XCom Global

Global Mobile WiFi Travel Router（fi1）

SDG Telecom

User Manual

Index

Note:

Operating temperature: -10℃—35℃.

1. About this Manual

The content of this User Manual has been made as accurate as possible. However, due to continual product improvements, specifications and other information are subject to change without notice.

2. Product Overview

This MIFI supports LTE Band 4/17 and WCDMA: 850/1900 and GSM:850/1900 (Subject to the configuration of LTE module) and it supports popular operating systems like Windows, Linux and Mac.

Please refer to the Quick Start Guide that is part of the MIFI supply. Once you have identified the place for MIFI, insert USIM card supplied by your service provider at the appropriate place. Press power key for 3 seconds and after few minutes the MIFI should attach itself to the LTE network. It is as simple as that. It is advised to read this manual at leisure to make best use of the MIFI.

3. Configuring the MIFI

The basic settings in WebGUI consist of seven main parts named Dashboard,4G,Status,LAN,WIFI,Firewall and System. You can login to WebGUI as follows, and configure the settings according to your requirements.

Connect the PC to MIFI with USB cable, Power on the device and waiting for about one minute until the device finished initializing. Please ensure that USIM card has been inserted into USIM slot in MIFI.

You can also connect the PC to MIFI by WiFi, choose the correct WiFi SSID and input the accurate password as the label shows. The default WiFi SSID is ice.net-XXXXXX, XXXXXX denotes the last six digits of the MIFI's MAC address.

3.1 Login

Open your Web browser and enter 192.168.0.1 in the address bar;

Login window will popup;

When prompted for User name and password, enter the following username and password.

Username/Password: admin/admin

3.2 Dashboard

After successful login, the following screen will appear and you will see seven menus on the top bar of the WebGUI.

The bars in the middle indicate the received signal level, data connection status, USIM status,WiFi icon and battery icon shown as below picture:

	LTE signal level
	Data connection Icon, when MIFI connect to network, the icon is on, otherwise, it is grey
	USIM card status. If MIFI work without USIM card. The USIM card icon change to
	WiFi function is enabled
	Battery status Battery is charging single battery or battery Full:
	Reboot key. It is used to reboot the device
	Log out key. It is used to log out Web page

Figure 3-2-1 Icon

From dashboard page, you can also know 4G status, Wi-Fi status, WAN Info, LAN Info, Data Traffic and Device&SIM Info.

3.3 4G

3.3.1 APN Settings

The default APN mode is automatic and APN is NULL, if you want to configure the LTE APN, you should choose the manual mode, and then you can configure the APN settings (Figure 3-3-1-2).

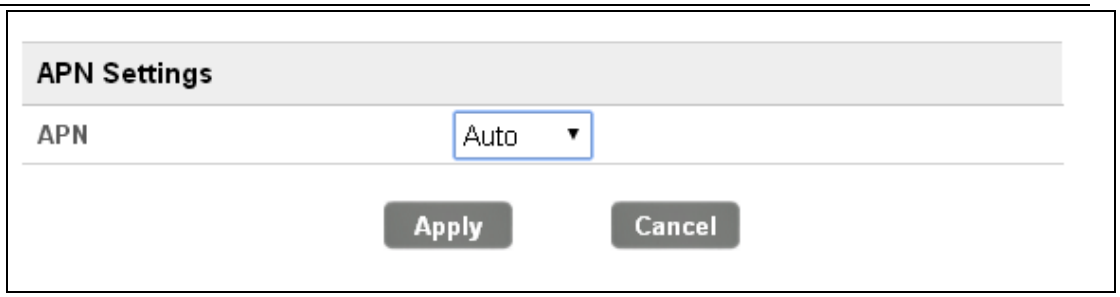

Figure 3-3-1-1 Auto APN

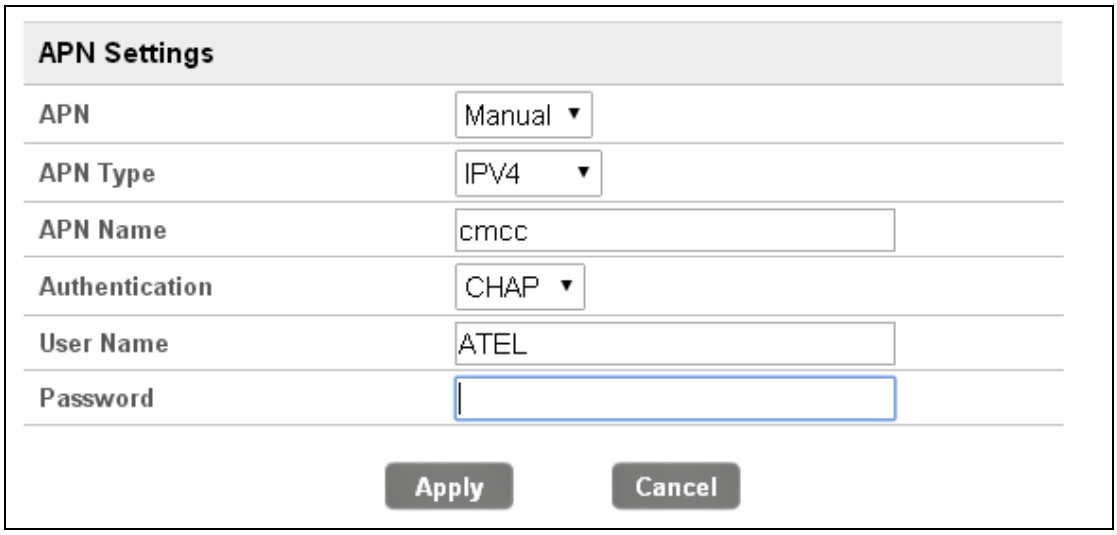

Figure 3-3-1-2 Manual APN

3.3.2 PIN Management

From this page, you can see the USIM card status and PIN status.

The default PIN status is disabled; you can input the correct PIN to enable the PIN function. The maximum PIN attempts are 3; otherwise you must enter PUK to reset the PIN code. The USIM will be invalid after the unsuccessful attempts for 10 times.

