ZTE MF60

3G Global Mobile Hotspot

User Manual

ZTE CORPORATION
NO. 55, Hi-tech Road South, ShenZhen, P.R.China
Postcode: 518057
Tel: (86) 755 26779999
URL: http://www.zte.com.cn
E-mail: mobile@zte.com.cn

LEGAL INFORMATION

Copyright © 2010 ZTE CORPORATION.

All rights reserved.

No part of this publication may be excerpted, reproduced, translated or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without the prior written permission of ZTE Corporation.

The manual is published by ZTE Corporation. We reserve the right to make modifications on print errors or update specifications without prior notice.

Version No. : R
Edition Time :
Manual No. :

Contents

Getting Started 5
Device Appearance 5
Indicators 6
Hardware Installation 6
Inserting SIM Card and Battery 6
Inserting microSD Card 7
Switching On/Off Your Device 8
Charging Your Device 8
microSD Card 9
About SIM Card 9
Working Mode 10
USB Mode 10
Wi-Fi Mode 13
Mixed Mode 14
Operation and Function 15
Preparation 15
Establish a connection between your device and the client 15
Access the Internet 16
Access the WebGUI Configuration Page 16
Login 17
Quick Setup 19
Settings 21
3G Settings 21
Wi-Fi Settings 24
Firewall 27
Advanced 30
Phonebook 33
Adding new contact 33

Operation in native 33
Operation in SIM Card 34
SMS 34
Configing SMS 34
Sending new SMS 35
Operation in native 35
Operation in SIM Card 36
WAN Connection 36
Usage of WPS 37
Logout 37
Disconnecting from the Internet 37
Sleep Mode 37
Warning and Notice 39
To the Owner 39
Using Your Device 39
Using Battery 40
Limited Warranty 40
Limitation of Liability 41
FCC Compliance 41
Radio Frequency (RF) Energy 41
Troubleshooting 43
Technical Parameters 45
Glossary 47

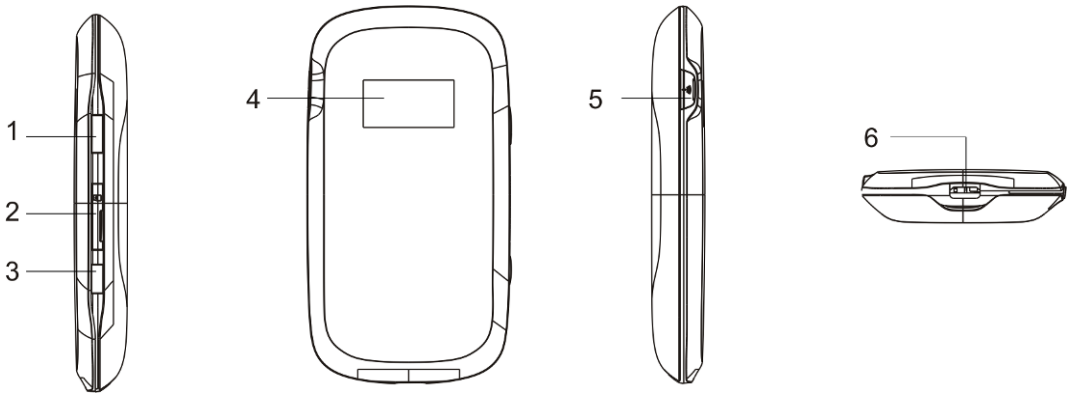
Chapter 1

Getting Started

ZTE MF60 is a 3G mobile hotspot device, working in EDGE/WCDMA/HSPA network. The client devices can connect to the device via USB or Wi-Fi interface; the device supports data and SMS services, enabling you to communicate anytime and anywhere.

Device Appearance

The following figure shows the appearance of the device. It is only for your reference. The actual device may be different.



Right Side **Front** **Left Side** **Bottom**

1.Power	Hold the **Power** button to switch on/off the device.
2.Memory card slot (microSD card)	It is where you insert the memory card (microSD card).
3.WPS	This button is used to start Wi-Fi Protected Setup authentication process and enable/disable the Wi-Fi function. ● Hold it for three seconds to activate the WPS process. ● Press it to enable/disable Wi-Fi function.
4. LED Screen	It is to indicate the signal type, signal strength, battery, Wi-Fi, etc.
5. External Antenna Connector	It is used to connect an external antenna to enhance the signal strength.
6.Charger/USB port	● Charge your device.

	● Connect the client to your device via USB cable.

Notes:

• Press **WPS** and **Power** buttons simultaneously, and hold on about three seconds until all LEDs are off, then release the buttons, the device will restart automatically and restore to the factory default settings.

• microSD is a trademark of SD Card Association.

Indicators

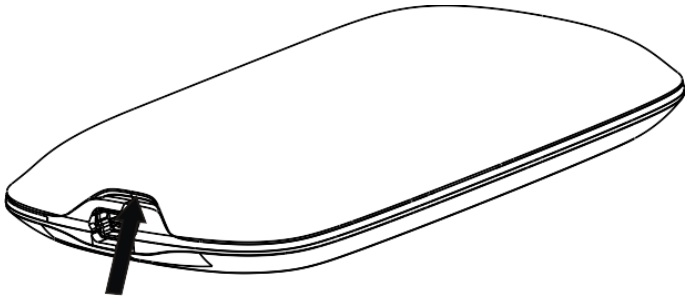
When the device is powered on, the following icons will appear on the LED screen, with the corresponding indications listed in the table below:

Icon	Indication
	Network signal strength.
2G	Network type. 2G or 3G icon will appear on the LED screen according to the network being connected.
R	Roaming network indication.
A	Connect to the Internet automatically.
M	Connect to the Internet manually.
5	Wi-Fi status and number of the connected users.
	New incoming message indication.
	Battery power indication.

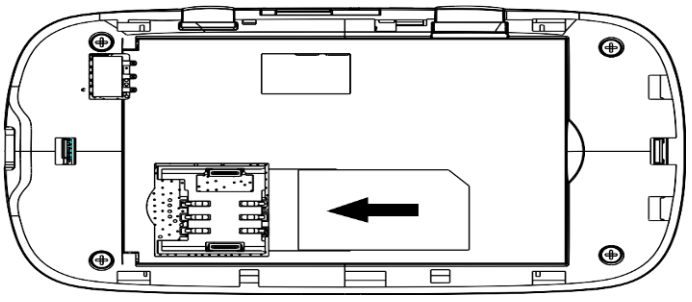
Hardware Installation

Inserting SIM Card and Battery

1. Use the thumb catch at the bottom of the device to open the battery cover.



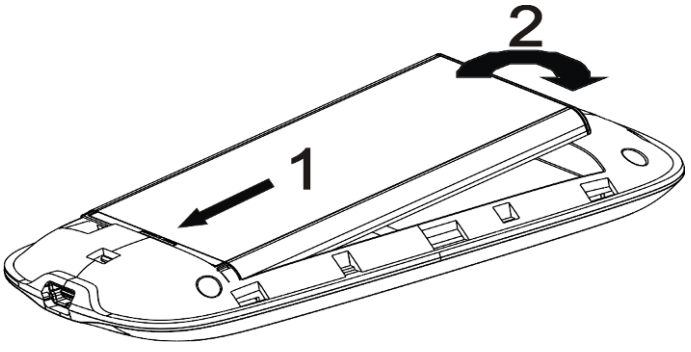
2. Insert SIM Card into the slot.



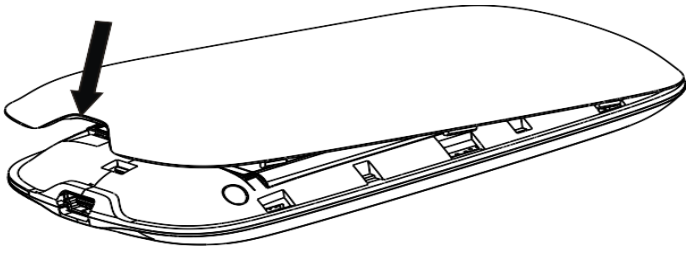
Warning:

Please power off the device and remove the external power adapter before removing or inserting the SIM card, if not, the device or SIM card may be damaged.

3. Insert the battery as shown with the contacts located against the gold springs.



4. Line the battery cover up correctly and press gently to close the case.



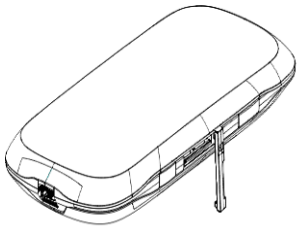
Inserting microSD Card

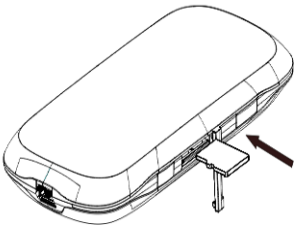
1. Pull the microSD cover out of the card slot.

Notes:

Do not pull the cover rudely, as it is connected with the device.

2. Insert the microSD card into the microSD slot. The following picture shows the correct inserting direction. You will hear a click when the microSD card locks in place.





3. Close the microSD cover.

Switching On/Off Your Device

Press and hold the **Power** button to switch on/off the device.

Notes:

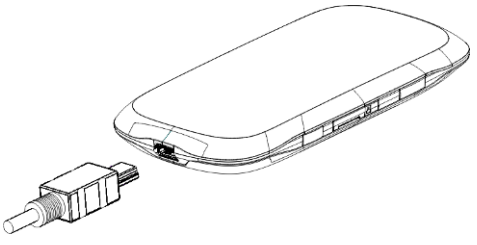
- Please install battery before power on.
- The device is powered on when the signal strength indication lights up.

Charging Your Device

Notes:

- Charge at least 4 hours to ensure a full initial charge.
- Charging is only possible within a temperature range of 0℃ to 45℃.
- You can charge your device by using USB cable or adapter.

1. Insert the charger lead carefully with the plug arrow facing the bottom of the device.
2. The plug only fits one way. Do not use excessive force to insert the plug.
3. Check the plug is the right way round and lined up correctly and insert it gently.



microSD Card

Using microSD Card

1. Insert the microSD card into the device.
2. Connect the microSD with PC or laptop via provided USB cable, and the system will display it as a removable disk.
3. Use it freely.

Uninstall microSD Card

1. Left click the icon in the Windows system tray bar. Then a menu will popup and indicate the USB devices list as below:

2. Select **Safely remove the USB disk** which is relevant to the device.
3. Remove the device directly.

About SIM Card

Avoid handling the SIM card unnecessarily. Hold the card by the edges to prevent static damage. Keep the SIM card away from electrical and magnetic appliances.

If you cannot get service, make sure that：

- You are in an area which has network coverage.
- You are using the correct SIM card.

Chapter 2

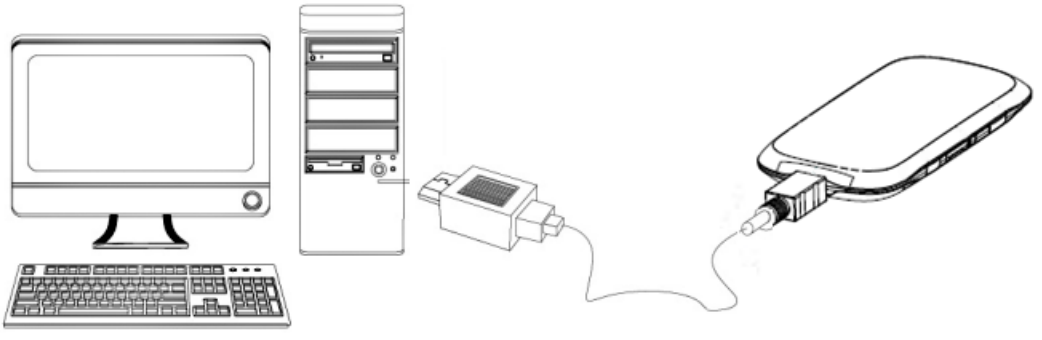
Working Mode

The following picture is the application example. Use the USB cable to connect your PC or laptop which cannot provide wireless network function, and connect other laptops with device via Wi-Fi, so all of them can surf on the Internet at the same time.

