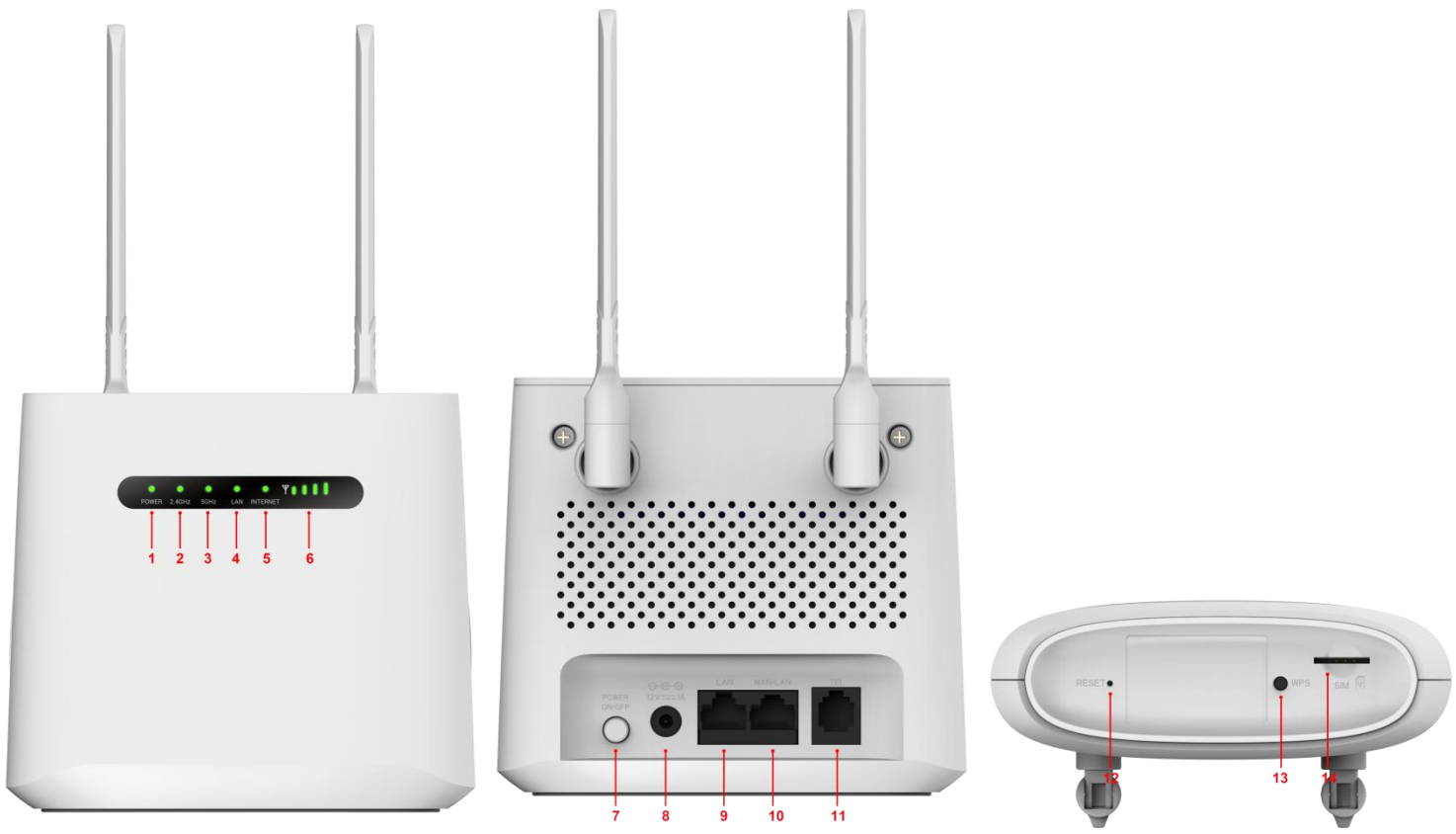
R402 User Manual

1. Interface



1.1 LED Light Color Indication

Number	Indicator	Color	Working Status
1	Power	Dark	Power off
		Green,Solid	Power on
		all led Green,Solid(except internet led ,it show pink)	External Power supply Booting up the device
2	WIFI(2.4G)	Green,Solid	2.4G WIFI is enable(No user)
		Green,Blink- 0.5s	2.4G Users connected to WIFI
		Dark	2.4G WIFI is disabled
		Green,Blink- 0.2s	2.4G WPS is Active
3	WIFI (5G)	Green,Solid	5G WIFI enable(No user)
		Green,Blink- 0.5s	5G Users connected to WIFI
		Dark	5G WIFI is disabled
		Green,Blink- 0.2s	5G WPS is Active
4	WAN/LAN	Green,Blink	Wire inserted into WAN port or LAN port .have a data transmission
		Dark	No Wire inserted into WAN port or LAN port
5	Internet	Blue	Solid:Disconnected to LTE Network . Blink: Connected to LTE Network
		Green	Solid:Disconnected to 2G/3G Network . Blink: Connected to 2G/3G Network
6	Signal	Green(1-4 bar)	Indicate signal strength

1.2 Interface

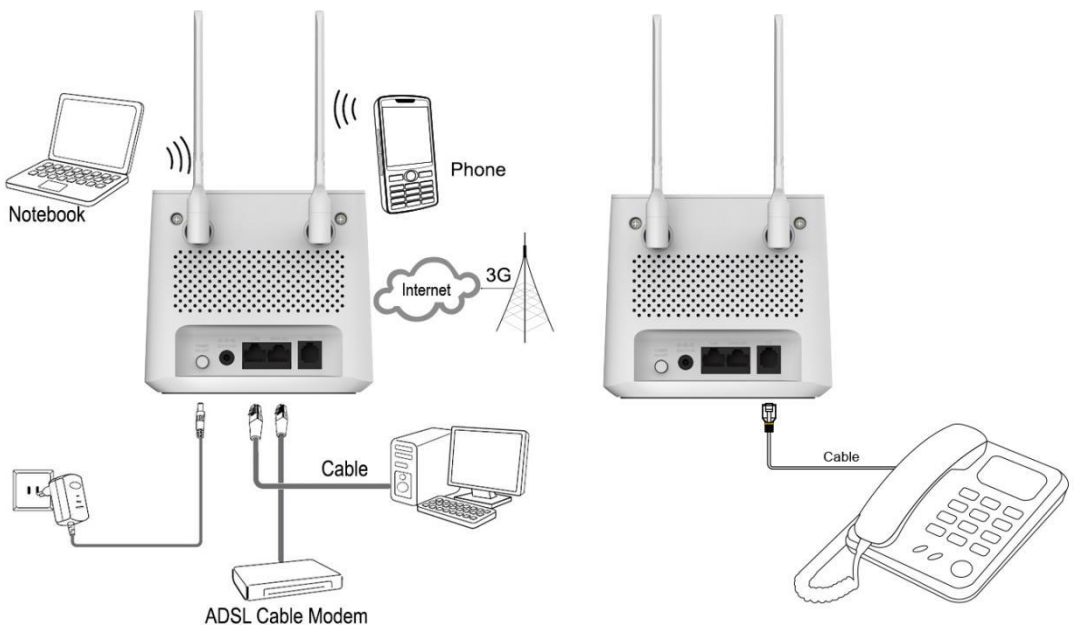
Number	Connections	Description
7	Power	Turn on/off the router.
8	Power Adapter	Connect Power to DC-Jack 12V/1A Power Adapter. Using power supplies with a different voltage from the one included with the R402 will cause damage and void the warranty.
9	LAN	LAN ports provide connections to Ethernet enabled devices.
10	WAN/LAN	If the WAN is set to the WAN Mode, will be as the WAN interface, you can dial the DSL module; If WAN set to LAN MODE, will be a LAN interface
11	TEL	Connect the telephone

1.3 KEY

Number	Connections	Description
12	RESET	Press the reset button 3 seconds to restore the device to its factory default settings.
13	WPS	Click this button to start WPS encryption.
14	SIM	Insert SIM card to automatically identify registration

2. Using

You can place R402 on a desk or other flat surface. Please keep R402 away from overheating. For optimal performance, please place your R402 router in the center of your home (office), in a location that is away from any potential interference source.



2.1 Access internet by Wire inserted into WAN port or LAN port

1) Connect Ethernet cable between your PC/Notebook and one of the four available LAN ports on R402.

2) Connect Ethernet cable between WAN ports of your ADSL/CABLE modem and WAN port of R402. Please make sure your ADSL/CABLE modem is working properly. Contact your ISP if you have any inquiry.

3) Powered up and turned on the R402 router

2.2 Wi-Fi wireless Internet access

To establish a connection with the R402 router for the first time, you need to enter the SSID (Wi-Fi account) and the Wi-Fi passwords.

Login Page

1. Open your browser, input http://192.168.1.1 and press enter on your computer

●The default user name is ClaroAdministrador

●The default password is soporteXXXXXX（XXXXXX is the last 6 bits of 2.4G WiFi MAC address）

Enter the user name and password above on the login administration page.