- **PIN Management**: Enter the correct PIN to enable or disable the PIN function, PIN code should be 4 to 8 digits;

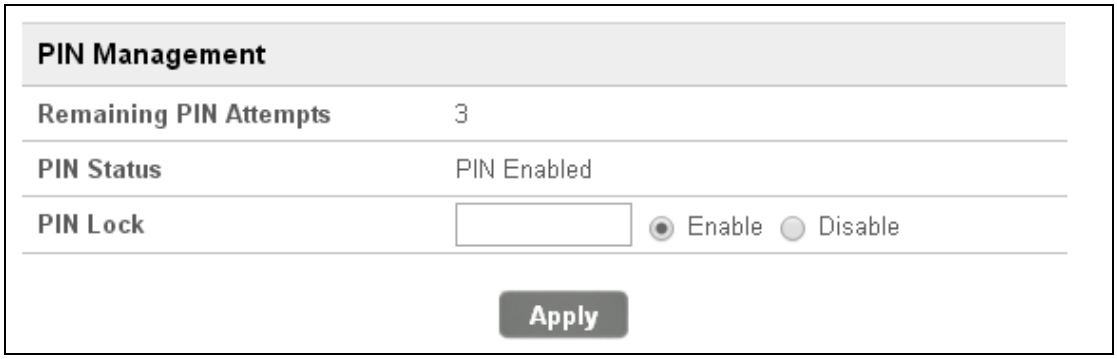

Figure 3-3-2-1 Enable PIN

- **PIN change:** You can input the current PIN code 1 time and the new PIN code for 2 times to change the PIN code. PIN code should be 4 to 8 digits.

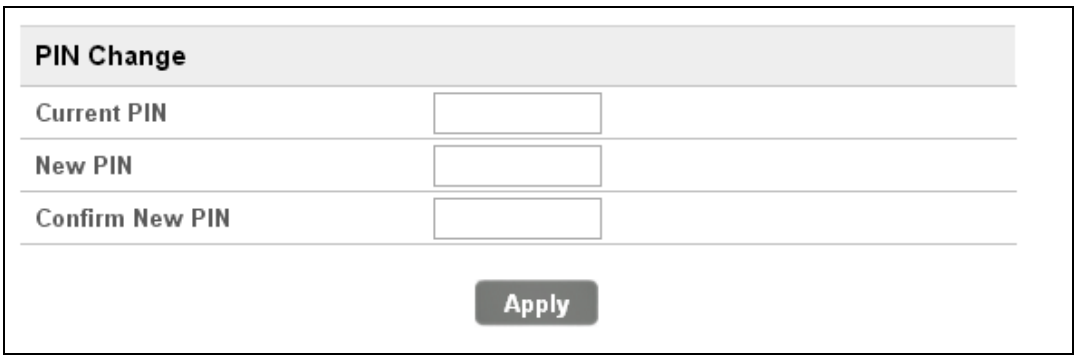

Figure 3-3-2-2 PIN Change Page

- **PUK Management**: Input the correct PUK code and the new PIN code for 2 times to reset the PIN code. The PIN code should be 4 to 8 digits. The maximum PUK attempts are 10.

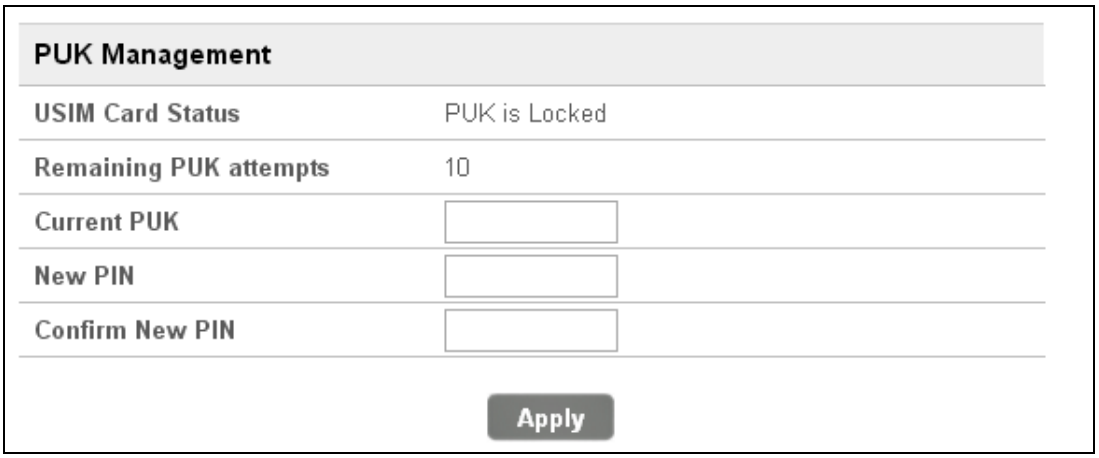

Figure 3-3-2-3 PUK Managet Page

3.4 Status

On this page, you can see WAN Status, LAN Status, 4G Status and Software Status.

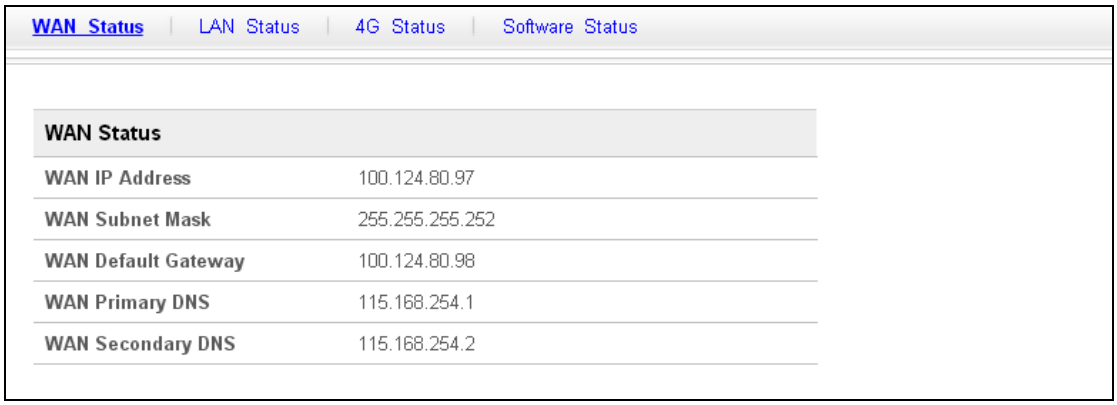

Figure 3-4-1 Status

3.4.1 WAN Status

From the WAN Status, WAN IP Address, WAN Primary DNS and WAN Secondary DNS information can be displayed

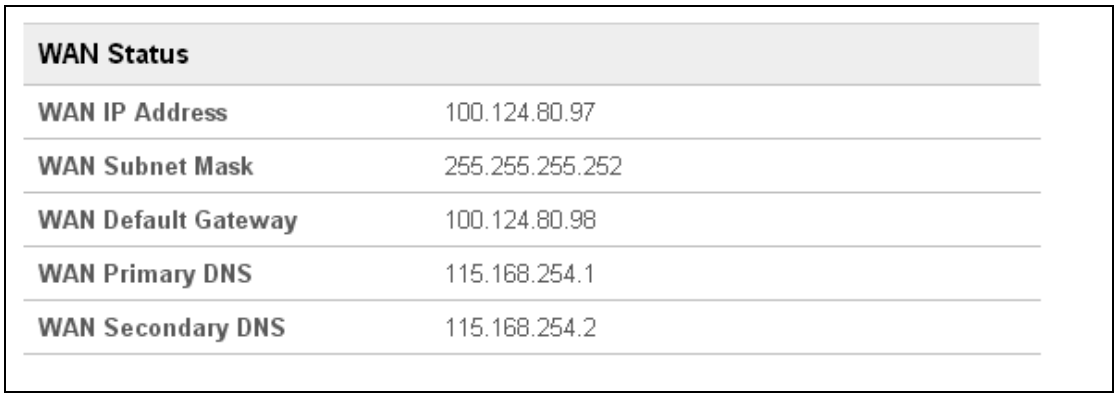

Figure 3-4-1-1 WAN Status

3.4.2 LAN Status

From this page, you can see the LAN Status such as SSID, Channel, Security, Key, LAN IP and DHCP Server.