Your device supports three working modes: USB mode, Wi-Fi mode, and Mixed mode. For the client, we only use PC or laptop as the example in this document.

USB Mode

Connect the device to your PC or laptop via the included USB cable, then power on your device. And the following picture is one application example:



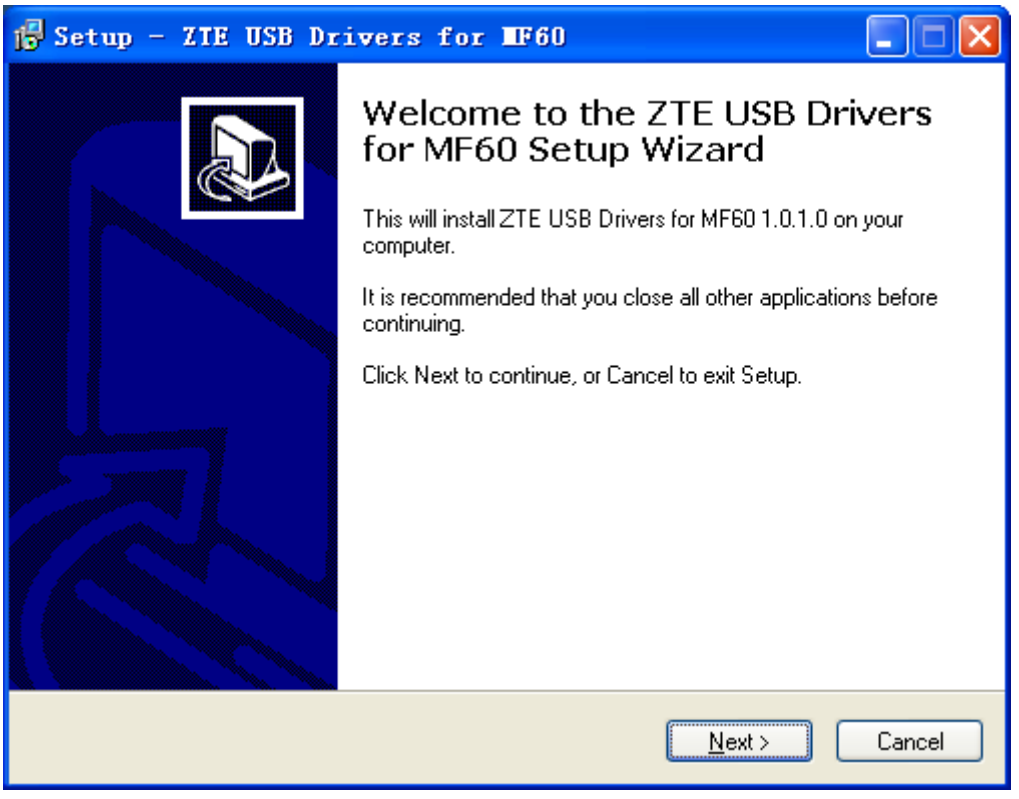
Installing Software

When you connect your device to PC or laptop for the first time, the system will automatically detect and recognize the new hardware and display the new icon in the desktop status bar, indicating that the PC or laptop and the USB device have been connected properly. After a few seconds, there will show the following installation interface if the laptop and desktop PC supports automatic installation.

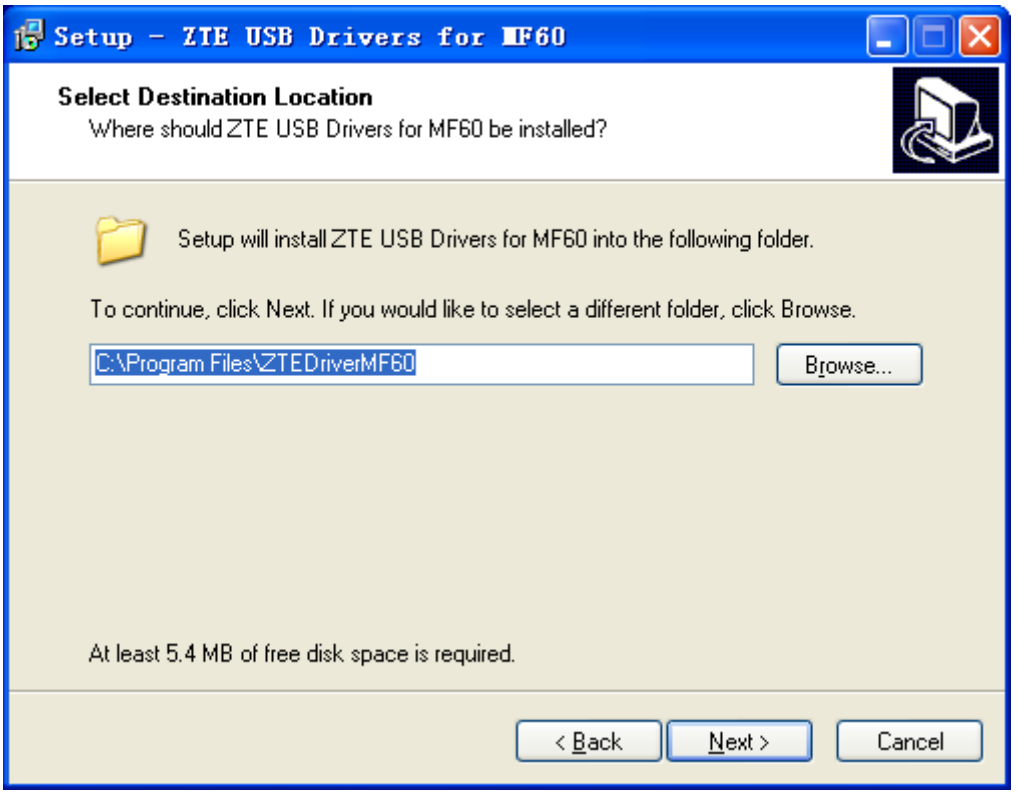
Notes:

If the system does not launch installation automatically, you can run the installation program in path of **My Computer > Portable Hotspot > Setup.exe**.

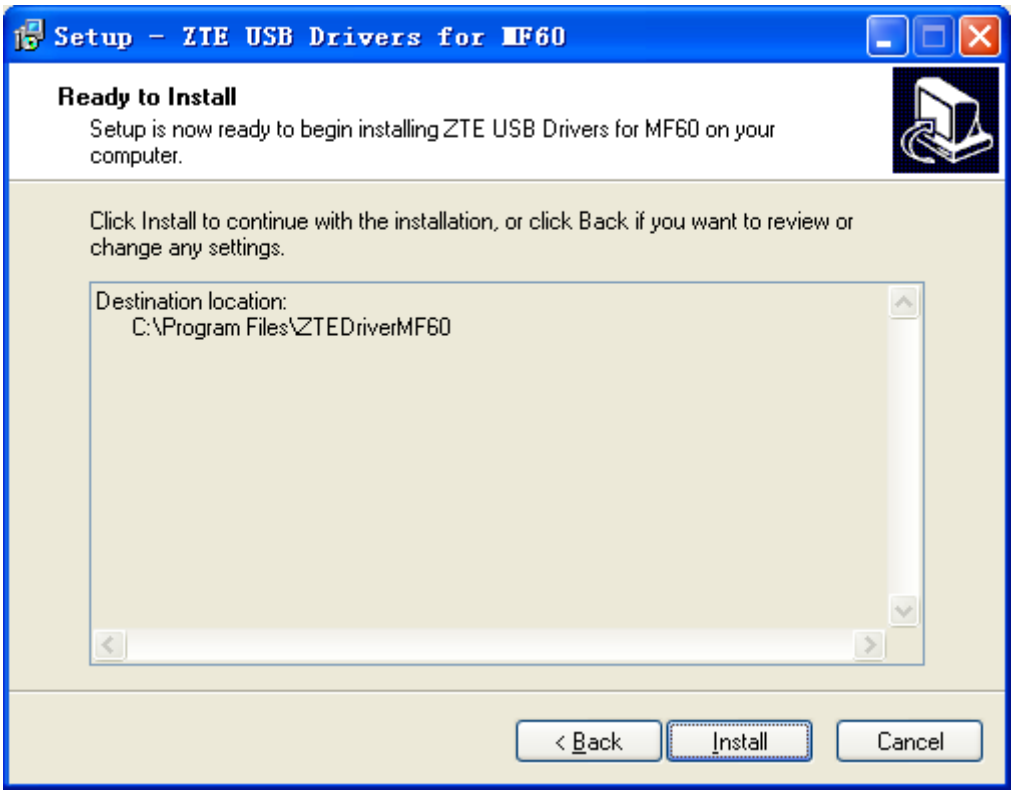
The following installation interface will show how to start installation. And the first screen you see as following:



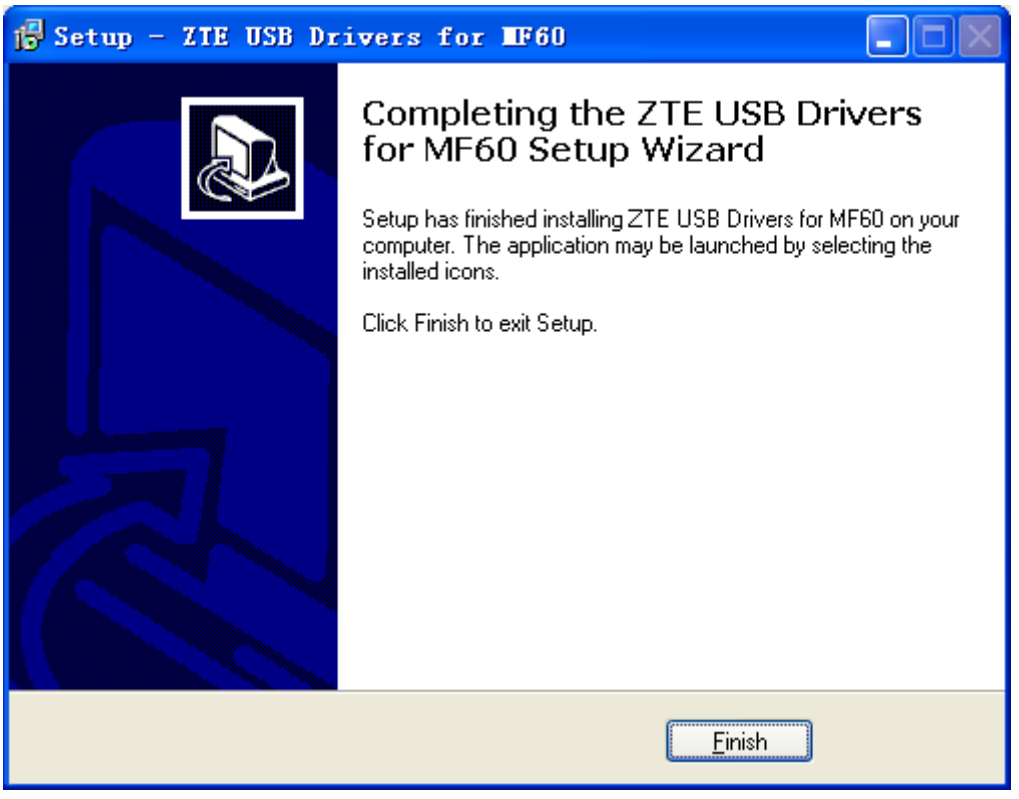
Strongly recommend you to exit Windows programs, and click **Next**,



Select the folder that you want to install the software, and you can select a different path by pressing Change, and then click **Next**.



Click **Install**.



