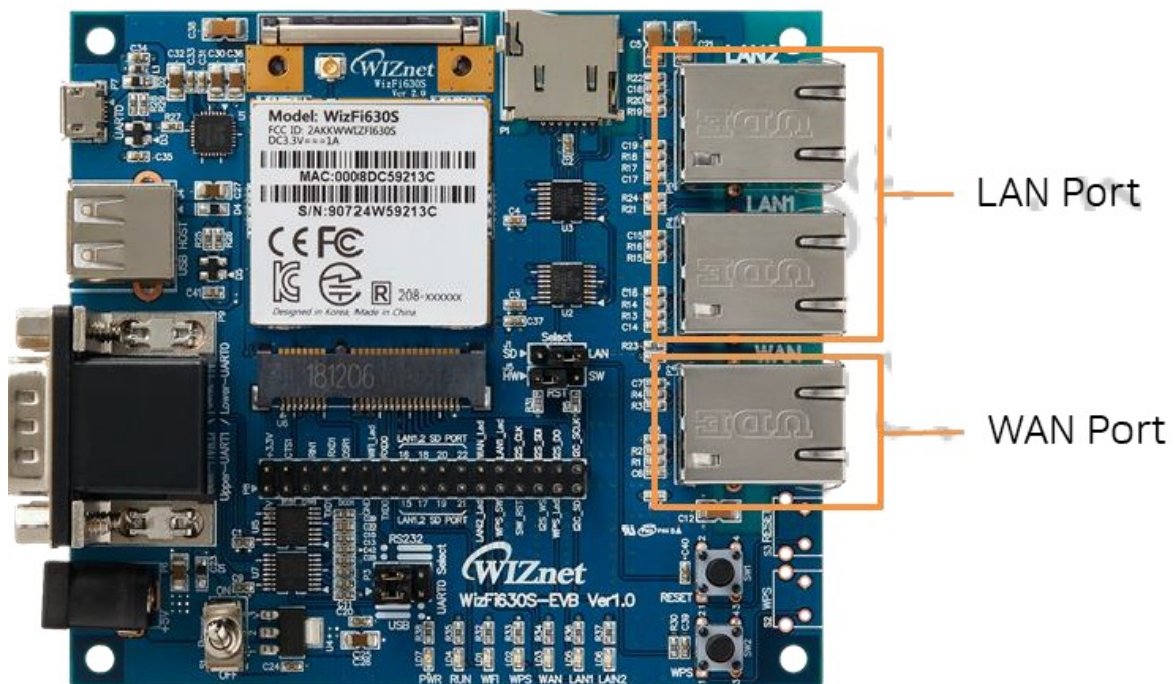
AP mode

1. type uci set wireless.ap.disabled='0' and press Enter

2. type `uci set wireless.ap.ssid='ap-ssid-here'` and press Enter
3. type `uci set wireless.ap.key='ap-password-here'` and press Enter
4. type `uci set wireless.ap.encryption='encryption-type-here'` and press Enter
5. type `uci commit && service network restart` (this will save the changes and restart network interfaces)
6. now you can connect your PC or Wi-Fi devices to the WizFi630S AP mode

Switch

WizFi630S supports 1-WAN port and 2-LAN port by default. And you can configure it



wizfi630s | OpenWrt SNAPSHOT r9850-2101002b3d | Load: 0.25 0.17 0.07 | Auto Refresh: on

Status
System
Network
Interfaces
Wireless
Switch
DHCP and DNS
Hostnames
Static Routes
Diagnostics
Firewall
Logout

No password set!
There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

Go to password configuration...

Switch

The network ports on this device can be combined to several VLANs in which computers can communicate directly with each other. VLANs are often used to separate different network segments. Often there is by default one Uplink port for a connection to the next greater network like the internet and other ports for a local network.