LAN Status	
LAN IP	192.168.0.1
Local Netmask	255.255.255.0
DHCP Server	192.168.0.10-192.168.0.100
LAN MAC Address	34:BA:9A:14:A4:B0
WLAN MAC Address	34:BA:9A:14:A4:B0
Channel	1(Auto)
SSID	ice.net-14A4B0
Security	WPA-PSK/WPA2-PSK
Key	4093BB08

Figure 3-4-2-1 WiFi LAN Status

3.4.3 4G Status

Clicking on the "4G Status", you can see the LTE information such as Connection Status, USIM Status, IMEI, IMSI, RSRP, RSRQ, RSSI, SINR, Localization and Frequency.

4G Status	
Connection Mode	Router
Connection Status	Connected
USIM Status	USIM Ready
Signal Strength (RSRP)	-97 dBm
Signal Strength (RSRQ)	-9 dB
IMEI	000000000000000
UICCID	89861114100210033585
IMSI	460110120011303
SINR	20 dB
RSSI	-81 dBm
Physical Cell ID	25
Global Cell ID	05B30F35
Transmission Mode	Open loop MIMO
PLMN	CHN-CT

Figure 3-4-3-1 LTE Status

3.4.4 Software Status

Software version and the DTB version can be displayed.

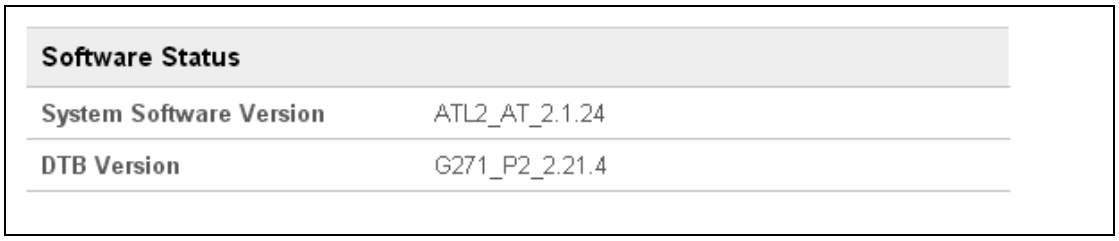

Figure 3-4-4-1 Software

3.5 LAN

The setting menu consists of two main menus named LAN Settings and Device List.

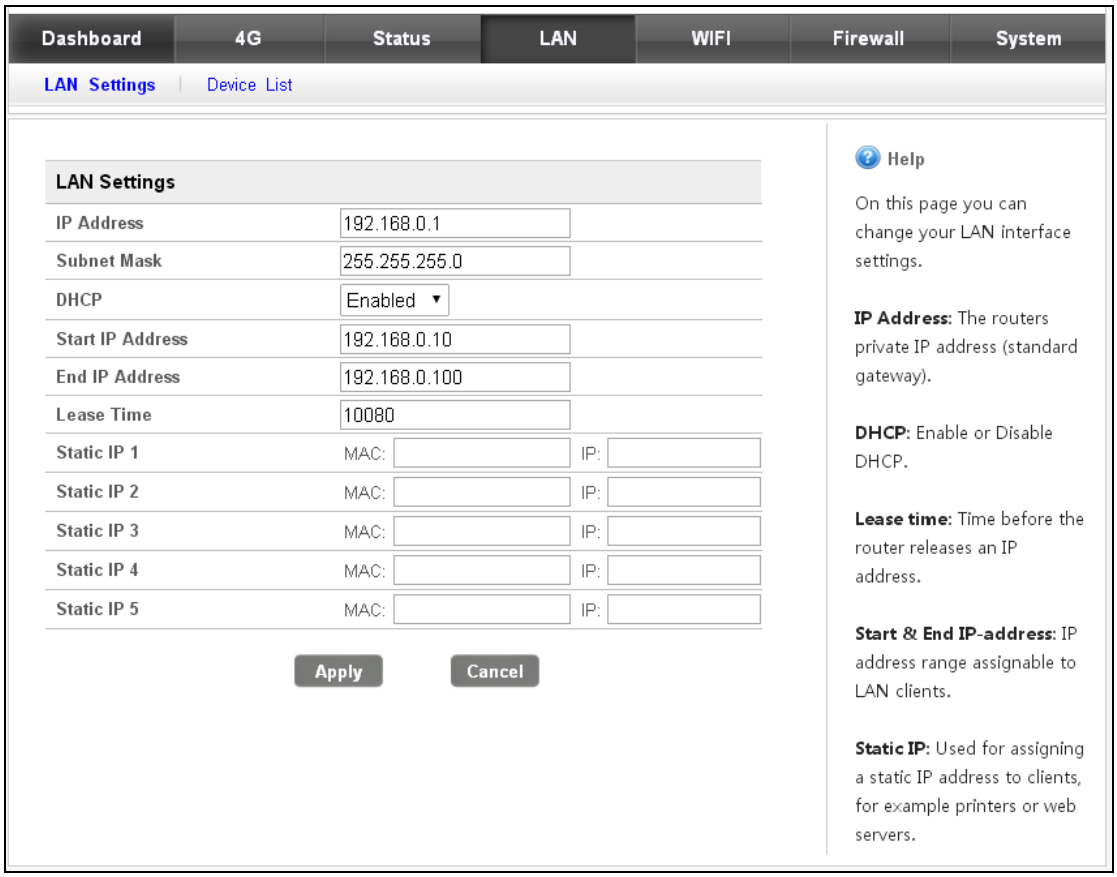

Figure 3-5-1 Settings

3.5.1 LAN Settings

Clicking on the “LAN Settings” tab will take you to the “LAN Settings” header

page. On this page, all settings for the internal LAN setup of the MIFI router can be viewed and changed.