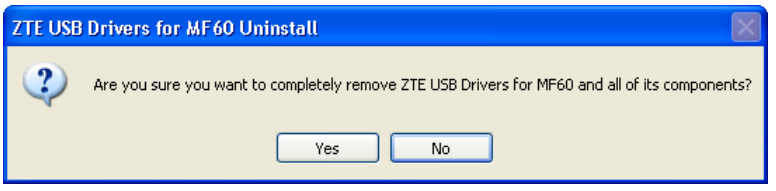
Click **Finish** to complete the installation.

After the installation, select **Start > Programs** and there will be a **ZTE USB Drivers for MF60** program group， which includes **MF60 Web UI** and **Uninstall ZTE USB Drivers for MF60**. There will be a shortcut icon

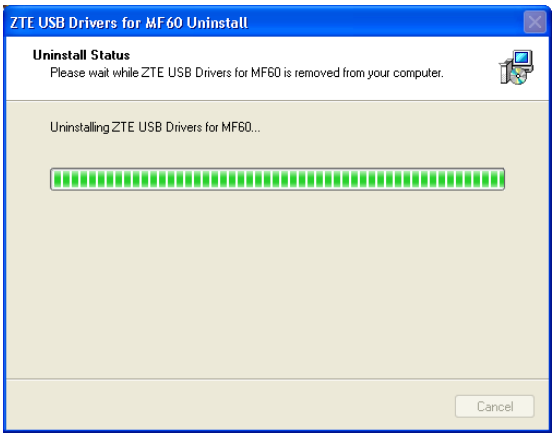
on the desktop.

Uninstalling Software

Select **Start** > **Programs** > **ZTE USB Drivers for MF60** > **Uninstall ZTE USB Drivers for MF60** menu on the laptop or desktop PC.



Click **Yes** to confirm uninstall the software. Then the system begins to uninstall programs, and this interface will indicate the progress of uninstall.



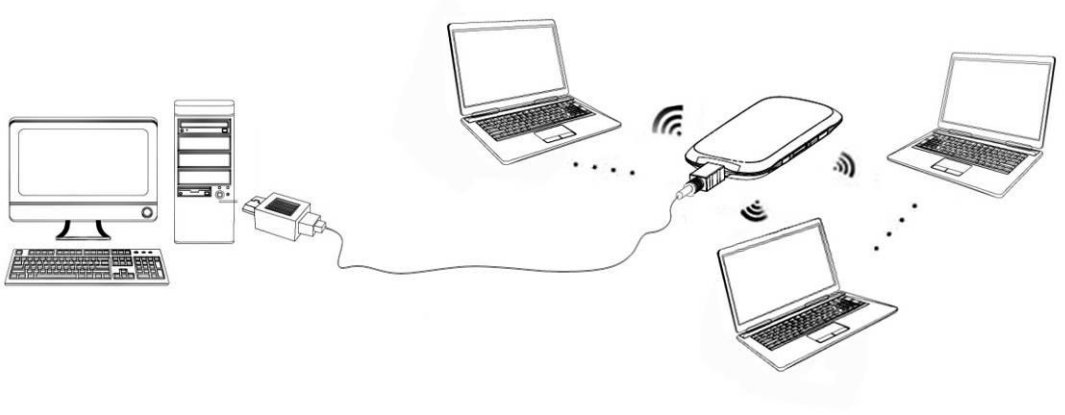
Click **OK** to complete the application software uninstall.

Wi-Fi Mode

Power on directly, and then connect the device to your PC or laptop via Wi-Fi. And the following picture is one application example:

Mixed Mode

Use the both connection methods to connect your PC or laptop. And the following picture is one application example:



Chapter 3

Operation and Function

Preparation

Before using the data service, make sure:

• SIM card is inserted.

• All LED Indicators are working normally.

Establish a connection between your device and the client

Via USB Cable

1.Connect your device and the client with the USB cable.

2.Power on your device.

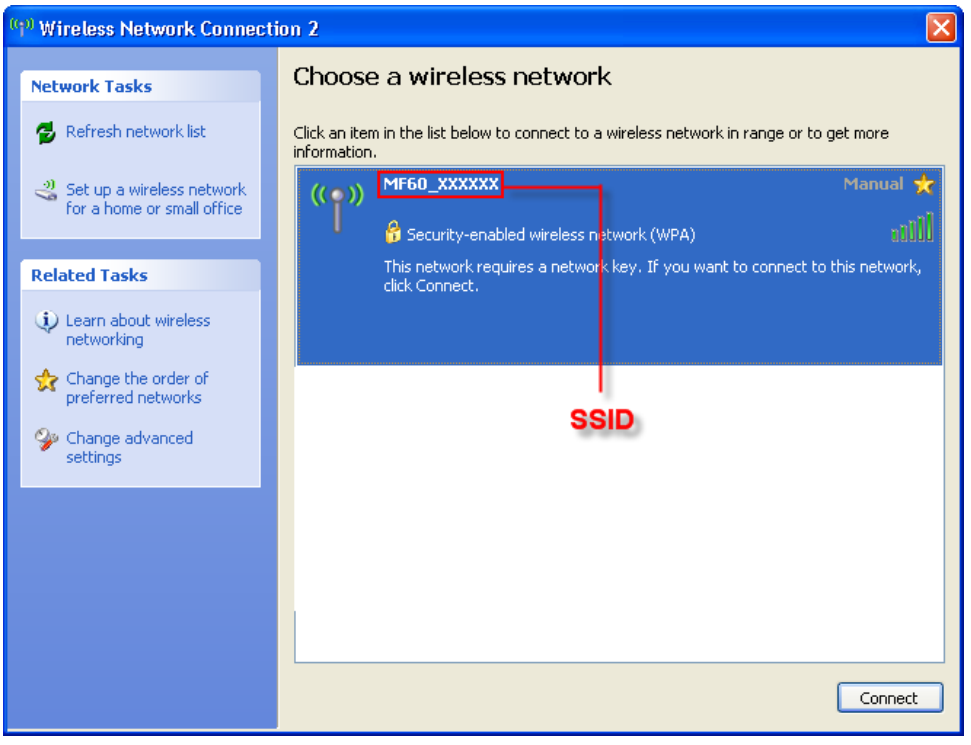
3.Install software.

After the installation, the connection between your device and the client will be established successfully a moment later.

Via Wi-Fi

1. Power on your device directly. It will take 1~2 minutes to initialize, and then Wi-Fi LED icon will be indicated on the LED screen of your device.
2. Use your normal Wi-Fi application on the client to search the available wireless network.

   Notes: You need to check your Wireless Network Connection. Set the client to obtain an IP address automatically in the Internet protocol (TCP/IP) properties, and the client will get an IP address like"192.168.0.101".
3. Select the SSID of your device, and then click **Connect**.



Notes:

There will be a pop-up window to require the password. Please check the label on the battery compartment of your device to gain the SSID and preset password information.

4. Wait a moment, the connection between your device and the client will be established successfully.

Access the Internet

1. Switch on the device.

2. Establish a connection between your device and the client.

3. After successfully establishing the connection, access the Internet in the **Always On** or **Manual** mode. The default mode is **Manual**.

Notes:

You can browse the WebGUI Configuration page and click WAN Connection to set the WAN connection mode.

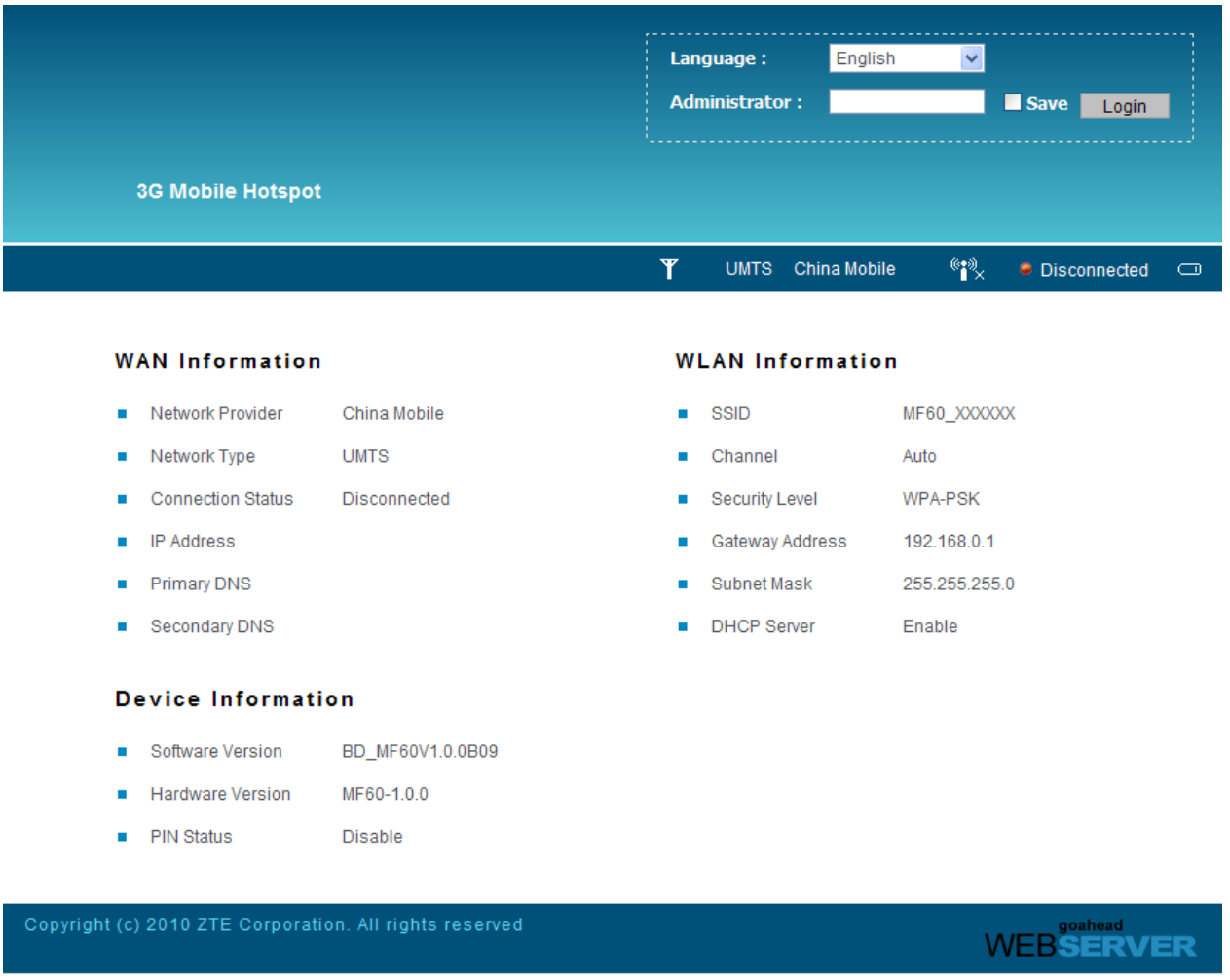
Access the WebGUI Configuration Page

1. Make sure the connection between your device and the client is correct.
2. Launch the internet browser and enter http://192.168.0.1 or http://ufi.home in the address bar.