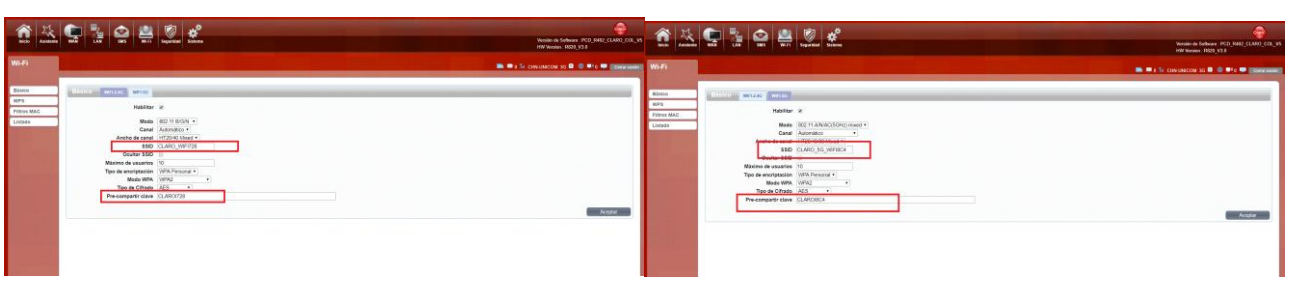
2. Enter the Wi-Fi menu , to view the default 2.4G WIFI SSID and 5G WIFI SSID and Wi-Fi passwords.5G WIFI defaults disabled.

●The default 2.4G WIFI SSID is CLARO_WIFIXXX(XXX is the first three bits of WiFi 2.4G mac)

●The default 5G WIFI SSID is CLARO_5G_WIFIXXX(XXX is the first three bits of WiFi 5g mac)

●The default 2.4G password is CLAROIXXX(XXX is the first three bits of WiFi 2.4G mac)

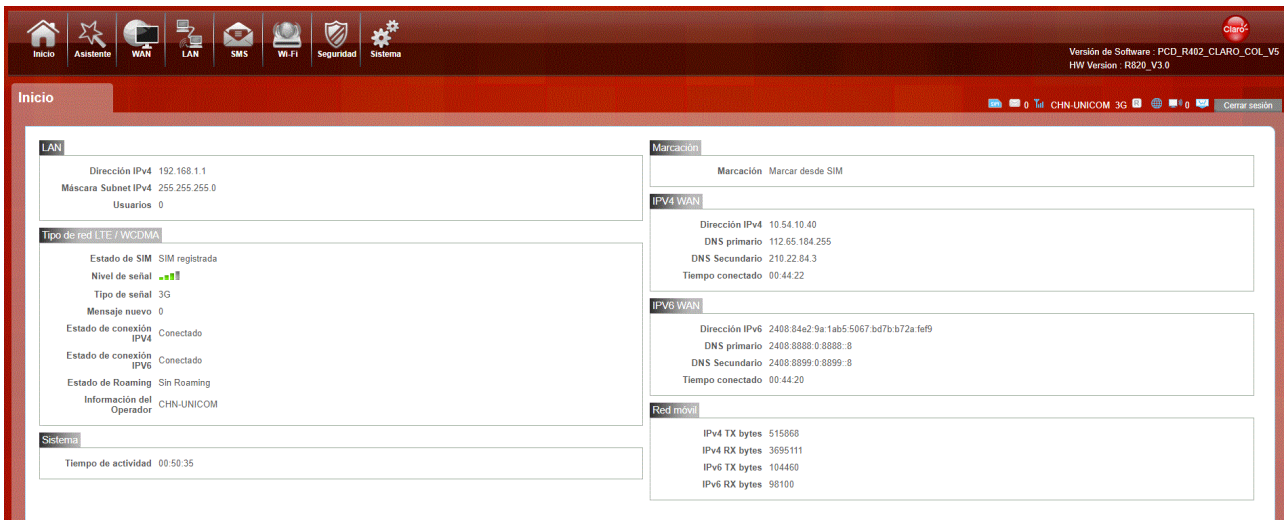
●The default 5G password is CLAROIXXX(XXX is the first three bits of WiFi 5g mac)



★Recommend setting a convenient SSID and a more secure Wi-Fi passwords before using or browsing the other pages of R402.

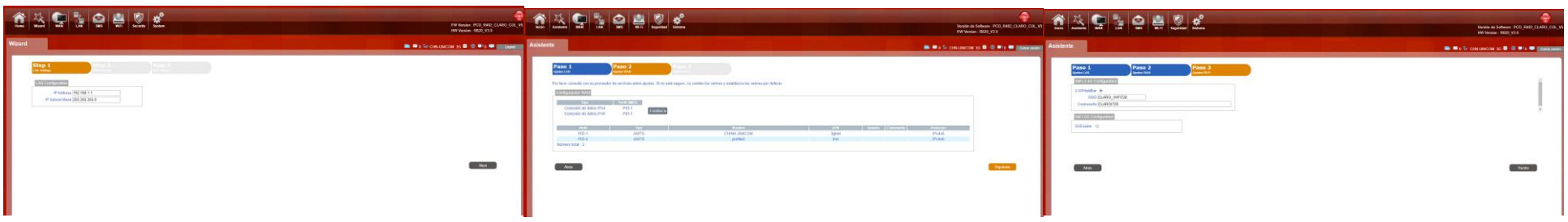
3. Administrator menu

●Home



The main display settings page shows the network status information such as SIM card status, type and quality of the network signal, new messages notification, and so on.

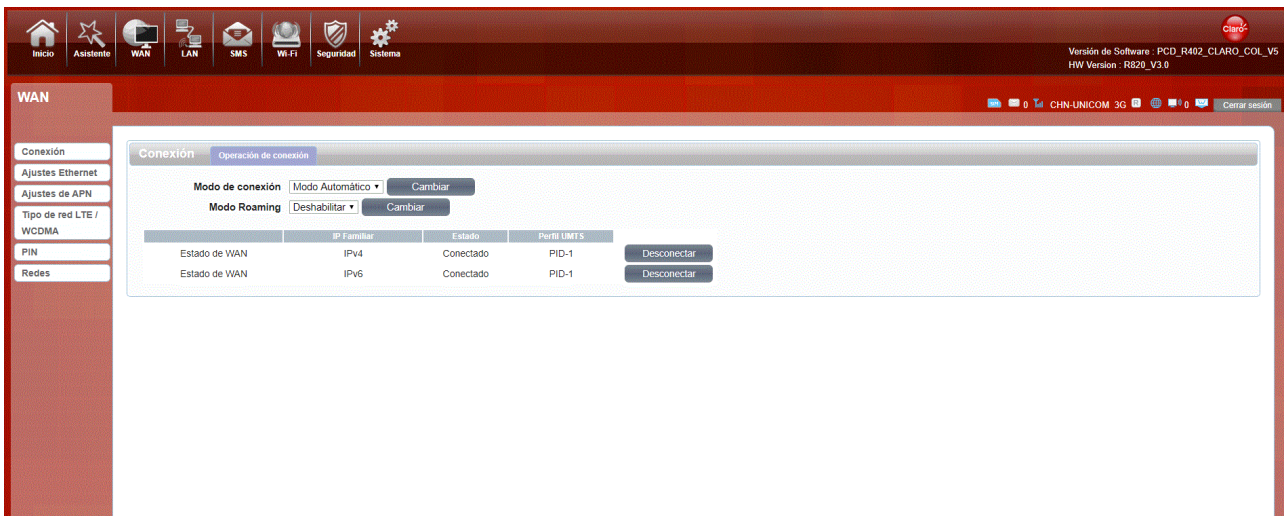
●Wizard



To change the LAN configuration, set the APN , and change the WIFI SSID \ password through the wizard function.

●WAN

1. Connection

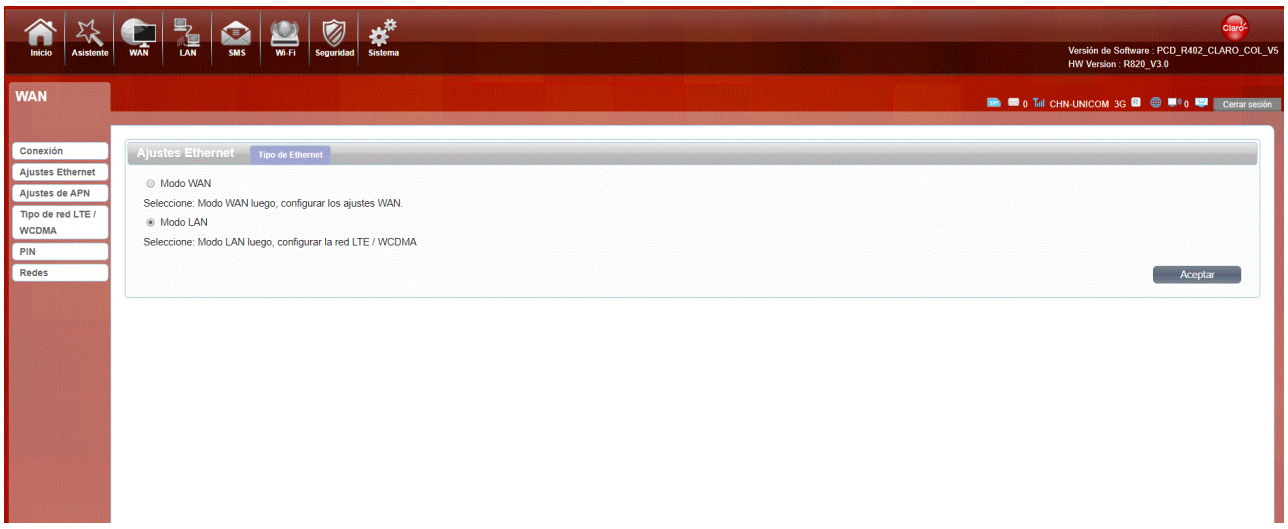


Dialing Mode:

Auto Mode, the device will automatically connect to the network after turning on R402. There is no need to do any other additional operations.
Manual Mode, manually connect to the network after opening the R402 management page.