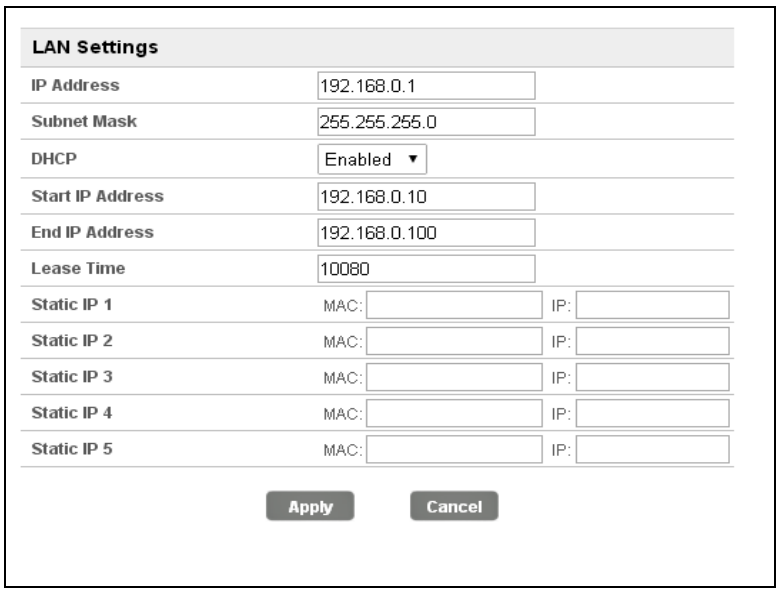

Figure 3-5-1-1 LAN Settings

- **IP Address -** Enter the IP address of your router (factory default: 192.168.0.1).
- **Subnet Mask** - An address code that determines the size of the network. Normally use 255.255.255.0 as the subnet mask.
- **DHCP** - Enable or Disable the DHCP server. If you disable the Server, Client cannot get valid IP address from MIFI automatically. But you can configure the address of your PC manually to connect MIFI
- **Start IP Address** - Specify an IP address for the DHCP server to start with when assigning IP address. The default start address is 192.168.0.10.
- **End IP Address** - Specify an IP address for the DHCP Server to end with when assigning IP address. The default end address is 192.168.0.100.
- **Lease Time** - The Lease Time is the amount of time a network user will be allowed connection to the router with their current dynamic IP address. Enter the amount of time in minutes and the user will be "leased" this dynamic IP address. After the time is up, the user will be assigned a new dynamic IP address automatically.
- **Static IP** - IP/MAC binding function, the system will assign a fixed IP address to the MAC according to the rules.

☞ **Note:**

1. If you change the IP Address of LAN, you must use the new IP address to login to the MIFI router.

2. If the new LAN IP address you set is not in the same subnet, the IP address pool of the DHCP server will change at the same time, while the Virtual Server and DMZ Host will not take effect until they are re-configured.

3.5.2 Device List

All clients connect to MIFI can be displayed. You can see the users' information, include hostname, MAC address, IP address and connection type.

Device List

Hostname	IP Address	MAC Address	Connection Type
lwangde-iPhone	192.168.0.11	5c:f5:da:ed:98:a7	WIFI
lwang01	192.168.0.10	34:ba:9a:14:a4:b1	USB

Refresh

Figure 3-5-2-1 Device List

3.6 WiFi

Clicking on "WIFI" will take you to the following header and on this page you can configure the WiFi settings and WiFi security.

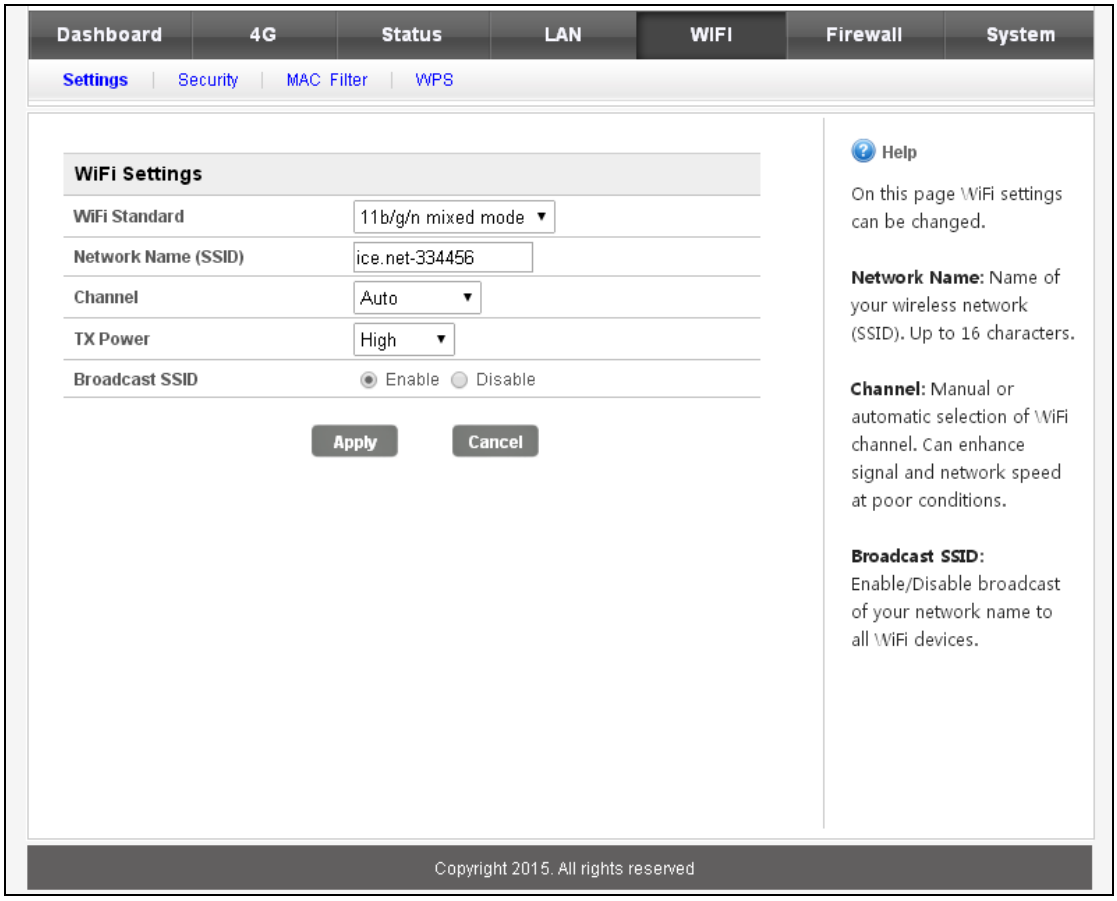

Figure 3-6-1 WiFi

3.6.1 WiFi Settings

You can set the WiFi status, configure the WiFi standard, network name and select the WiFi channel.