   Notes:

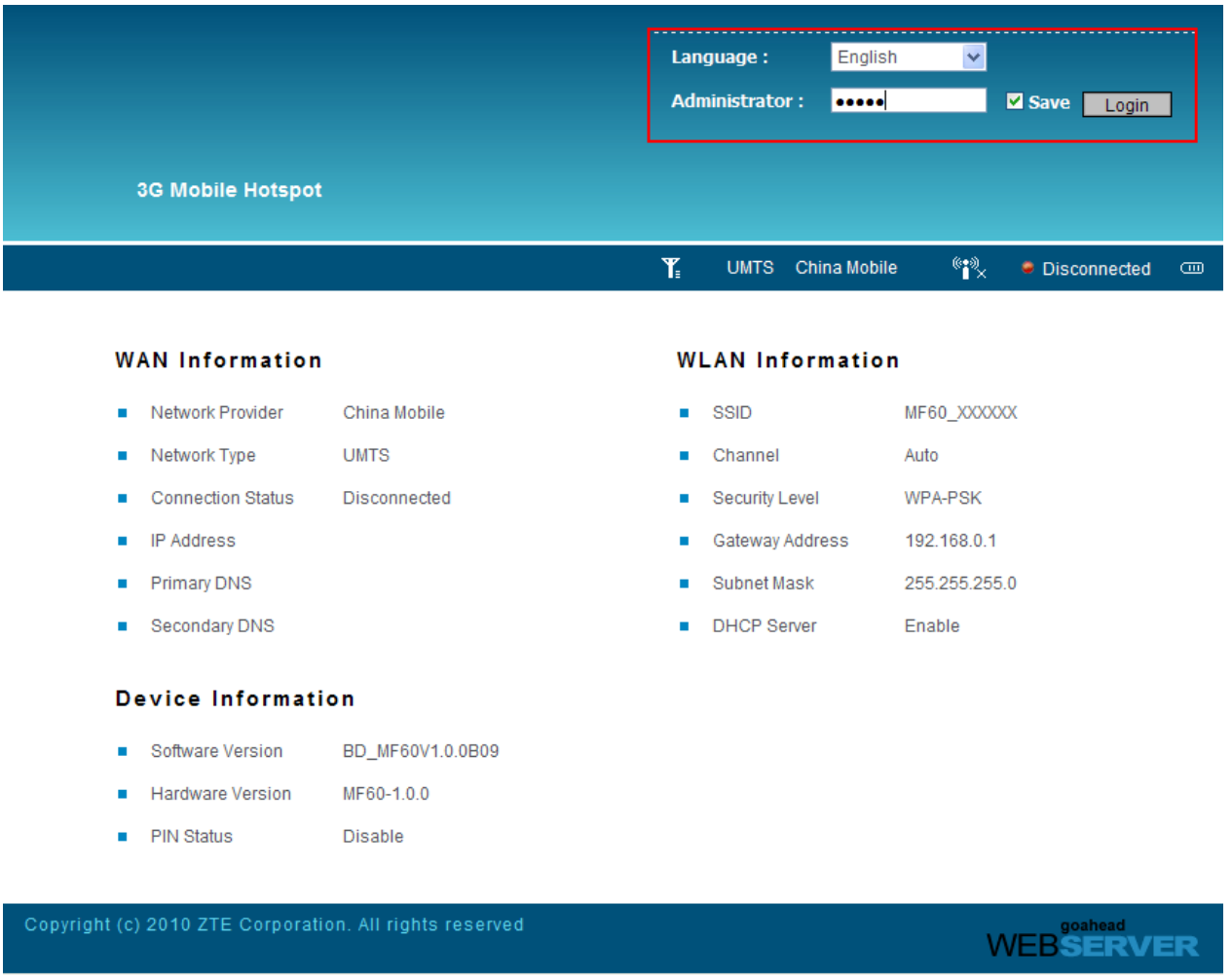
   It is recommended that you use IE (6.0 or later), Firefox (1.0 or later), Opera (6.0 or later), Safari (3.0 or later), Chrome (6.0 or later)

3.The login page appears as follows.



Login

In the WebGUI Configuration page, select the desired language and input the password (the default **Password** is admin).

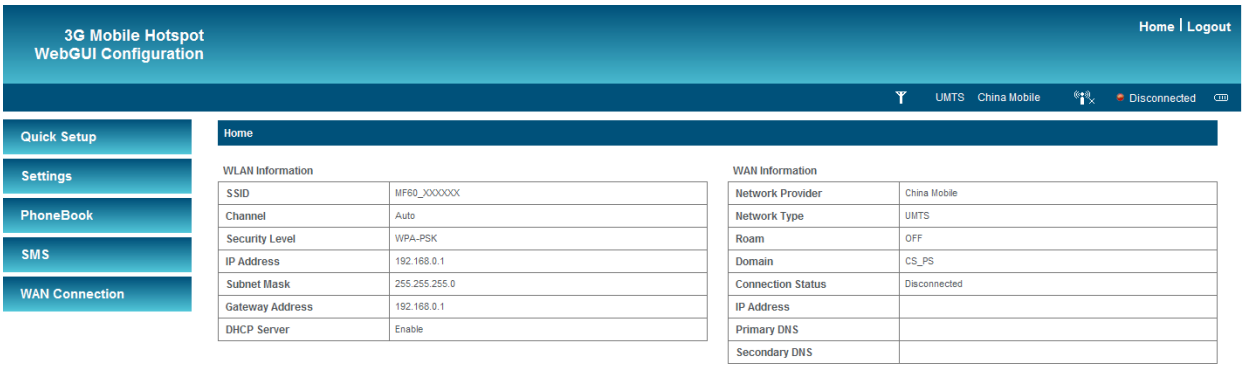


Click **Login** to log in the device.

Notes:

If you check **Save** after type in password, the device will save it. Next time when you want to login the device with the same password, what you need to do is click **Login**.

When you login, the following interface appears.



Notes:

In any situation click **Home** to switch to this interface.

The whole interface is divided into three parts. Related functions can be executed by operation in the related areas.

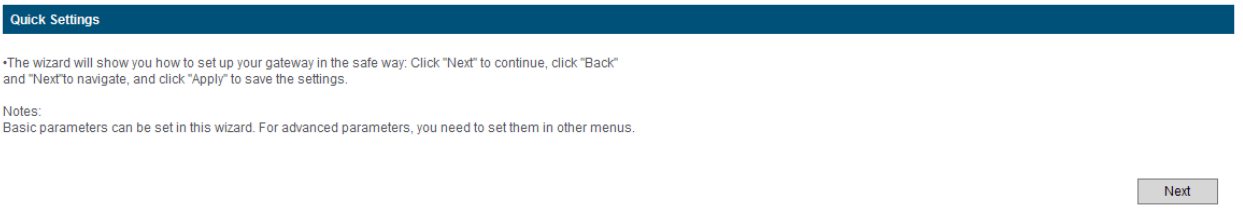
- **Index area:** Show the configuration list for your device.
- **Content area:** Show the detail configuration.
- **System Information Area:** Show the system status and different kinds of tip.

Battery indicator	: Shows the battery level, 4 stages from none to high .
Signal strength	: Shows the network signal intensity, 5 stages from none to strong .
Internet Status	: Connect Internet.
	: Disconnect Internet.
Wi-Fi Strength	: Wi-Fi status and number of the connected users. And the maximum number is 10.

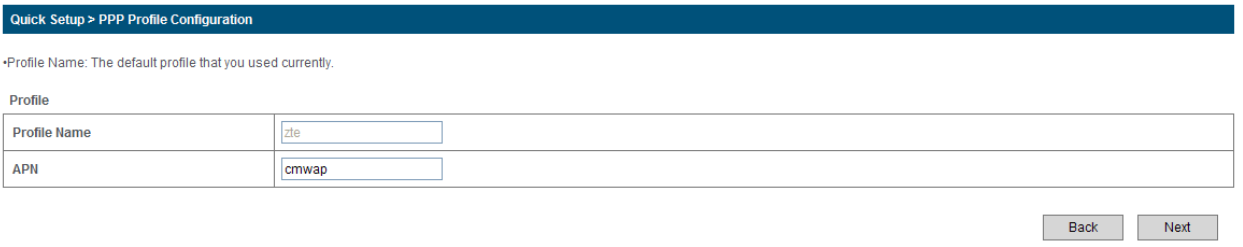
Quick Setup

1. In the main interface click **Quick Setup**.

2. Read the guide carefully, and then click **Next**.

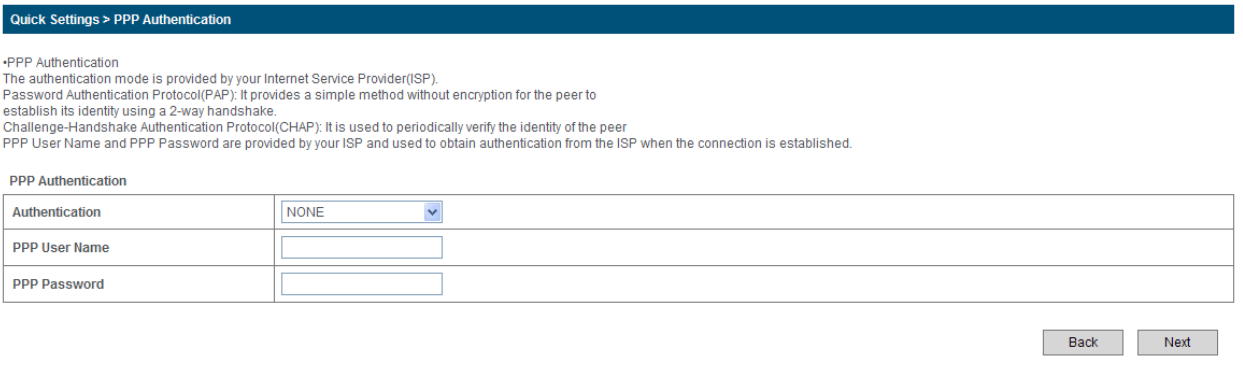


3. Set **PPP Profile Configuration** in the following figure:

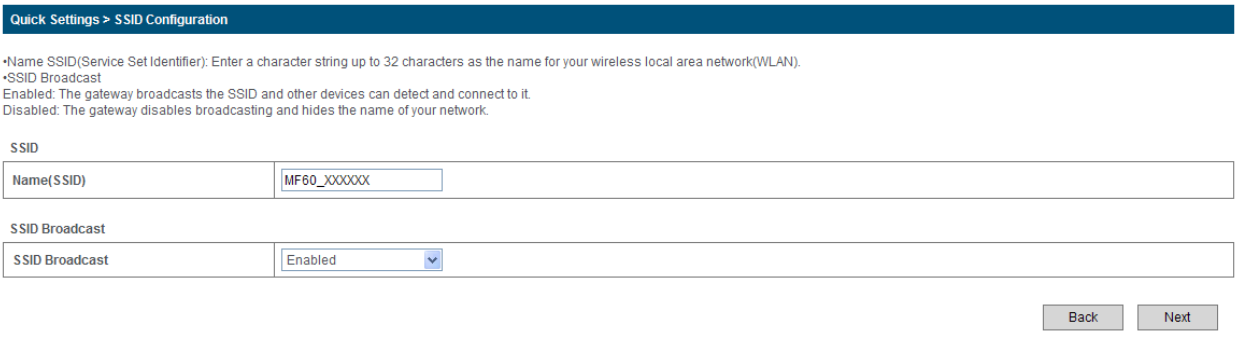


Type the APN string.