2. Connection Setting

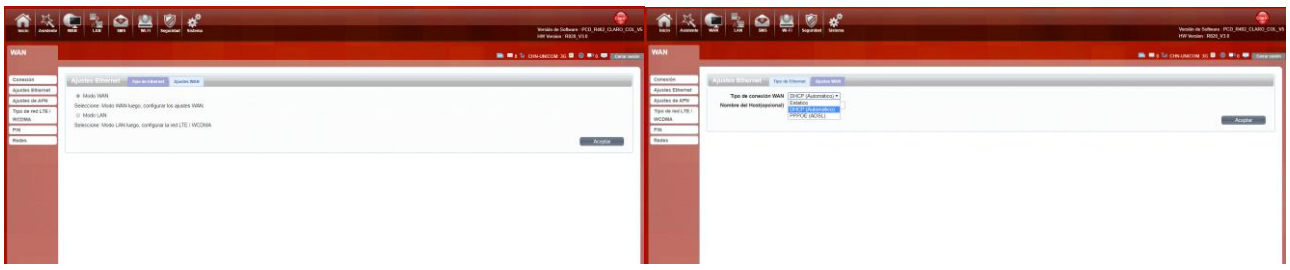
LAN Mode



Choose your Internet Access Type.

If you choose 3G/4G SIM card to access the network: On the APN setting page, Key in the “APN”, “Dial Number” and ”Authentication” which are provided by your mobile network operator.

WAN Mode



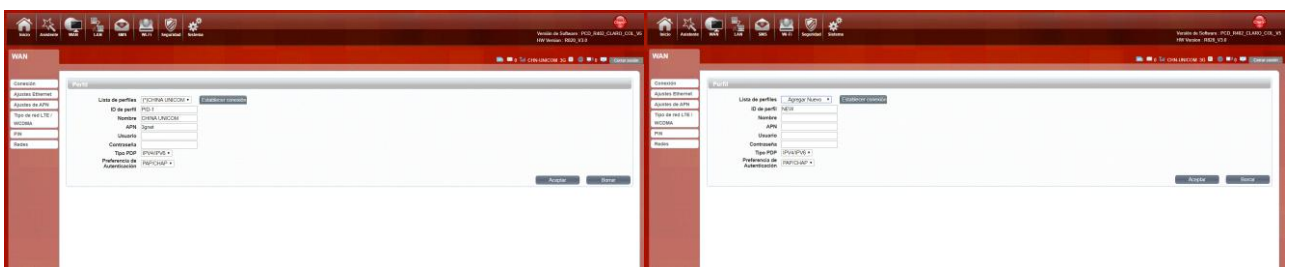
If you choose WAN Mode, please select the type of internet connection for your router.

DHCP：A dynamic IP address connection that configures the router to automatically obtain IP address from a DHCP server on the ISP’s network.

Static Mode: Please enter the IP address information provided to you by your ISP. The Subnet Mask for R820 is preconfigured to 255.255.255.0. Other configurations can be made, but it is not recommended. This feature is for advanced users. Your ISP should also provide the Default Gateway, Primary DNS and Secondary DNS (optional).

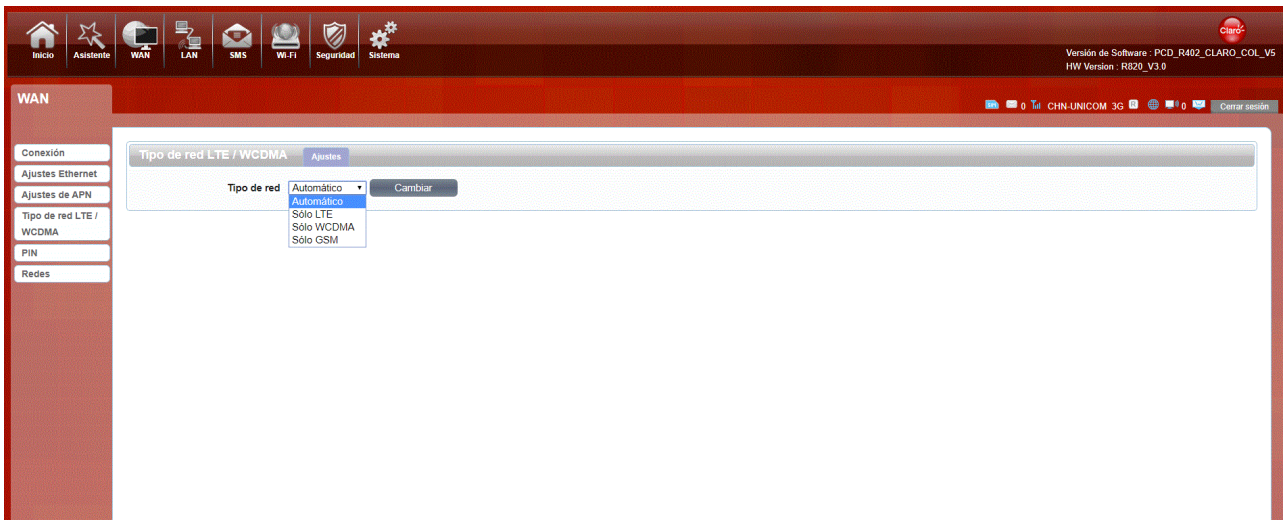
PPPoE: Please enter the PPPoE username and password assigned by your ISP. Choose the Operation Mode; enable the Keep Alive option to automatically re-establish the connection when an application attempts to access the Internet again. The On Demand Mode Idle Time is a maximum period of time for which the Internet connection is maintained during inactivity. If the connection is in activate longer than the Maximum Idle Time, it will be dropped.

3. APN Settings



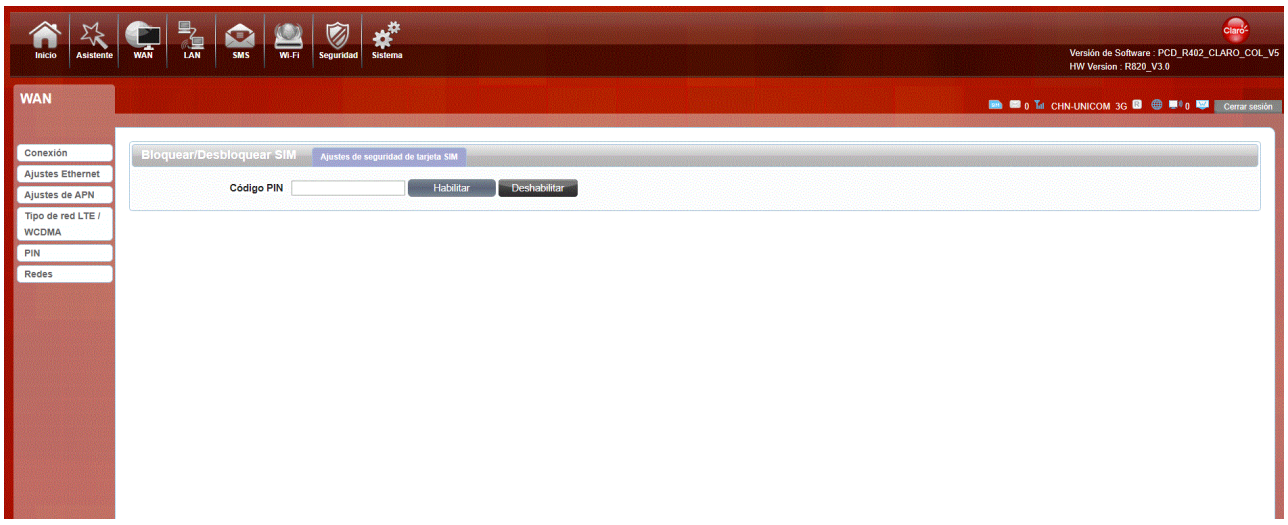
You can customize the network configuration or manually add the new APN and set the default APN.

4. 4G/3G/2G Modem



There are four types of networks available: Auto, LTE Only, WCDMA Only and GSM Only. The default function is Auto, after Turning On R402 the device will automatically register to the network.

5. SIM Card PIN Lock



Open your PIN page to configure your SIM card. If you reboot the device, the log management page will prompt to enter the correct PIN code, to use the SIM card.

The PIN / PUK code is supplied with the SIM card provided by your Network carrier, for more info please consult your Network carrier.

6. PLMN

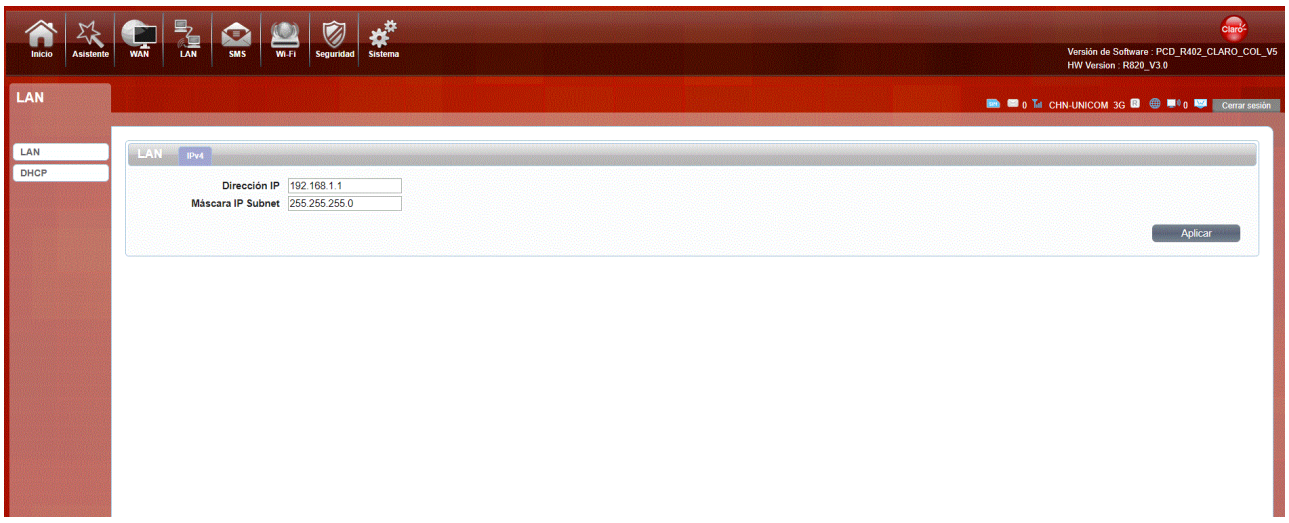
Into automatic and manual setting options

Automatic: Select this mode to automatically selects the best network registration status

Manual : Select this mode, if your device is in the state of a dial-up Internet, disconnect the network, and then click the query, wait for it to load, the device will search for all nearby networks, select a network, click the update button and the device will registers to the network that you have selected.