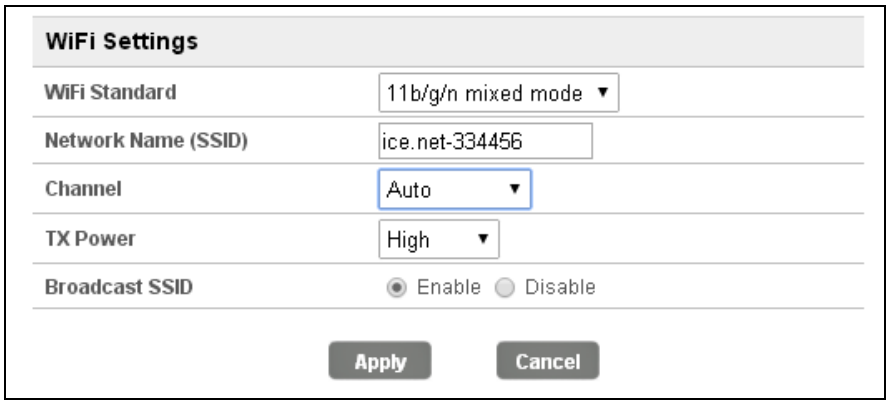

Figure 3-6-1-1 WiFi Settings

- **WiFi Standard:**

The router can be operated in five different wireless modes:"11b/g mixed mode", "11b only", "11g only","11b/g/n mixed mode", "11g/n mixed mode".

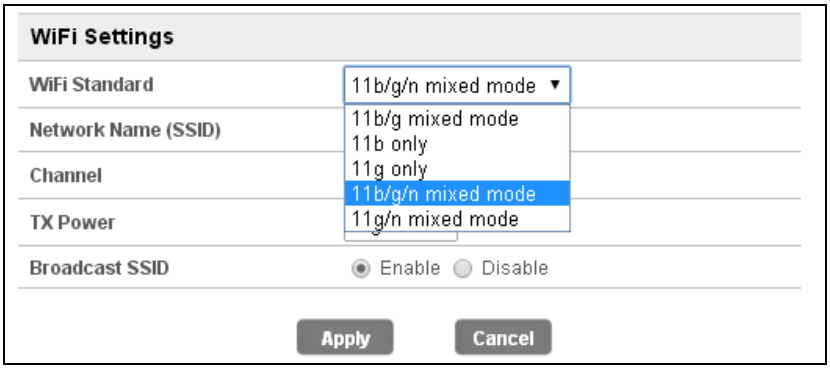

Figure 3-6-1-2 WiFi standard

- **Network Name(SSID)**

To identify your wireless network, a name called the SSID (Service Set Identifier) is used. You can set it to anything you like and you should make sure that your SSID is unique if there are other wireless networks operating in your area.

- **Channel**

This field determines which operating frequency will be used for WiFi. It is not necessary to change the wireless channel unless you noticed the interference problems with other access points nearby.

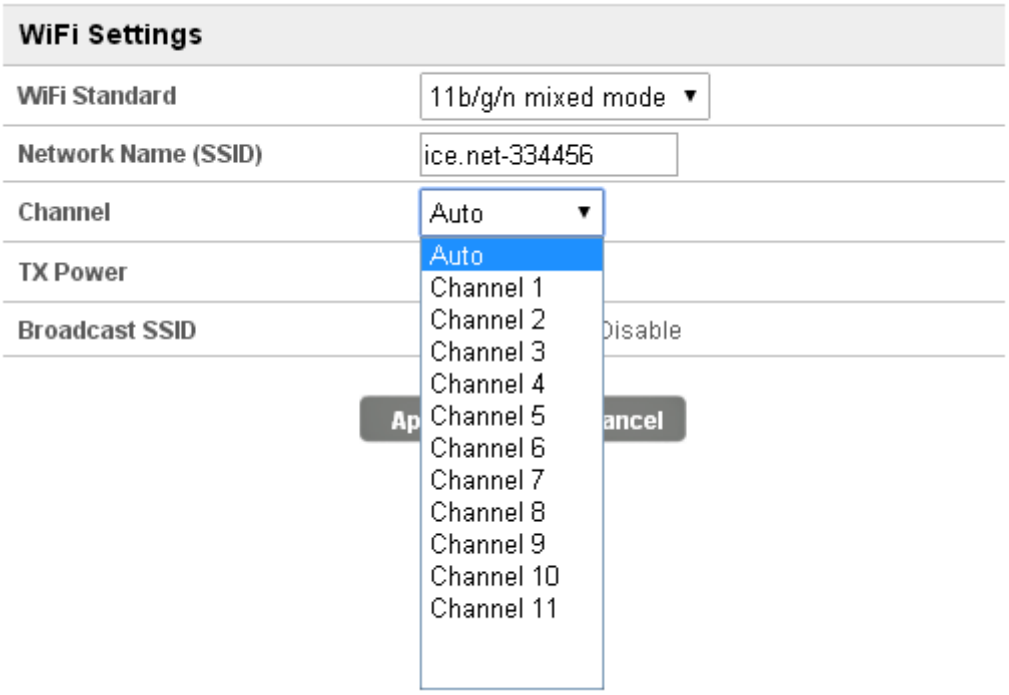

Figure 3-6-1-3 Frequency (Channel)

- **TX Power:** there are three modes: high, Medium and low. TX power affects wireless client connection coverage. Default value is high.
- **Broadcast SSID:** Enabled(default)/Disabled

When wireless clients survey the local area for wireless networks to associate with, they will detect the SSID broadcast of the router. If you disabled this feature, the WiFi of the router is invisible.

3.6.2 Security

Setting the wireless security and encryption to prevent the router from unauthorized access and monitoring. Default security mode is WPA-PSK/WPA2-PSK and the default password is unique (Figure 3-6-2-1), you can modify the security mode and password you like from this page.