4. Set **PPP Authentication** in the following figure:

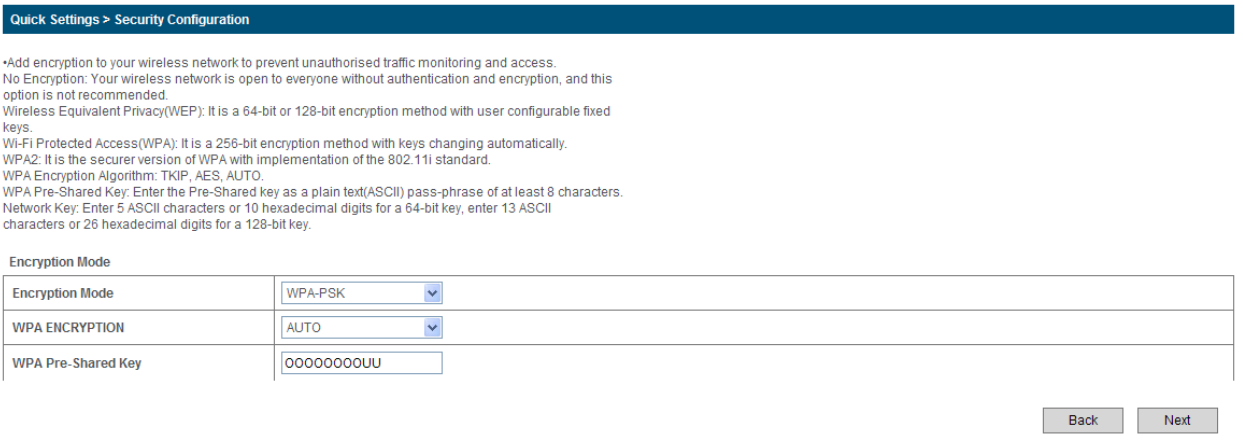


5. Set **SSID Configuration** in the following figure:



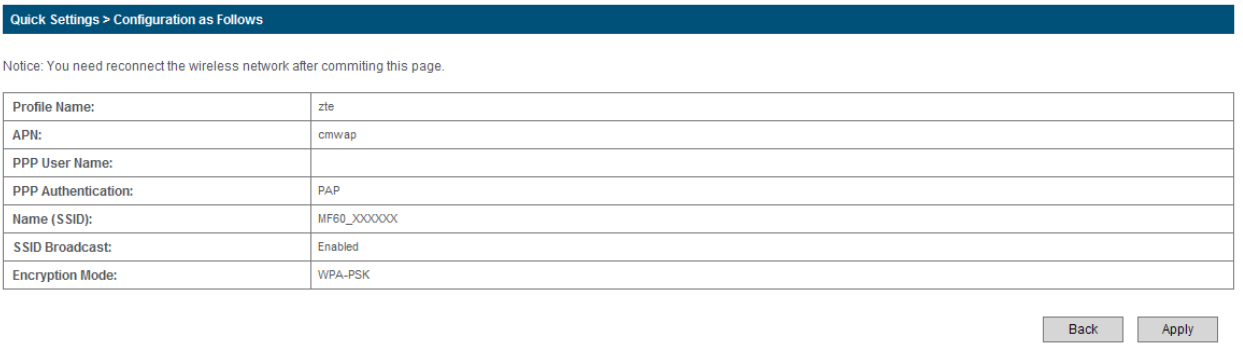
Service Set Identifier (SSID) is used to uniquely identify your WLAN. If you enable **SSID Broadcast**, the gateway will broadcast the SSID, and other devices can detect and connect to it.

5. Set **Security Configuration** in the following figure:



Encryption will keep your traffic from being unauthorized monitored and accessed, select one encryption mode from the list, and then set key and/or algorithm for it.

6. Show the Configuration in the following figure:



Make sure that all the parameters shown in the figure are correct, and then click **Apply**.

Settings

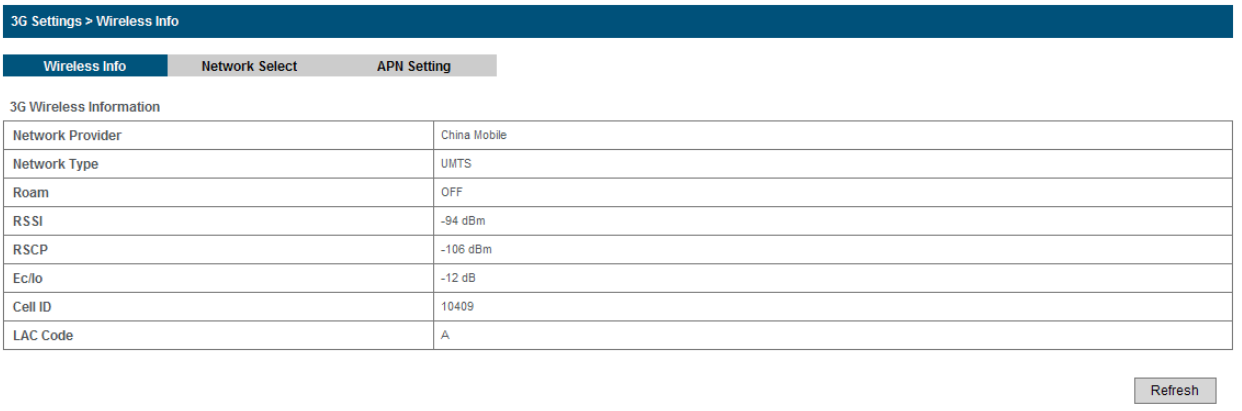
• Do not modify any settings unless instructed by your service provider.

• Please disconnect the device from the network before change the settings.

3G Settings

Wireless Info

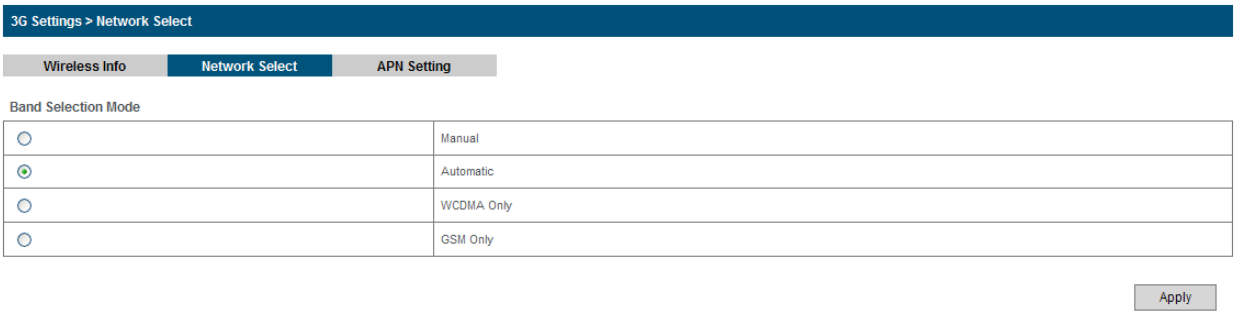
Select **Settings** > **3G Settings** > **Wireless Info**, the 3G wireless information is shown in the following figure:



Click **Refresh** to update the wireless information.

Network Select

Select **Settings** > **3G Settings** > **Network Select**, the Band Selection Mode is shown in the following figure:

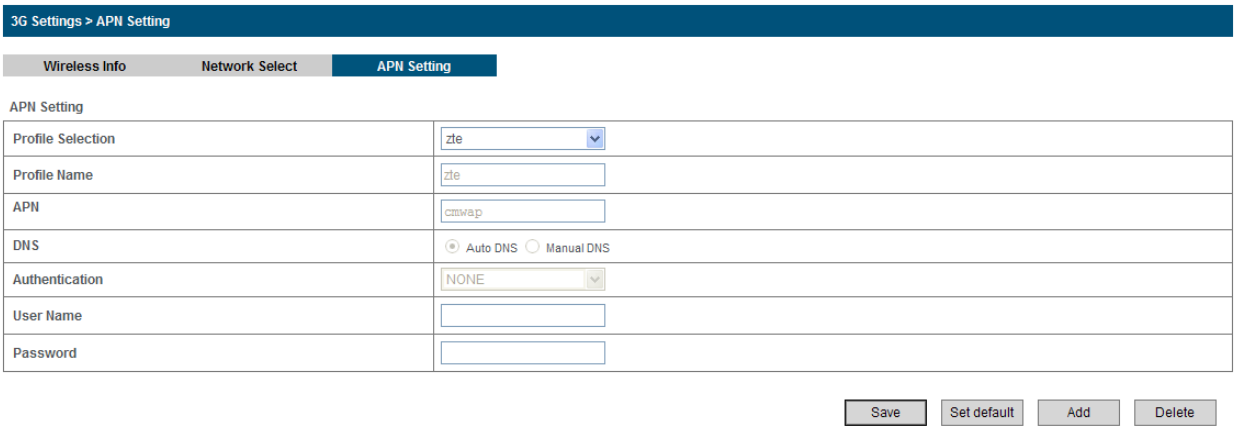


- **Manual**: Search the available network manually.
- **Automatic**: Device searches for available network.
- **WCDMA Only**: Device searches for WCDMA network only.
- **GSM Only**: Device searches for GSM network only.

Click **Apply** to confirm your configuration.

APN Setting

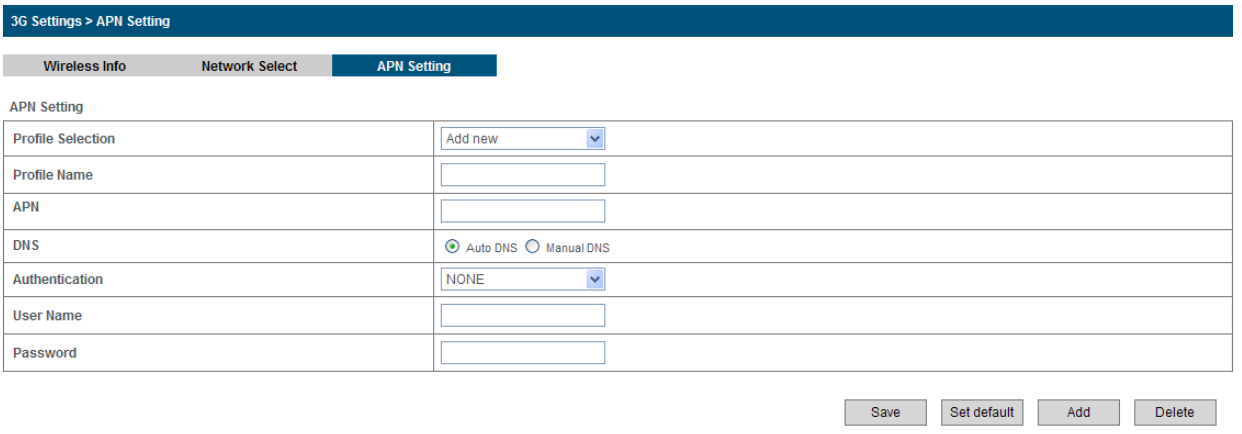
Select **Settings** > **3G Settings** > **APN Setting**, the APN parameters are shown in the following figure:



• Click **Set default** to set current profile as the default profile.

• Click **Delete** to delete the current profile.

• Click **Add** to access the following figure:



Enter the related parameters (detailed please see following table), and then click **Save** to add one new profile.

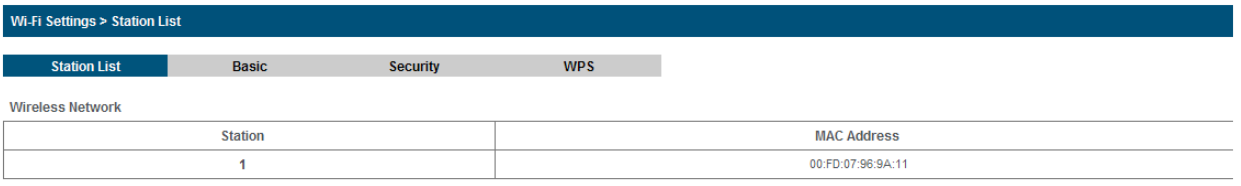
Parameter	Function
Profile Selection	Choose one profile from the list.
Profile Name	Type the profile name.
APN	Type the APN string.
DNS	Set DNS mode.
Authentication	Password Authentication Protocol (PAP) provides a simple method without encryption for the peer to establish its identity using a 2-way handshake. Challenge-Handshake

	Authentication Protocol (CHAP) is used to periodically verify the identity of the peer using a 3-way handshake.
User Name	User name is used to obtain authentication from the ISP when the connection is established
Password	Password is used to obtain authentication from the ISP when the connection is established.