● LAN

1. LAN

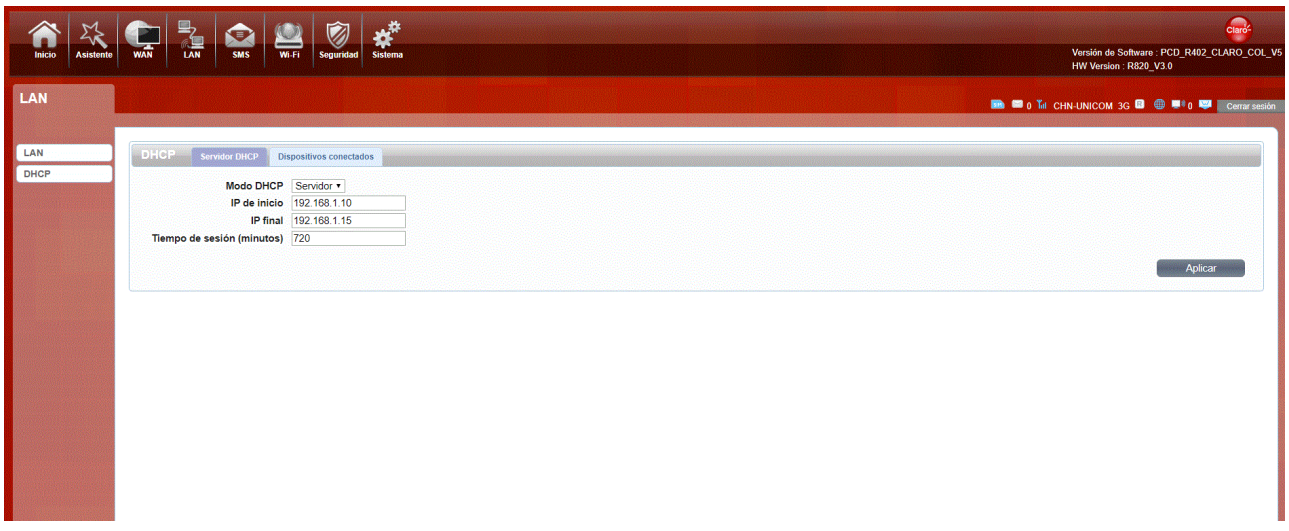


You can configure the LAN port parameters here.

IP Address: Enter the IPv4 address for your Wi-Fi network. The address in your web browser’s address bar in order to access the web-based configuration utility.

Subnet: Enter the IPv4 subnet mask for your Wi-Fi network.

2. DHCP



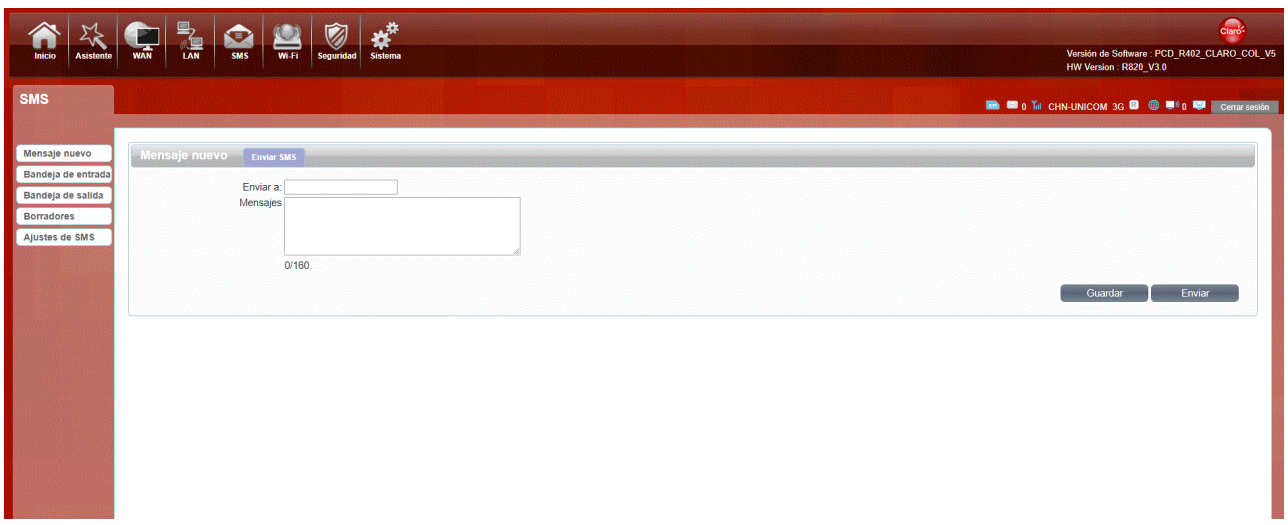
DHCP Mode: Server- the R402 DHCP Service is on, theR402 assigns IP addresses and provides subnet mask ,gateway ,and DNS server information to the network .The R402 is the DHCP server for the network

None- the R402 DHCP Service is off ,the R402 does not provide any DHCP services .There is already a DHCP server on the network

Starting IP Address & Ending IP Address: The IP range obtained through DHCP by LAN host.

Lease Time: The time limit for the IP address configuration information obtained by the client device at the DHCP server

● SMS

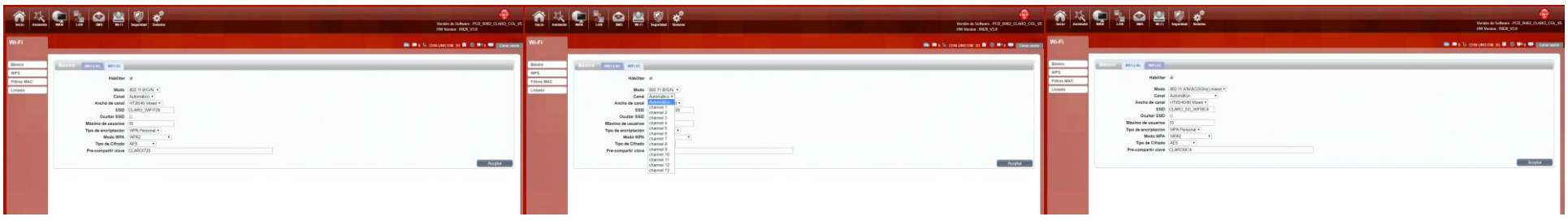


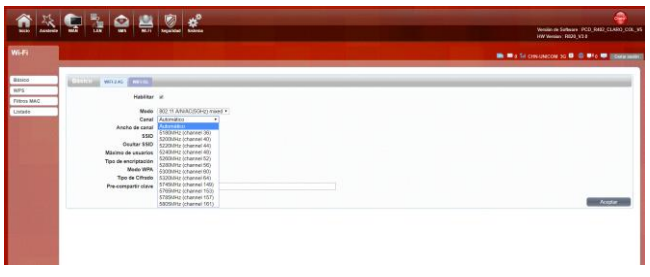
When using SIM card to access network, you could also send text messages at the same time. You can send, receive, reply, forward, and save test messages. You can send up to 10 text messages at the same time, SMS number intervals with a semicolon, setting the storage location of messages, and so on. Using the SMS page above.

● Wi-Fi

1. Basic

Wi-Fi 2.4 GHz and Wi-Fi 5 GHz





It shows some information of the wireless connection. It is recommended that you enable wireless security on your router in order to protect your wireless network from unauthorized access. You should select a wireless security protocol that is compatible with the wireless clients which will be accessing your network.

Enable: Open or close the router wireless function.

Mode: The 2.4GHz Wi-Fi of R402, you can choose Wireless network protocol such as 802.11B/G/N and mixed type. The 5GHz Wi-Fi of R402, you can choose Wireless network protocol such as 802.11A/N/AC(5GHz) and mixed type.

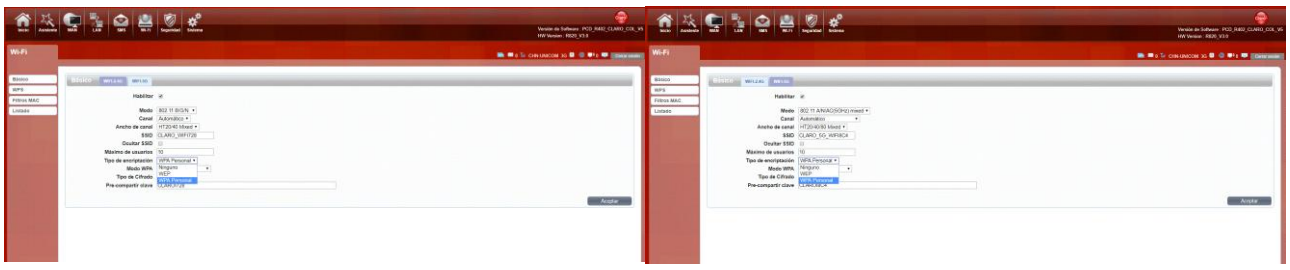
Channel: The channel currently used. The 2.4GHz Wi-Fi of R402 supports channel 1 to 13, You can select channel from 1 to 13. The 5GHz Wi-Fi of R402 supports channel 36\40\44\48\52\56\60\64\149\153\157\161, You can select it from the drop-down menu. The router will choose the frequency by itself if you select the “Auto”.