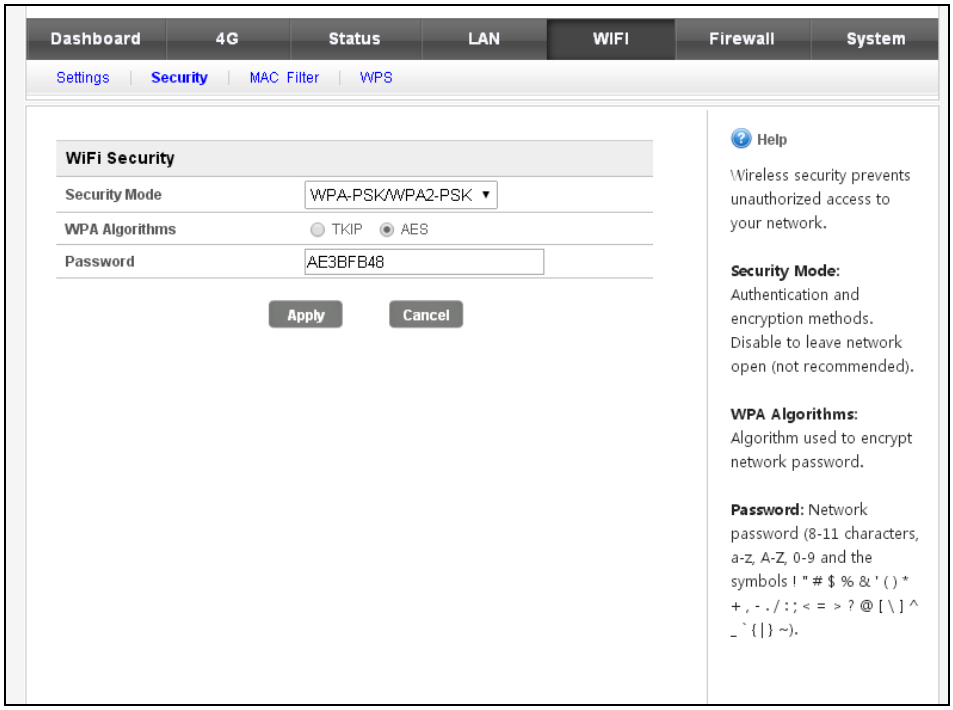

Figure 3-6-2-1 WIFI Security

- **Security Mode:** Disabled, WPA-PSK, WPA2-PSK, WPA-PSK/WPA2-PSK
- **WPA Algorithms:** TKIP, AES
- **Password:**8 ~ 11 characters

3.6.3 MAC Filter

This function is a powerful security feature that allows you to specify which wireless client users are not allowed to surf the Internet.

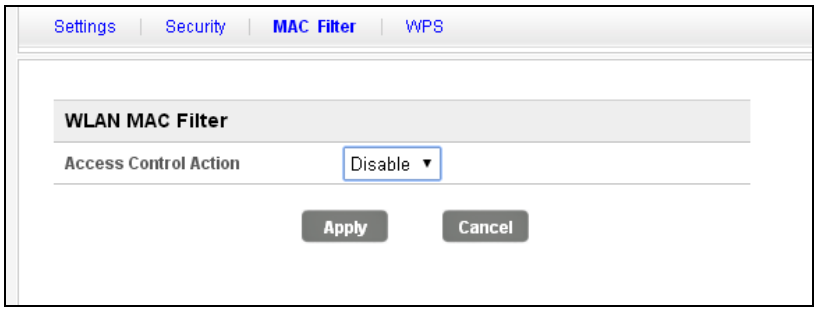

Figure 3-6-3-1 MAC Filter

The default MAC filtering setting is disabled, so you should enable it before you begin to configure the filter. Then click the "Add New" button, you can configure the rules you like (Figure 3-6-3-2).

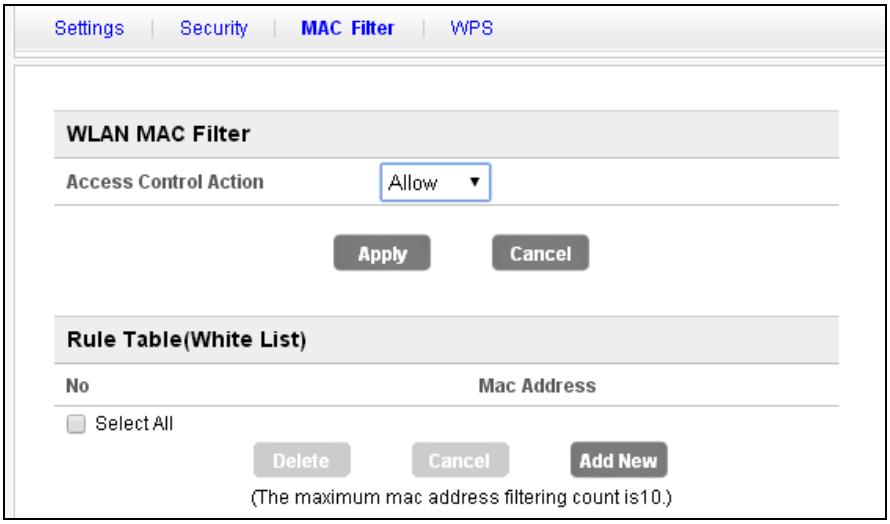

Figure 3-6-3-2 MAC Filter allow

Default Policy: The packets that don't match with any rules would be "Allow/Deny". If you choose the "Allow" button, the MAC address that you add can connect to MIFI with WiFi; if you choose the "Deny" button, the wireless clients that you add cannot connect to MIFI.

The new rules will be shown on the rule table, here you can delete the rules that you have selected and add new rules sequentially. The maximum rule count is 10. (Figure 3-6-3-4).

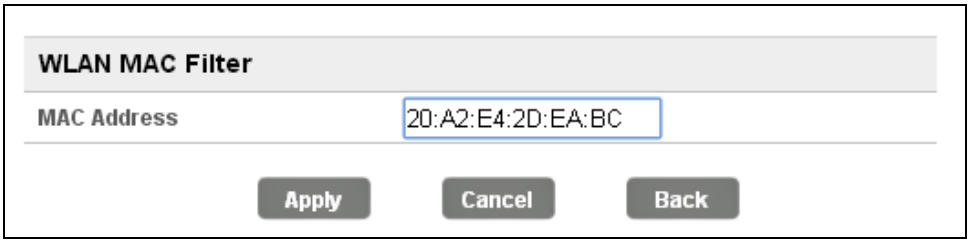

Figure 3-6-3-3 Add Rule

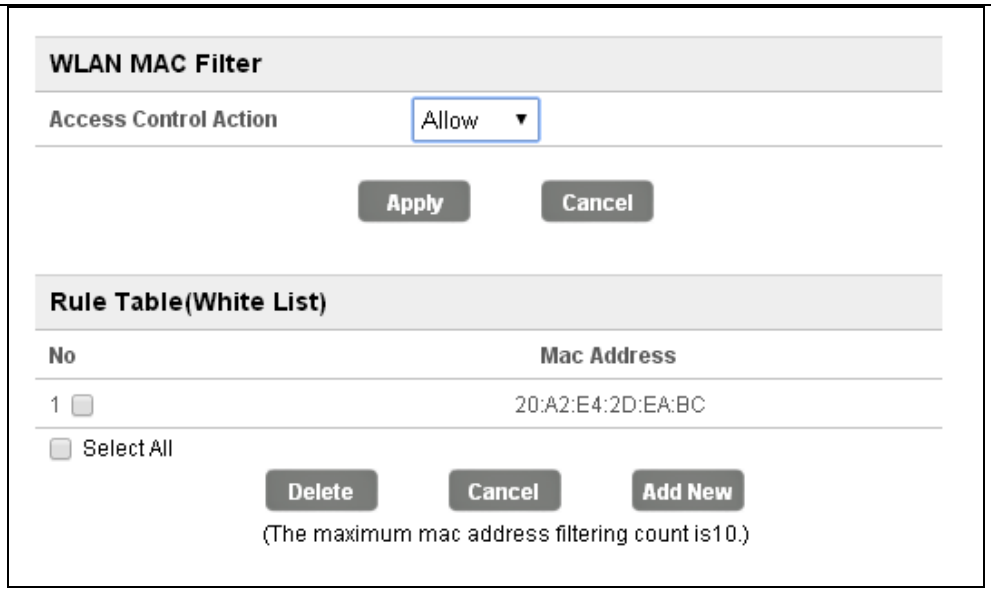

Figure 3-6-3-4 Rule Table

3.6.4 WPS

You can setup security easily by choosing PBC method to do WiFi Protected Setup.This feature can make your wireless client within a few minutes automatically synchronized with the AP devices and establish the connection via WiFi.