Wi-Fi Settings

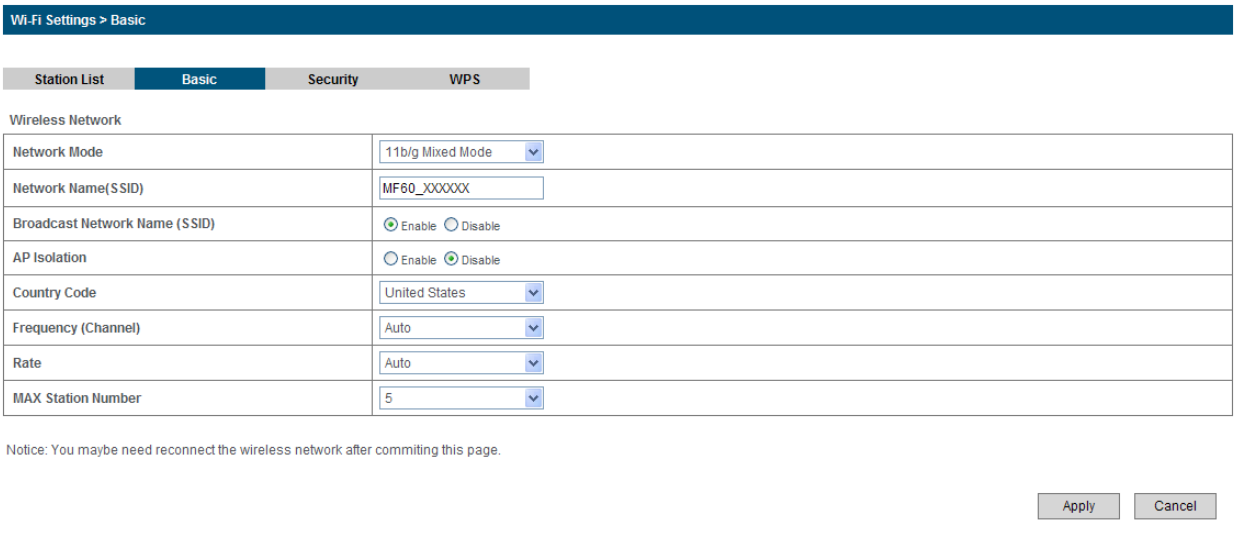
Station list

Select **Settings > Wi-Fi Settings > Station List**, the wireless network stations are shown in the following figure:



Basic

Select **Settings > Wi-Fi Settings > Basic**, the wireless network basic parameters are shown in the following figure:



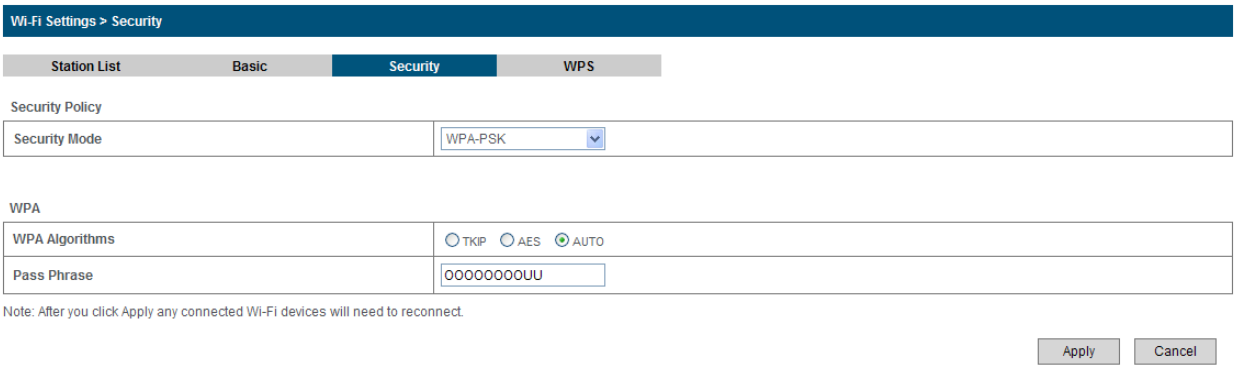
- **Network Mode**: If all of the wireless devices connect with this device in the same transmission mode, performance will be improved by choosing the appropriate wireless mode.
- **Network Name(SSID)**: Service Set Identifier(SSID). Enter a string less than 32 characters as the name for your wireless local area network(WLAN).

- **Broadcast Network Name(SSID)**: Disable or Enable(Default) this function. If **Enable** is selected, the device broadcasts the SSID, and other devices can search and connect to it. When you select **Disable**, other devices can not search out the SSID. If you want someone to connect, you need tell them the SSID, and let them setup manually.
- **AP Isolation**: When **Enabled** is selected, each of your wireless clients will not be able to communicate with each other.
- **Country Code**: Choose the right country code.
- **Frequency(Channel)**: Choose the appropriate channel to optimize the performance and coverage of your wireless network.
- **Rate**: Choose the speed rate.
- **MAX Station Number:** Choose the maximum number of the stations which connect the AP simultaneously.

Click **Apply** to confirm your configuration.

Security

Select **Settings > Wi-Fi Settings > Security**, the Security parameters are shown in the following figure:



Unless one of these encryption modes is selected, wireless transmissions to and from your wireless network can be easily intercepted and interpreted by unauthorized users.

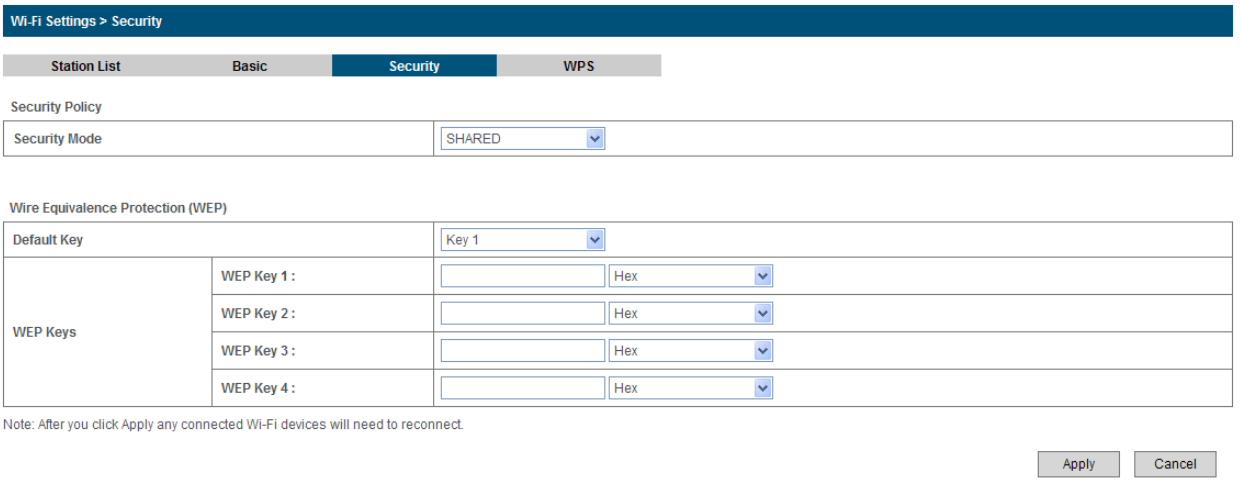
- **Security Mode**: The security modes are described below:

Mode	**Description**
OPEN	You can authenticate successfully with a SSID, whether it is valid or empty.
SHARED	The WLAN clients who have the same WEP key with wireless gateway can pass the authentication and access the wireless network.
WPA-PSK	WPA Pre-Shared Key, Enter the Pre-Shared key as a plain text (ASCII)

	pass-phrase.
WPA2-PSK	It is the securer version of WPA with implementation of the 802.11i standard.
WPA-PSK/WPA2-PSK	Apply both the WPA-PSK and WPA2-PSK scheme.

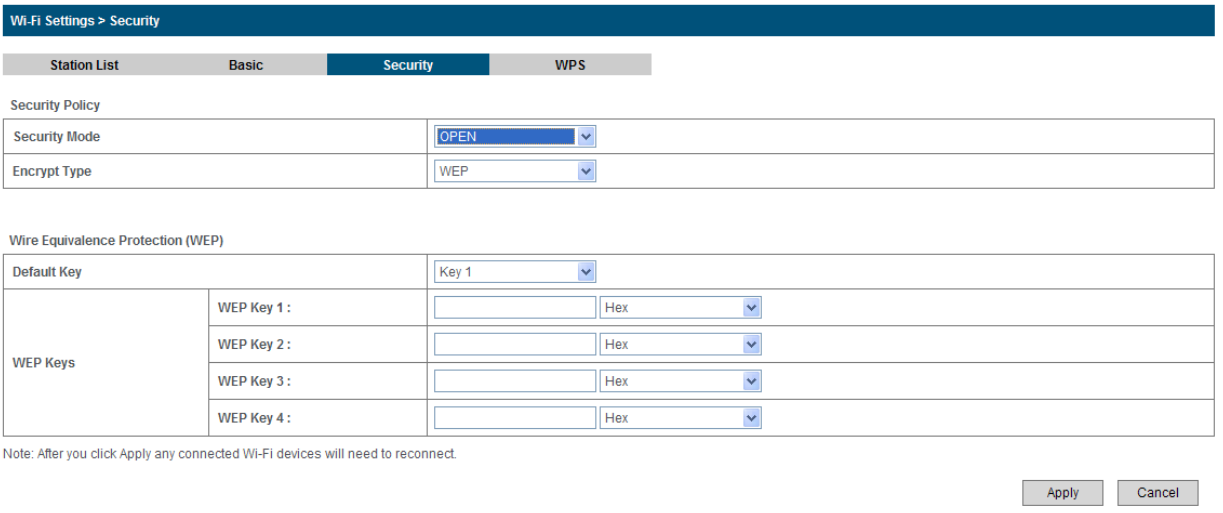
- **WPA Algorithm**: **TKIP**, **AES** or **AUTO**.
- **Pass phrase**: Enter the password manually.

If the Authentication type is **SHARED,** the bottom part of the configuration page displays parameters as shown:



- **WEP Keys**: At most four keys can be set in the blank. Choose the primary key index. The primary key is the only key in use at a given time. Whatever keys you enter for an access point, you must also enter the same keys for the client adapter in the same order. In other words, WEP key 1 on the AP must match WEP key 1 on the client adapter, WEP key 2 on the AP must match WEP key 2 on the client adapter, etc. A WEP can be in HEX form either 10 or 26 hexadecimal digits (0~9,a~f and A~F) and in ASCII form either 5or 13 ASCII code.

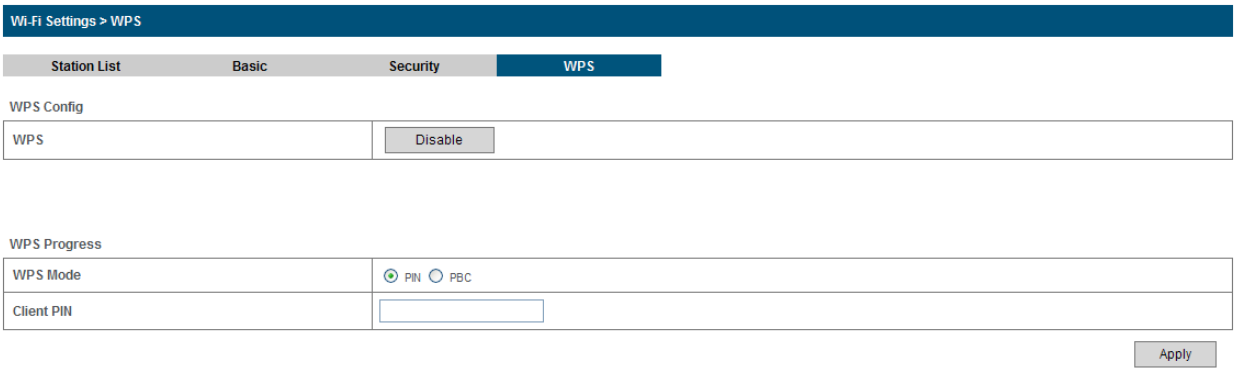
If the Authentication type is **OPEN**, the bottom part of the configuration page displays WPA parameters.