Channel Width: You can set the 2.4GHz Wi-Fi Channel Width to HT20/40 Mixed, and set the 5GHz Wi-Fi Channel Width to reach HT20/40/80 Mixed

SSID: Set the SSID. You can connect the router by this SSID. It can be hidden or isolated. If select Hide function, the router’s SSID cannot be scanned; Select Isolated function, it can prevent wireless communications.

Hide SSID: Enable this function, wireless client will not scan to the router’s SSID.

Encryption Type: The router’s security mode supports None，WEP(Auto\OPEN SYSTEM\SHARED KEY), WPA Personal(default)



-WPA**:**

WPA is a newer and more secure encryption protocol which makes significant improvements over WEP. There are two versions of WPA; the original WPA, and the newer WPA2.

- -WPA Mode :Select the desired authentication method from the drop down menu:

Auto (WPA or WPA2) - The router will automatically determine the version of WPA to be used based on the client that is connecting to it.

WPA2 - Clients will only be able to associate with the router using the WPA2 standard. Clients which do not support WPA2will not be able to associate with the router.

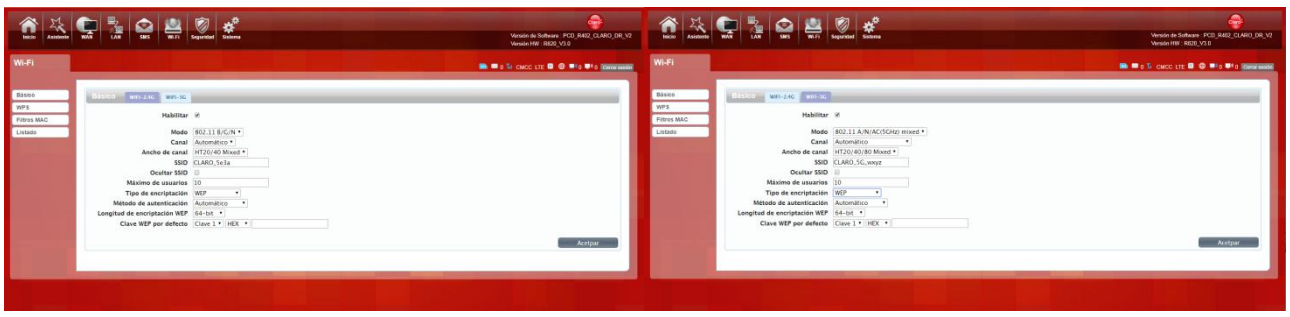
- - Cipher Type :Select the desired cipher type from the drop-down menu:

TKIP - This cipher is used by the WPA standard.

AES - A newer cipher used by the WPA2 standard. Use of this cipher type is required in order to achieve 802.11 speeds.

- -Pre-Shared Key: The pre-shared key is the password which clients will require in order to connect to your network. Enter a password of between 8 and 63 characters in length.

Click Apply to save the current settings



-WEP:

WEP is an older wireless security standard, which although providing more protection than no security at all, has some weaknesses which could make it vulnerable to intrusion. It is recommended that you only use WEP if your wireless clients do not support Wi-Fi Protected Access (WPA). WEP is not supported by the 802.11n standard, and therefore you will not be able to achieve 802.11n speeds if using WEP.

- -**Authentication Method** :

SHARED KEY - The encryption key is used for authentication as well as to encrypt data packets.

- -**WEP Encryption Length**: Select the length of the encryption key to be used.

64-bit - A 64-bit key comprises a string of 10 hexadecimal characters, or 5 ASCII characters.

128-bit - A 128-bit key comprises a string of 26 hexadecimal characters, or 13 ASCII characters.

- -Key 1-4:You can predetermine up to 4 WEP keys. Select the WEP key you wish to use by clicking on the radio buttons next to the keys. Select whether you wish to use HEX or ASCII characters in your key using the drop-down menu. Enter the desired key in the field provided. Click Apply to save the current settings.

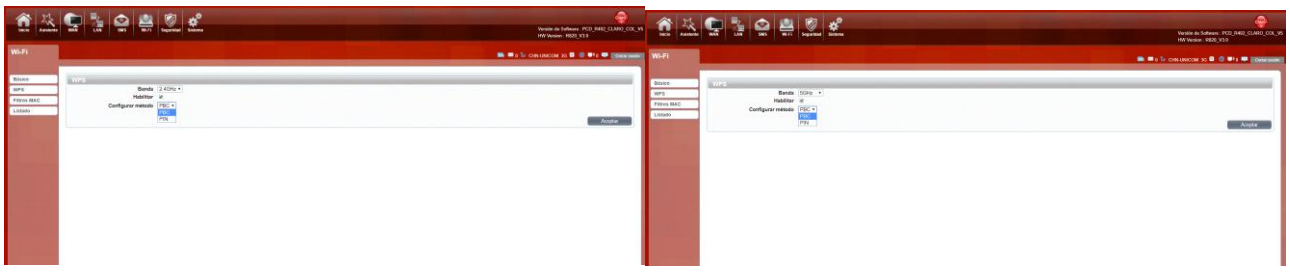
2. WPS

If you forget or do not know the SSID and Wi-Fi password or in need of a quick access to the network, R402 supports WPS function.

Page drop-down box to choose 2.4G or 5G wifi.

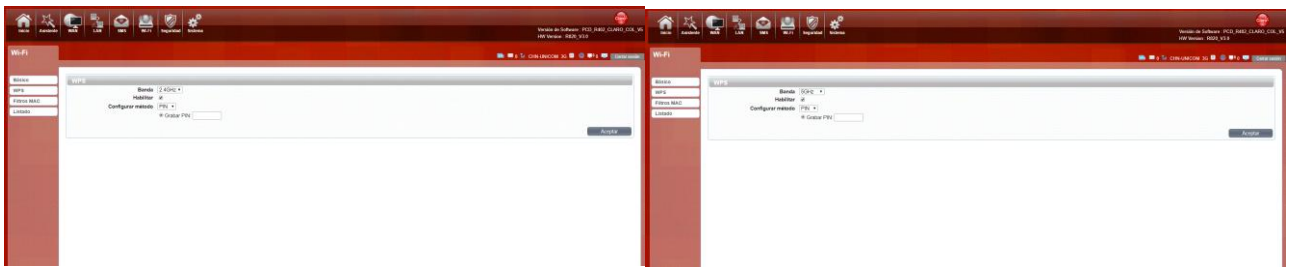
- PBC

If your device supports Push Button Connection (PBC), simply select this option and click Apply to start the connection process. You will then have 120 seconds to press the WPS button on your wireless device in order to initiate the connection.



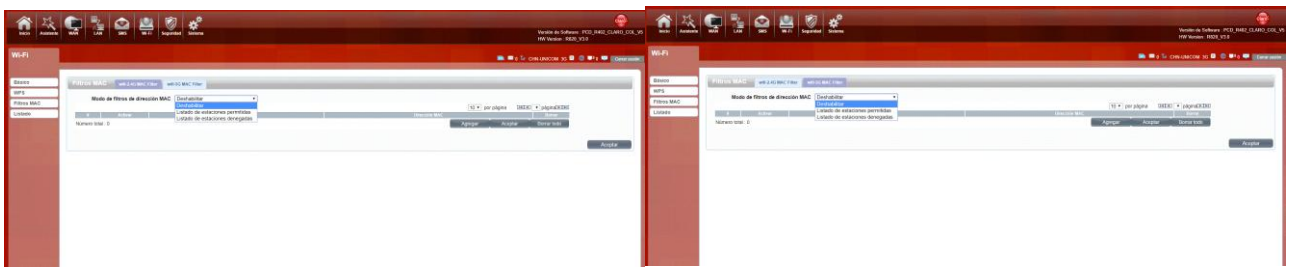
In the management interface page, open the WPS with PBC.

- PIN



You can choose to enter the PIN currently generated by R402 to the wireless card terminal, or enter the PIN currently generated by the wireless card terminal to the frame of Enrollee PIN

3. Mac Filter



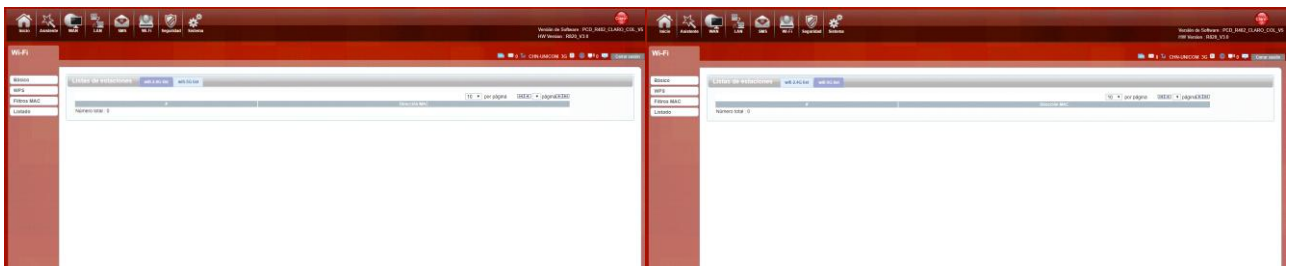
The MAC filtering option allows you to deny access to wireless clients based on their MAC address.