Figure 3-6-4-1 WPS

- **PBC Mode**

(1) Press the WPS button of the MIFI directly;
(2) Then MIFI and wireless client will automatically complete the interaction and connect via WiFi if these two devices can match with each other.

3.7 Firewall

The Firewall menu consists of two main menus named Port Forwarding and DMZ.

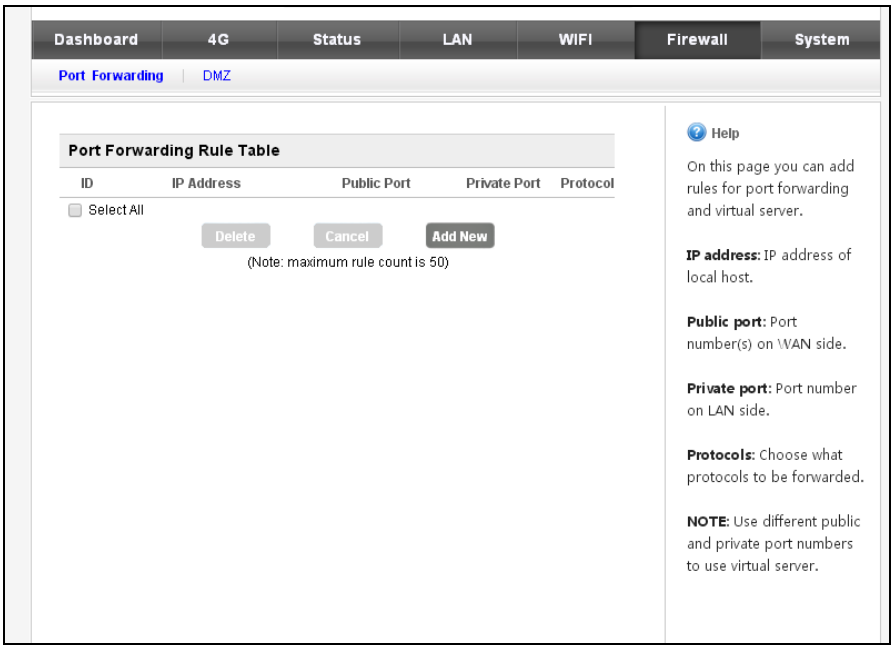

Figure 3-7-1 Firewall

3.7.1 Port Forwarding

Clicking on the header of the "Port Forwarding" button will take you to the "Port Forwarding" header page (Figure 3-7-1-1). Clicking on the "Add New" button, you can configure IP address, Public Port, Private Port, Protocol to achieve the port forwarding purpose.

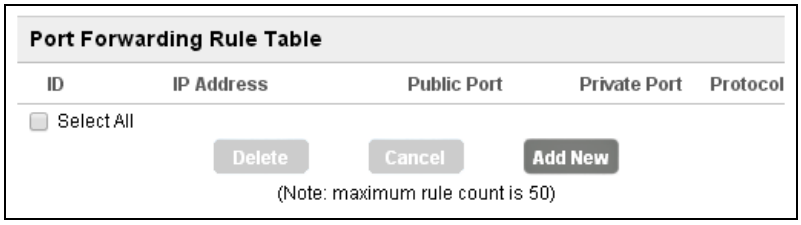

Figure 3-7-1-1 Port Forwarding page

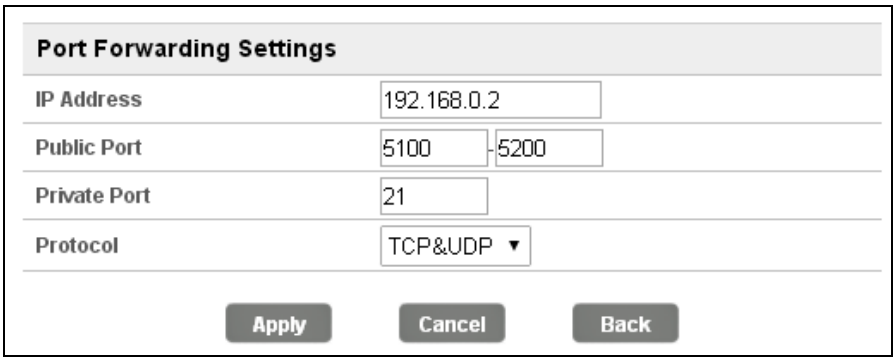

Figure 3-7-1-2 Port Forwarding Setting

- **IP Address-** The IP address of the PC running the service application;

- **Public Port-** The port of server-side;
- **Private Port-** The port of client-side, it can be same with the public port;
- **Protocol-** UDP, TCP, TCP&UDP

The new rules will be shown on the rule table, you can delete the items that you have selected or add new rules by clicking the "Add New" button here. The maximum rule count is 50.

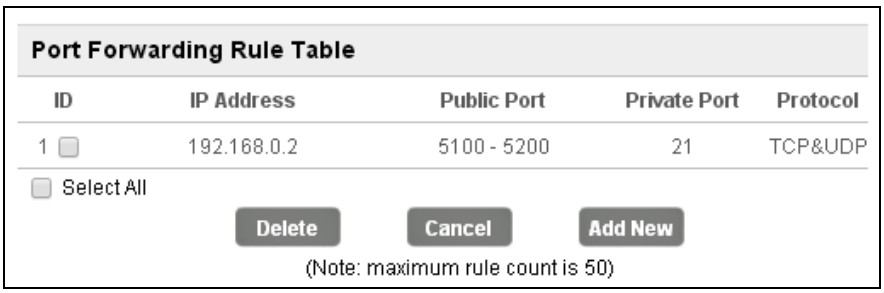

Figure 3-7-1-3 Rule Table

3.7.2 DMZ

From this page, you can configure a De-militarized Zone (DMZ) to separate internal network and Internet.