• **Encrypt Type**: There are two encrypt type: **WEP** and **No ENCRYPTION**.

WPS

Select **Settings** > **Wi-Fi Settings** > **WPS**, the WPS configuration is shown in the following figure:



• **WPS**: Disable this function.

• **WPS mode**: Choose the desired mode.

• **Client PIN**: Enter the client PIN.

Click **Apply** to confirm your configuration.

Firewall

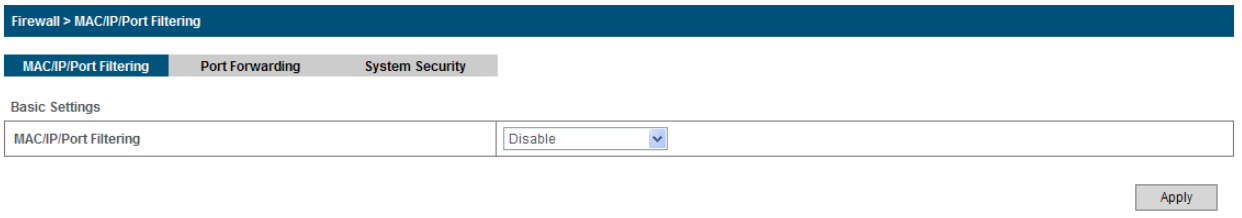
You may setup firewall rules to protect your network from virus, worm and malicious activity on the Internet.

Notes:

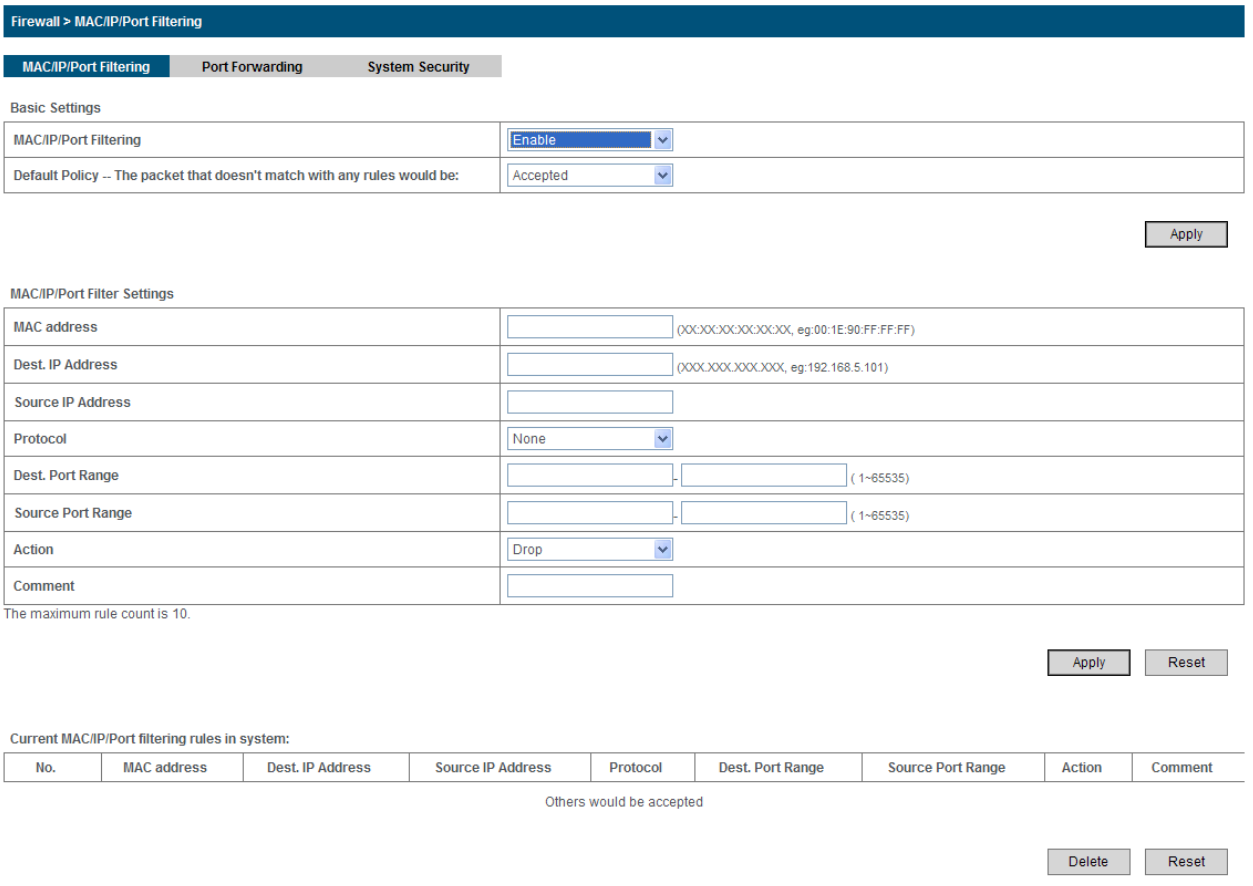
You can set the maximum 10 filtering items for **MAC/IP/Port Filtering** and **Port Forwarding**.

MAC/IP/Port Filtering

Select **Settings** > **Firewall** > **Mac/IP/Port Filtering**, the Mac/IP/Port Filtering is shown in the following figure:



If you select **Enable**, the filter settings will appear:



- **Default Policy**: Set how to handle the packet if none of the rules matches.
- **MAC address**: Set the MAC address that will be filtered.
- **Dest. IP Address**: Set the destination IP address that will be filtered.
- **Source IP Address**: Set the source IP address that will be filtered.
- **Protocol**: Set which protocol will be used for filtering.
- **Dest. Port Range**: Set the destination port numbers that will be filtered
- **Source Port Range**: Set the source port numbers that will be filtered.
- **Action**: Set how to handle the packet if it matches with the rule.

• **Comment**: Type comment for the filter settings.

Notes:

Filtering rules are matched one by one, if met this provision, it will not continue to match the rules listed below.

Click **Apply** to confirm your configuration.

Click **Delete** to delete the rule which you selected.

Click **Reset** to clear what you select or input.

To add a new rule:

1. Select **Enable** in the **Basic Settings** area.

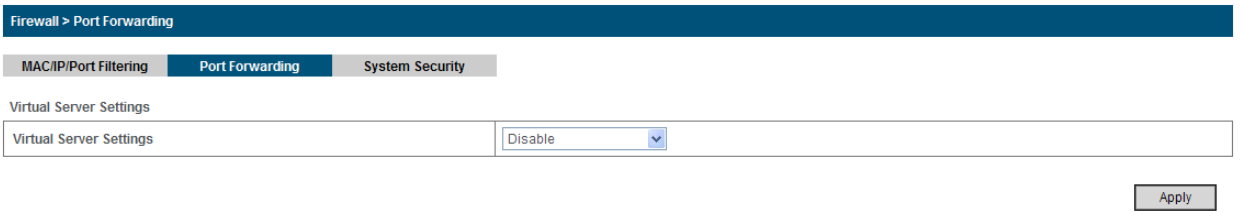
2. Click **Apply**.

3. Input the detail information in the **Mac/IP/Port Filtering** area.

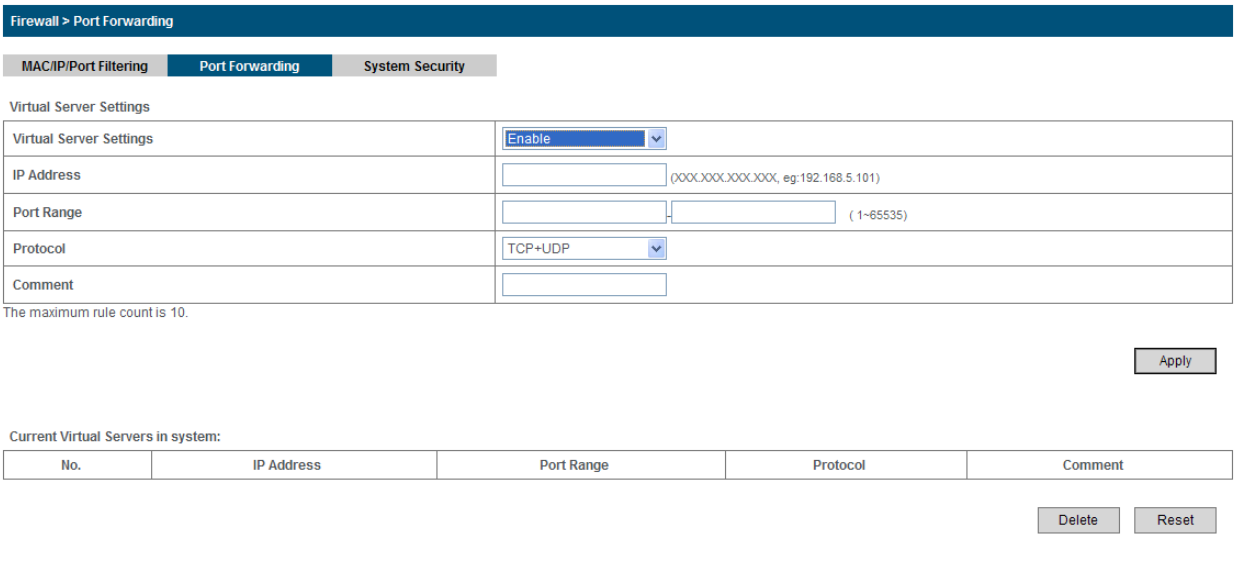
4. Click **Apply** in the **Mac/IP/Port Filtering** area.

Port Forwarding

You can setup virtual servers to provide services on the Internet. Select **Settings** > **Firewall** > **Port Forwarding**, the virtual server settings are shown in the following figure:



If you select **Enable**, the Virtual Server Settings will appear:



• **IP Address**: Set IP address for the virtual server.

• **Port Range**: Set port numbers for the virtual server.

• **Protocol**: Set protocol for the virtual server.

• **Comment**: Type comment for the virtual server settings.

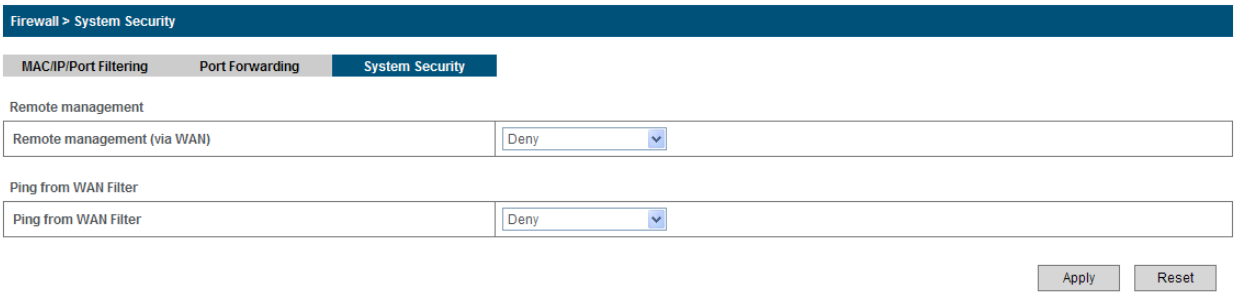
Select **Enable**, and input the detail information in the **Virtual Server Settings** area, then click **Apply** to add a new rule.

Click **Delete Selected** to delete the rule which you selected.

Click **Reset** to clear what you select or input.