4. Station List

Shows the devices connected to the R402 wireless devices

Users connected to 2.4G Wi-Fi are listed in 2.4G list

Users connected to 5G Wi-Fi are listed in 5G list



●Security

1. Firewall

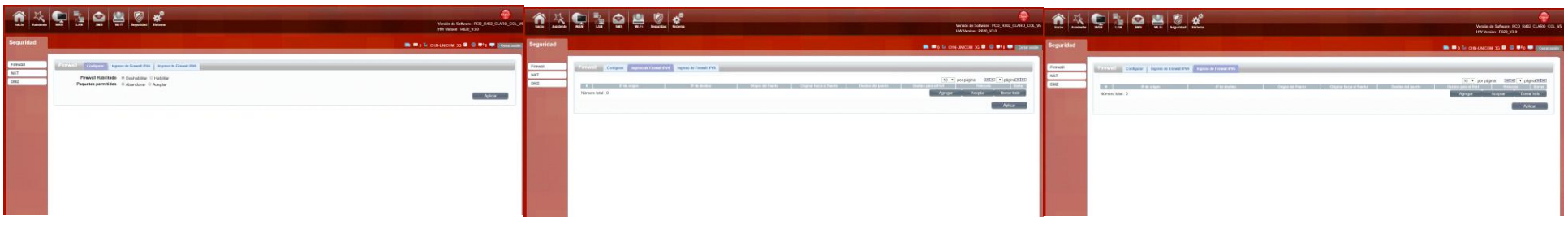
Firewall configuration: You can Disable or Enable the Firewall function. You can also set the matching packets rule to receive or reject.

You can add the rule as per below:

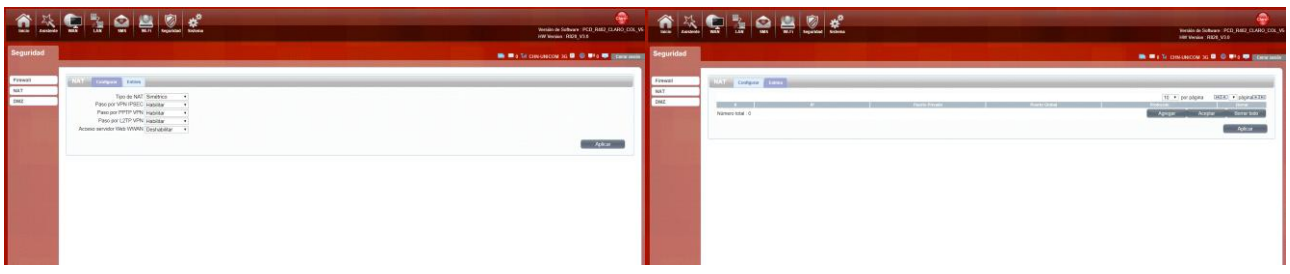
Delete: Check the rule, Click the 'APPLY' button to delete the IP filtering rule.

Protocol: Select the protocol for the IP filter rule.

Source IP: Enter the source IP address to be filtered.



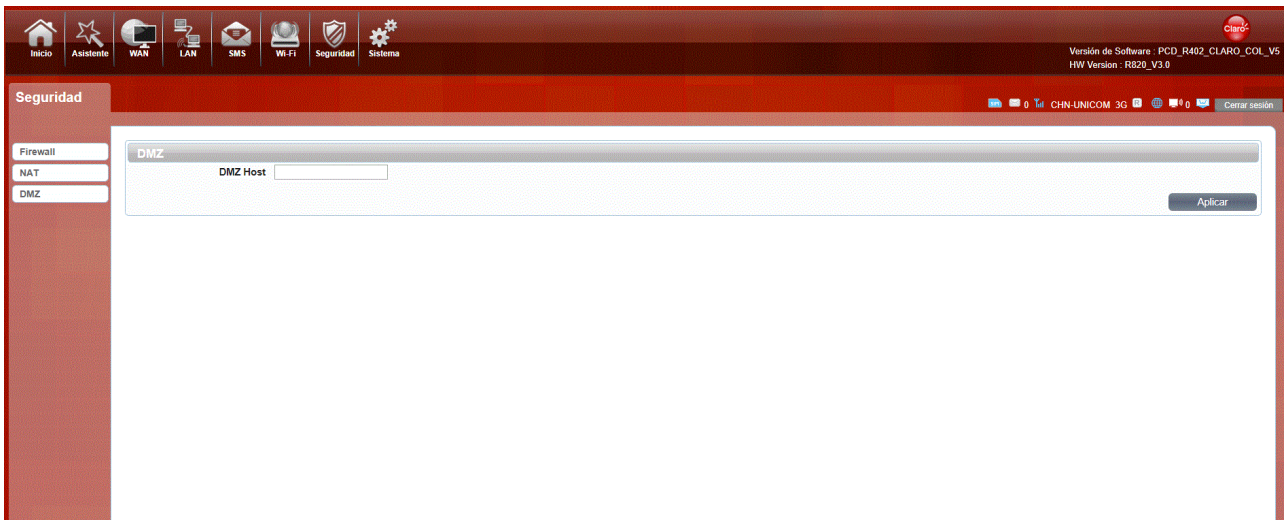
2. NAT



The R402 supports NAT/IPSEC VPN Pass Through/PPTP VPN Pass Through/L2TP VPN Pass Through/Webserver WWAN Access.

When some hosts inside the private network have already allocated the local IP address, using only the private address in the private network. If they want to communicate with the host on the Internet (there is no need to encrypt), we can use the NAT method.

3. DMZ



Receive all the data from external network interface forwarded to "DMZ IP address"

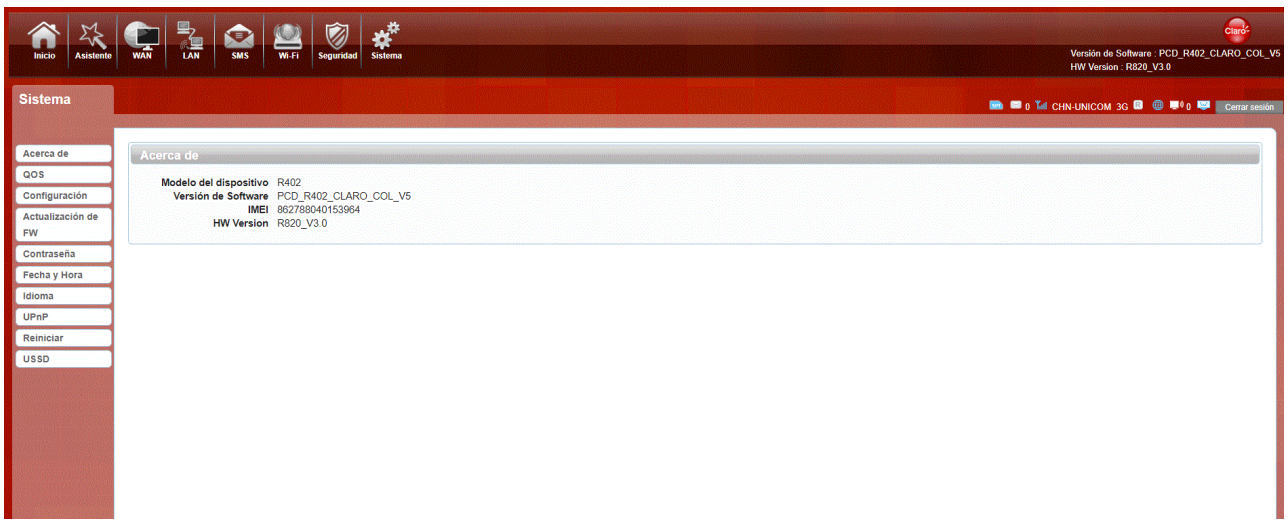
Enable DMZ: If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

Note: Placing a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.

DMZ Address: Specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication.