- **DMZ IP Address-** The IP address of your PC. (such as 192.168.0.3)

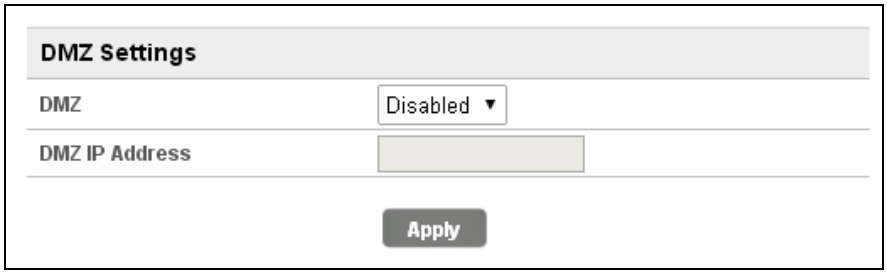

Figure 3-7-2-1 DMZ page

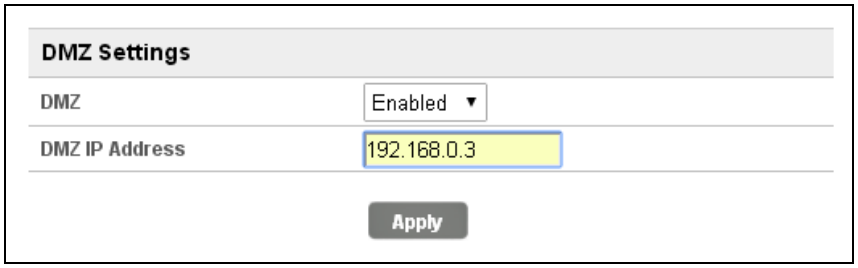

Figure 3-7-2-2 DMZ Setting

3.8 System

On this page you can set System Menu: Password, backup&restore, firmware software and remote upgrade

3.8.1 Password

The default password is admin, you can enter 1~32 characters for 2 times as your new password. Then you would logout automatically and you should login to the system by the new password.

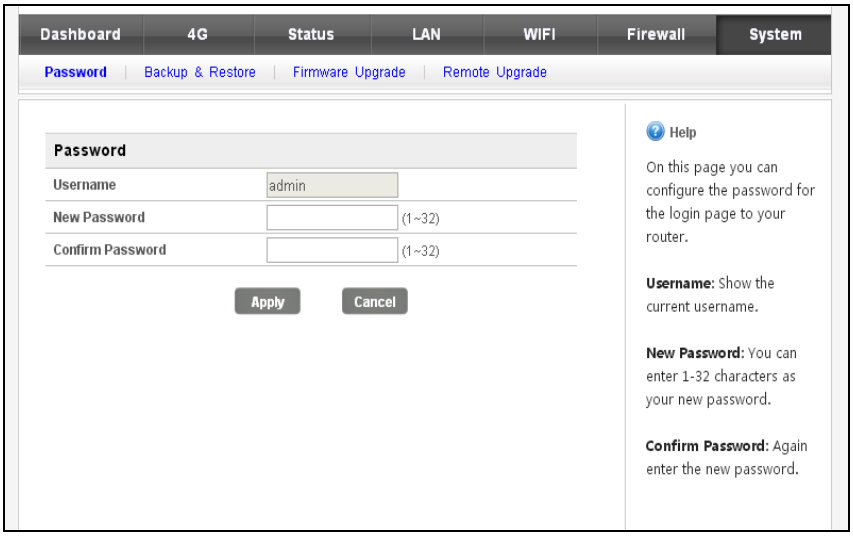

Figure 3-8-1-1 Password

3.8.2 Backup & Restore

Clicking the “Export” button, the current settings will be saved as a data file to the local PC. You can import the device configuration from the files that you saved. You can restore and reboot the device.

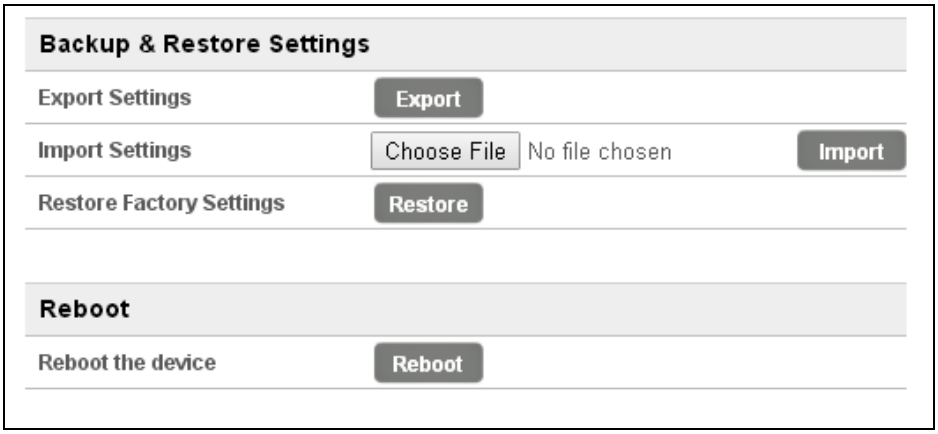

Figure 3-8-2-1 Backup & Restore

3.8.3 Firmware Upgrade

On this page, you can upgrade the current Router version from the local PC. Please wait until the whole upgrade complete, and then the device will reboot automatically

Figure 3-8-3-1 Firmware Upgrade

3.8.4 Remote Upgrade

After the device detects the new router version from Web server, the device will upgrade the new version automatically, and the device can upgrade the new version manually after you click the “Upgrade” button.

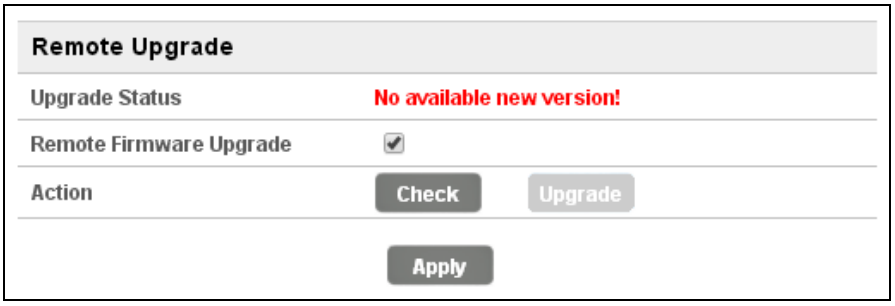

Figure 3-8-4-1 Remote Upgrade

Note:

1) The firmware version must be suitable for the corresponding hardware;
2) Please make sure the adequate and stable power supply while upgrading.

FCC Regulations

1. This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference
(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 RF Exposure Information (SAR)

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mifi phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg.

* Tests for SAR are conducted with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the as described in this user guide, is **1.044 W/Kg**(Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements).

While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/ oet/fccid after searching on

FCC ID: 2AGER-XG1 Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Asso-ciation (CTIA) web-site at http://www.wow-com.com. * In the United States and Canada, the SAR limit for mifi phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a sub-stantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Body-worn Operation

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of **10mm** must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.