Switch "switch0" (rt305x-esw)

Enable VLAN functionality ☒

VLANs on "switch0" (rt305x-esw)

VLAN ID	CPU (eth0)	LAN 1	LAN 2	WAN	
1	1000baseT full-duplex	no link	no link	no link	
2	tagged	untagged	untagged	off	Delete
	tagged	off	off	untagged	Delete

[Add](#)

[Save & Apply](#)
[Save](#)
[Reset](#)

Firewall

Sections of the Firewall declare firewall zones for firewall rules to what is allowed to be forwarded across interfaces, which packets are allowed to be inputted to/outputted from,

the WizFi630S itself.

Status

System

Network

Interfaces

Wireless

Switch

DHCP and DNS

Hostnames

Static Routes

Diagnostics

Firewall

Logout

General Settings

Port Forwards

Traffic Rules

Custom Rules

WizFi630s | OpenWrt SNAPSHOT r9850-2101002b3d | Load: 0.00 0.00 0.00

Unsaved Changes: 14

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

Go to password configuration...

Firewall - Zone Settings

The firewall creates zones over your network interfaces to control network traffic flow.

General Settings

Enable SYN-flood protection

Drop invalid packets

Input

Output

Forward

Routing/NAT Offloading

Software flow offloading

Zones

Name	Zone →	Forwardings	Input	Output	Forward	Masquerading	MSS clamping		
lan	lan	→ wan	accept	accept	accept	<input type="checkbox"/>	<input type="checkbox"/>	Edit	Delete
wan	wan	→ REJECT	accept	accept	reject	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Edit	Delete

Add

Save & Apply

Save

Reset

In Port Forwards-> New port forward tab, you can configure port forwarding. After all the settings are completed, click “Save & Apply” to restart the Network Interface to activate the Port Forwarding function.

Status

System

Network

Interfaces

Wireless

Switch

DHCP and DNS

Hostnames

Static Routes

Diagnostics

Firewall

Logout

General Settings

Port Forwards

Traffic Rules

Custom Rules

WizFi630s | OpenWrt SNAPSHOT r9850-2101002b3d | Load: 0.16 0.03 0.01

Unsaved Changes: 14

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.

Go to password configuration...

Firewall - Port Forwards

Port forwarding allows remote computers on the Internet to connect to a specific computer or service within the private LAN.

Port Forwards

Name	Match	Forward to	Enable
This section contains no values yet			

New port forward

Name	Protocol	External zone	External port	Internal zone	Internal IP address	Internal port	
New port forward	TCP+UDP	wan		lan	-- Please choose --		Add

Save & Apply

Save

Reset

STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for

compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body

© Copyright 2019 WIZnet Co., Ltd. All rights reserved.

For more information, please visit our website at <http://www.wiznet.io/>

Document Revision History

Date	Revision	Changes
2019-09-09	1.0	Release
2019-11-13	1.1	Typo correction

Frequently Asked Questions


What are the key FCC requirements for the modular transmitter?

The key FCC requirements include shielding of radio frequency circuitry, power supply regulation on the module, compliance with RF exposure requirements, and proper labeling with the FCC ID.

How can host product manufacturers ensure compliance with FCC regulations?

Host product manufacturers should refer to the integration instructions provided in the OEM manual and follow the checklist of requirements outlined in the manual.

Documents / Resources

	WIZnet WIZFi630S Modular Transmitter Application [pdf] User Manual 2BQPH-WIZFI630S, 2BQPHWIZFI630S, WIZFi630S Modular Transmitter Application, WIZFi630S, Modular Transmitter Application, Transmitter Application, Application
---	--

References

- [User Manual](#)

WIZnet
2BQPH-WIZFI630S, 2BQPHWIZFI630S, Application, Modular Transmitter Application, Transmitter Application, WIZFi630S, WIZFi630S Modular Transmitter Application, WIZnet

Leave a comment

Your email address will not be published. Required fields are marked *

Comment *

Name

Email

Website

☐ Save my name, email, and website in this browser for the next time I comment.

Post Comment

Search:

e.g. whirlpool wrf535swhz

Search

[Manuals+](#) | [Upload](#) | [Deep Search](#) | [Privacy Policy](#) | [@manuals.plus](#) | [YouTube](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.