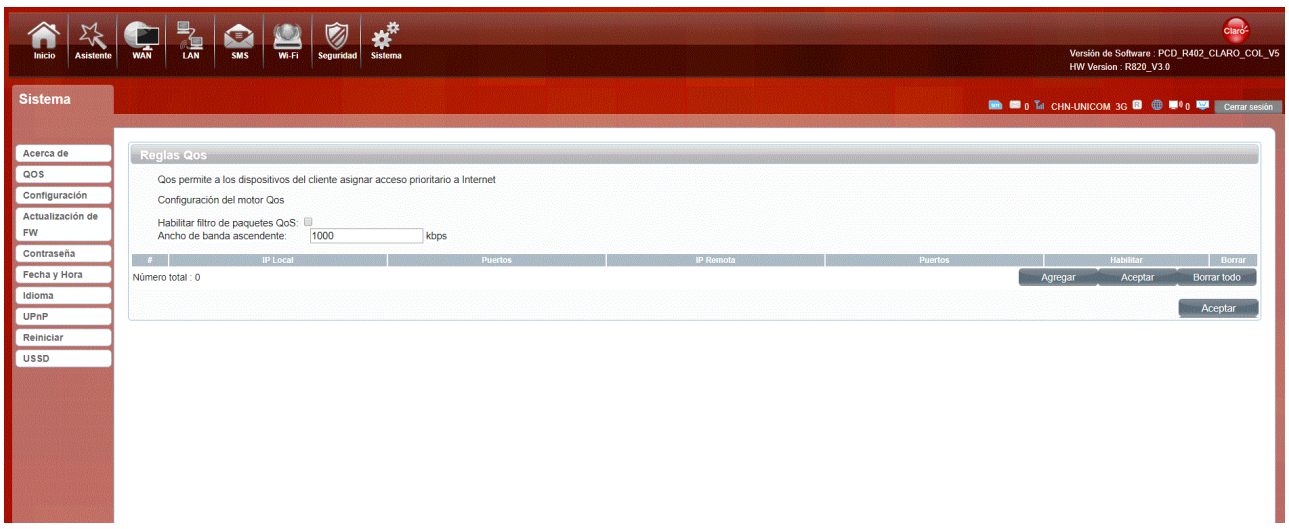
●System

1. About



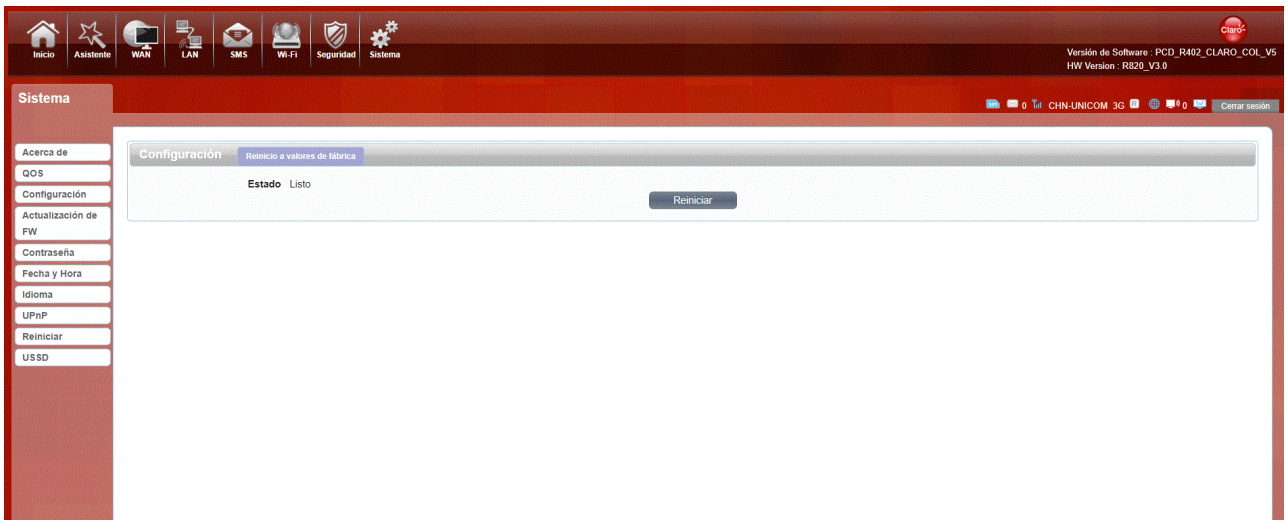
This tab shows the router basic information, such as Device name, FW version, IMEI.

2. QOS

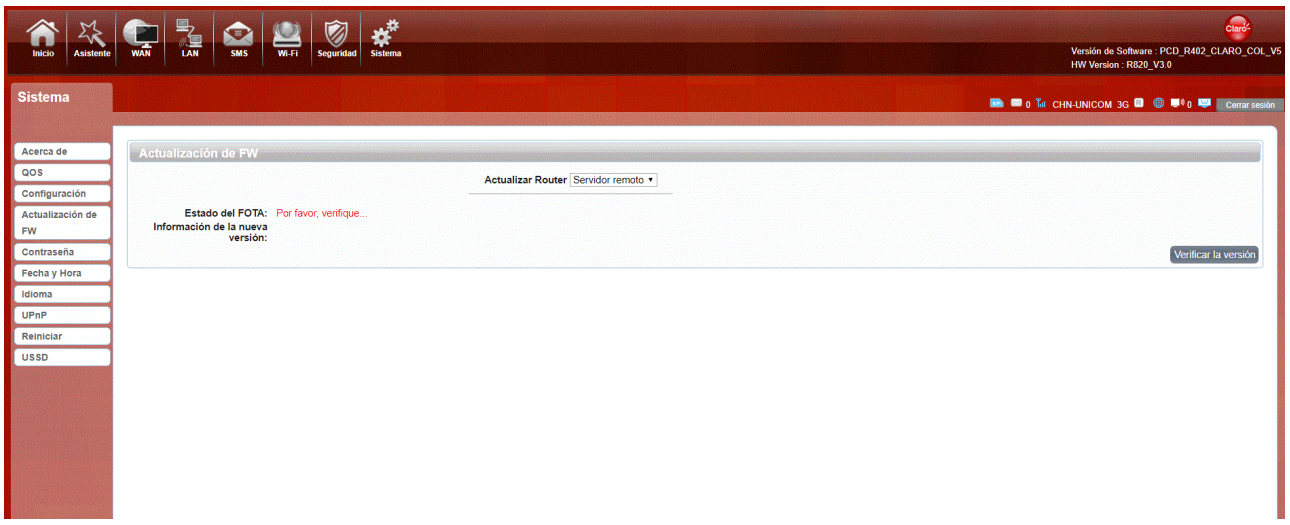


3. Configuration

Restore the factory settings, all of the personal configuration will be deleted, all of the configuration pages will be restored to the factory defaults.



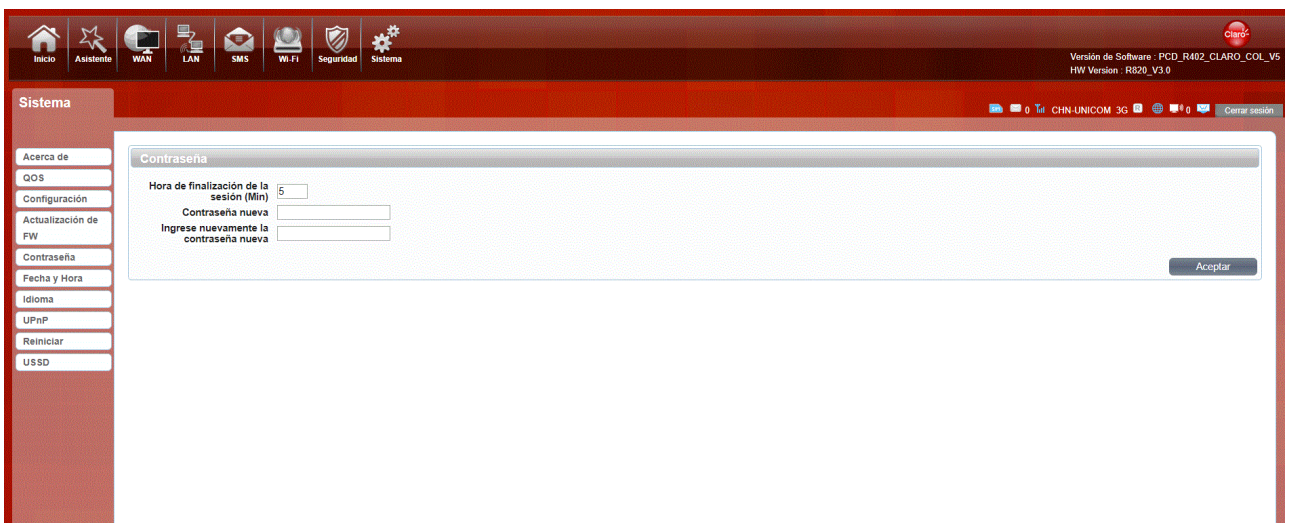
4. Firmware Upgrade



You can upgrade the firmware of the router here. Make sure the firmware file you want to use is on the local hard drive of the computer.

Click Browse to locate a previously downloaded firmware file on your computer. Once the file has been located, click “Start Update” to carry out the firmware upgrade process.

5. Password



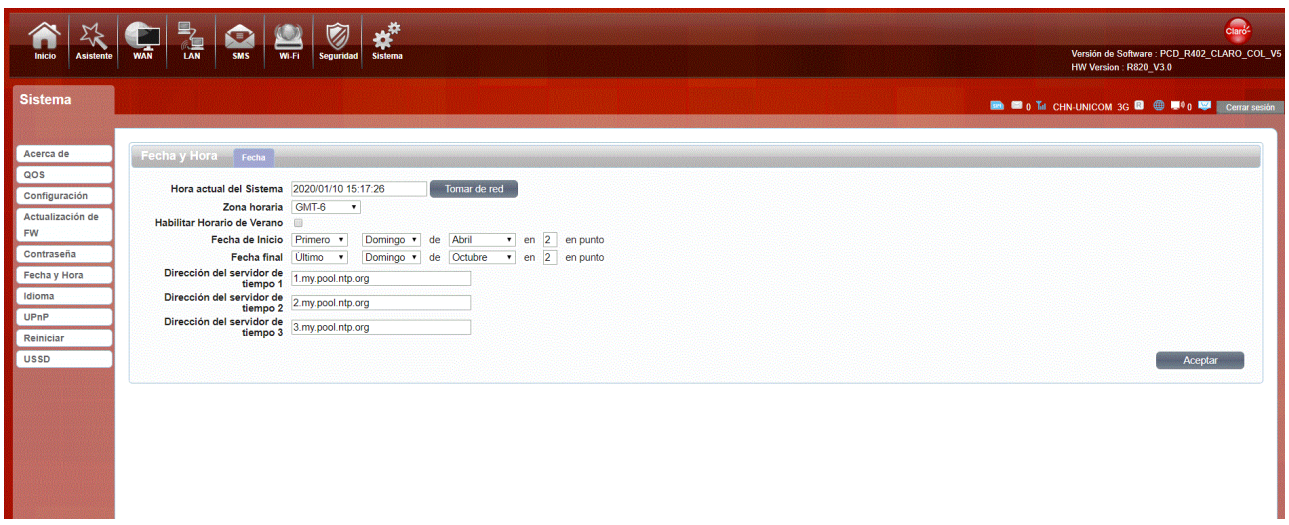
This page lets you change the configuration interface passwords for the Administrator

New Password: Enter the new password for this account.

Retype new Password: Type the new password again to confirm.

Session Timeout (Min): Automatically logged within the set time.

6. Data and Time

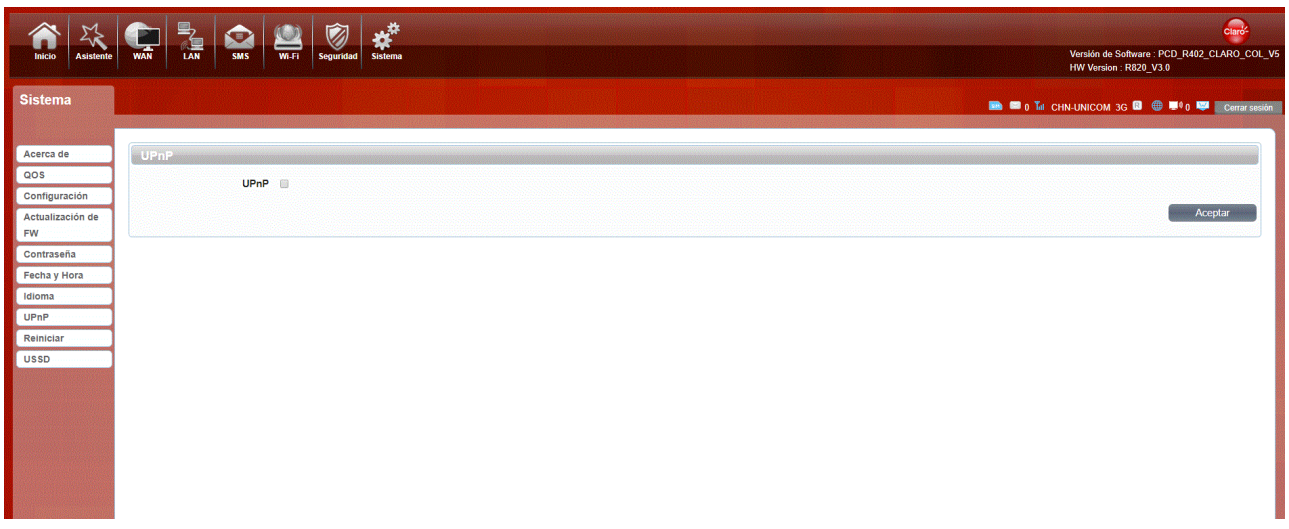


You can synchronize the time with the host; you can also select the time zone

7. Language

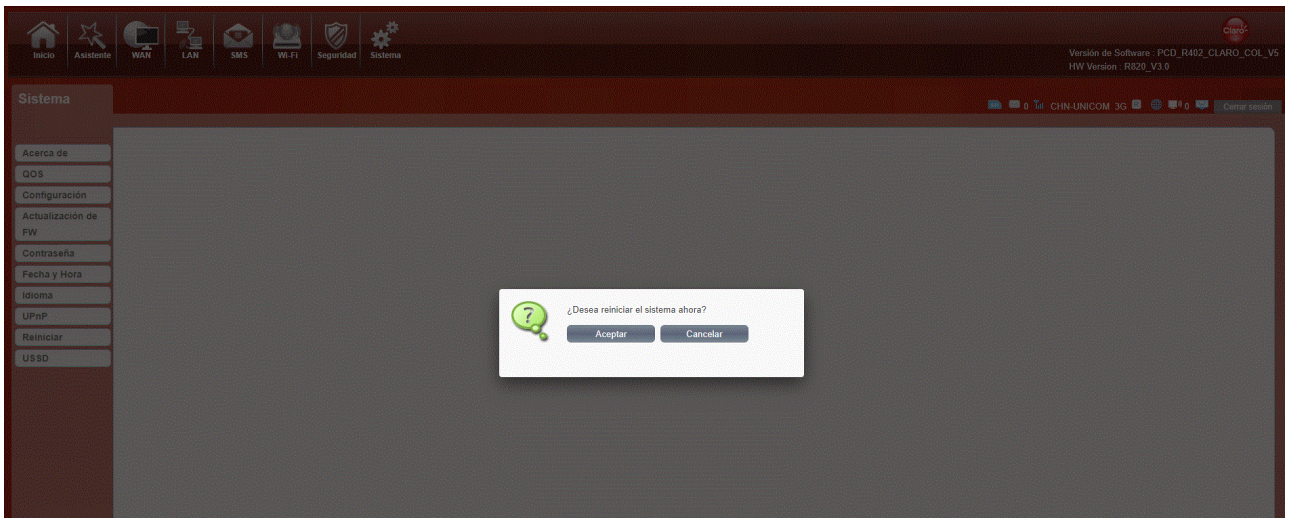
Select your preferred language from the drop-down menu.

8. Upnp



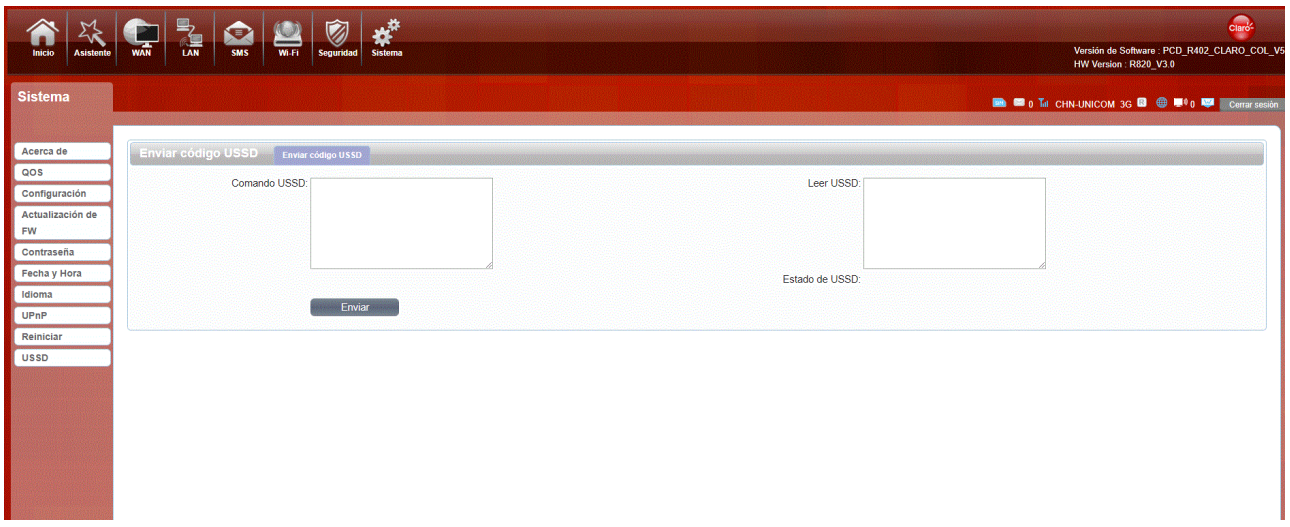
Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.

9. **Reboot**



Click Reboot to restart the router

10. USSD



Unstructured Supplementary Service Data: You can send some specific numbers or symbols to the service provider.

FAQ

This Appendix provides solutions to some problems that could be seen when install and use the device. Please read the following instruction, it will help you to solve these problems. If you fail to solve your issues from this FAQ, please contact your network provider

Problem	**Solution**
Wireless device cannot connect to SSID.	❶ Please make sure the wireless function of your PC is turned on. If it is already on, please refresh the network list. ❷ Please make sure your PC is in the wireless signal coverage of the device. ❸ Please make sure your device is away from the electromagnetic interference. If the problem is still not solved, please try to reset your device to default settings.
Cannot Access internet:	❶ Please make sure your PC is in the wireless signal coverage of the device. ❷ Please make your device DHCP function is turned on. ❸ Please make sure your firewall is turned off. If the problem is still not solved, and your PC has got connected to the network, but the wireless icon shows a yellow exclamation mark. It means your wireless card could not be allocated an IP address. Please use the static IP settings, and fill DNS and gateway according to instructions of your operator.
Input IP but fail to login to the administration page.	❶ Please make sure the problem is not caused by the Cache of the internet browser, please clean up the Cache. ❷ Please make sure the username and password are correct If the problem is still not solved, and your PC already gets the IP address. Please try to ping 192.168.0.254 to see if there is any response. If responses are received, please check if you set an agent server for connection. If no agent server is set, then reset the device.
IP conflict ion when turn on the device:	❶ Please make sure if your LAN has other DHCP servers. ❷ Please make sure that IP address is not occupied by other computers or devices. If occupied, please change the IP address of that device to avoid the IP conflicts.

Safety Warning

Stay away from interference:

All the wireless devices could be possibly interfered, and it will affect the performance of the device.

Turn off the device in restricted area:

Turned off the device in restricted area.

Qualified services:

Do not disassemble this device yourself. Please contact professionals to repair and install the device.

Accessories:

Do not touch the device with wet hands, when it is charging. Only use the accessories that are recognized to be compatible to the device.

Danger of explosion:

Turn off your device in any areas that explosion could possibly happen. Please follow all the notices in the areas where spark could cause fire or explosion.

NOTICE:

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, and*
(2) *this device must accept any interference received, including interference that may cause undesired operation.*

NOTICE:

Changes or modifications made to this equipment not expressly approved by PCD, LLC may void the FCC authorization to operate this 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.*

To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.