System Security

You can configure system firewall to protect the device from being attacked. Select **Settings** > **Firewall** > **System Security**, the system security setting is shown in the following figure:



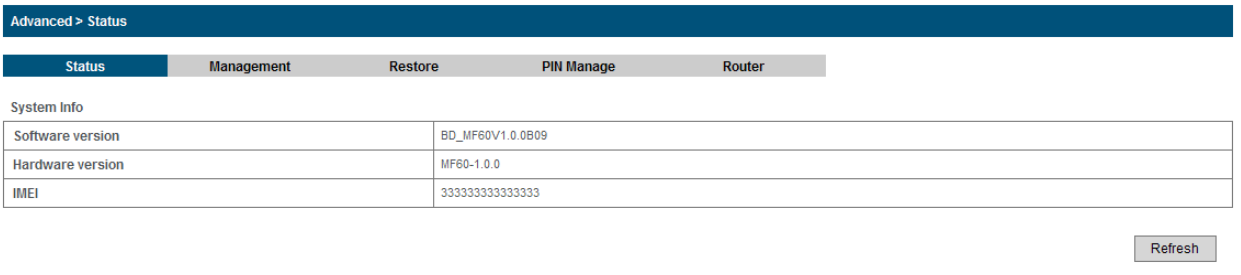
Allow or **Deny** the remote management function and ping from WAN filter function on requirement, and then click **Apply**.

Click **Reset** to restore the default value.

Advanced

Status

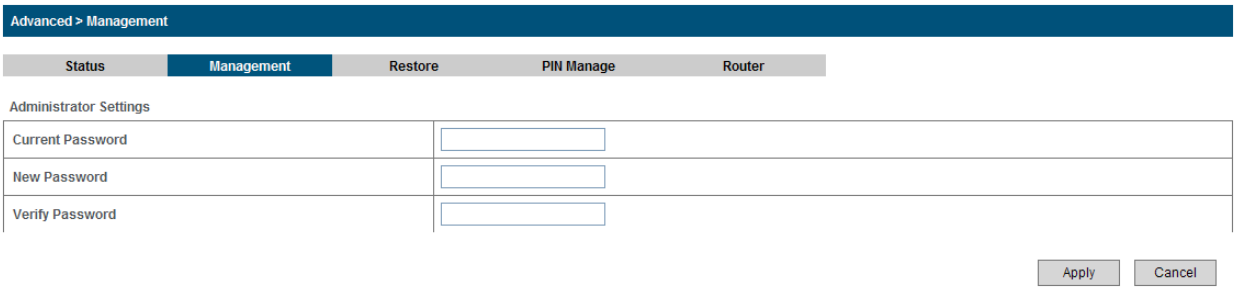
Select **Settings** > **Advanced** > **Status**, the system information is shown in the following figure:



Management

Select **Settings** > **Advanced** > **Management**, the administrator settings information is shown in the

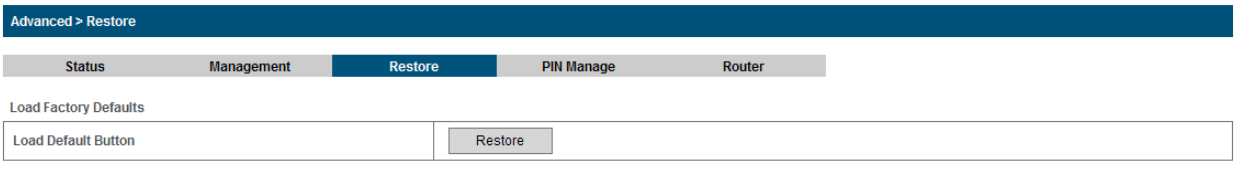
following figure:



You can change the administrator's password. Click **Apply** to confirm your configuration.

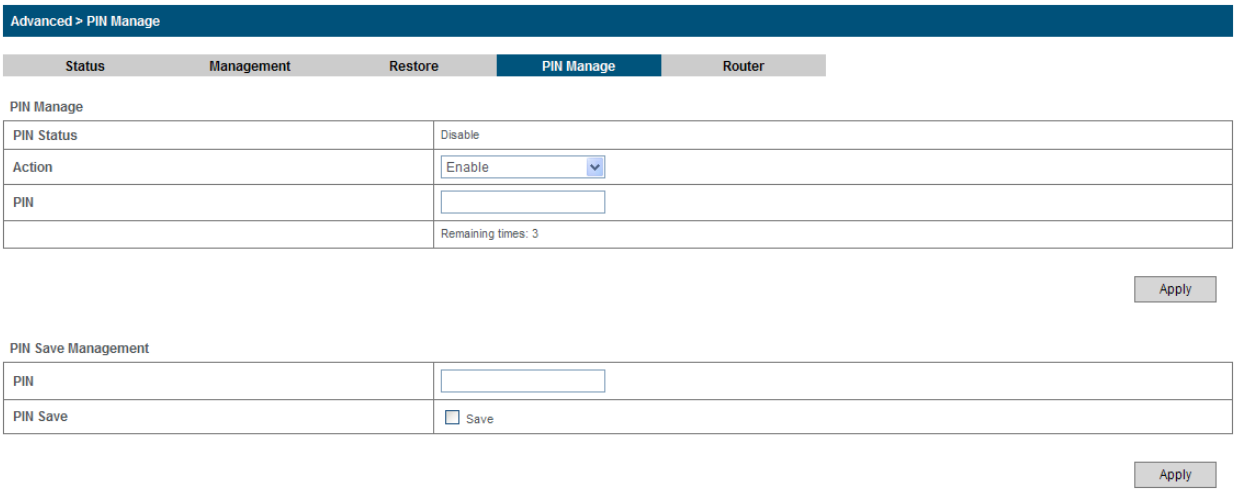
Restore

Select **Settings > Advanced > Restore**, click **Restore** to set all the settings to their factory default values, and then the device will restart automatically.



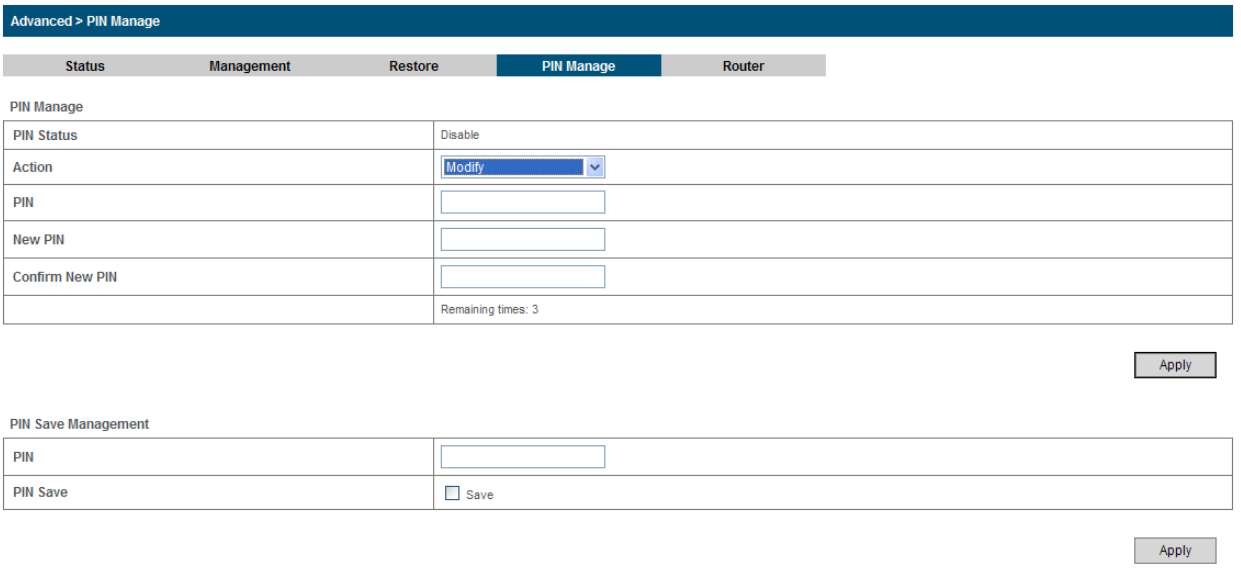
PIN Manage

Select **Settings > Advanced > PIN Manage**, the PIN manage is shown in the following figure:



- **PIN Status**: Show the current PIN status.
- **Action**: Choose one option, and then click **Apply** to active corresponding function.
- **PIN:** Type the PIN code.
- **PIN Save**: Check the box, then click **Apply** to enable PIN save function. After you enable this function, the device will save your PIN code, and you do not need to input PIN code every time after power on.

If you select **Modify**, the modification parameters are shown in the following figure:



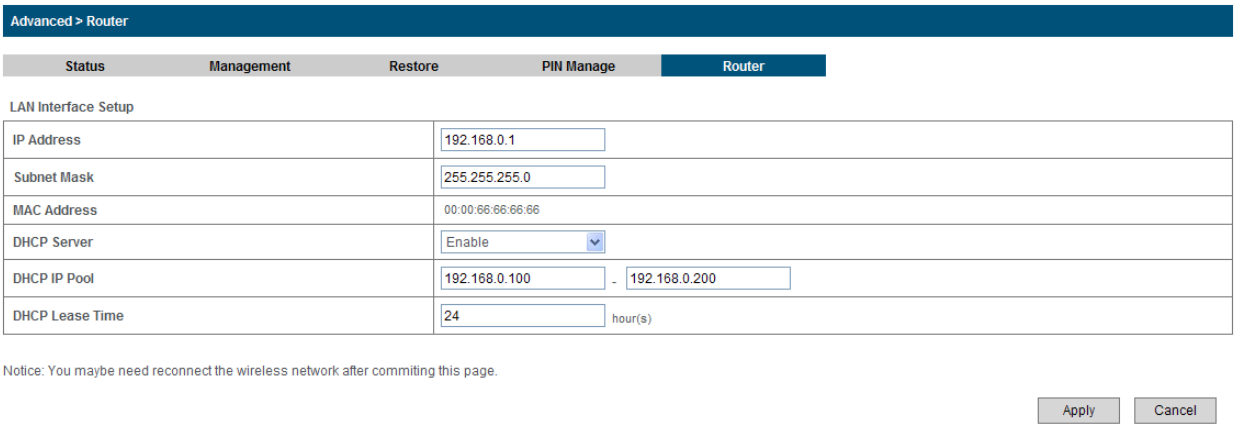
Type the old PIN code, and then type two times the new PIN code. Click **Apply** to confirm your configuration.

Notes:

- Three times consecutive wrong PIN code entries will block the SIM card.
- After you changed the PIN code, you still need input PIN code again, even though you enable PIN save function.

Router

Select **Settings > Advanced > Router**, the router information is shown in the following figure:



- **IP Address**: IP address for LAN interface.
- **Subnet Mask**: Subnet mask for the IP address.
- **MAC Address**: MAC address for the LAN interface.
- **DHCP Server**: Enable or disable DHCP Server function.

• **DHCP IP Pool**: Allocate begin and end IP address for IP pool.

• **DHCP Lease Time**: Define how long the leased IP address will be expired, and will relocate new IP address.

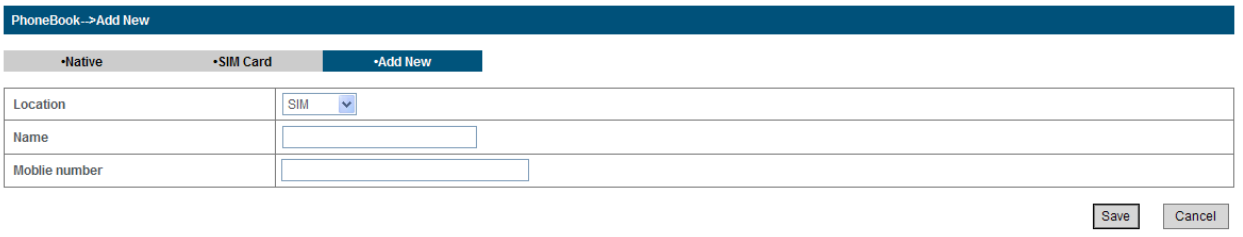
Click **Apply** to confirm your configuration.

Phonebook

This function allows you store contacts.

Adding new contact

1. Select **Phonebook** > **Add New** to access the following figure:



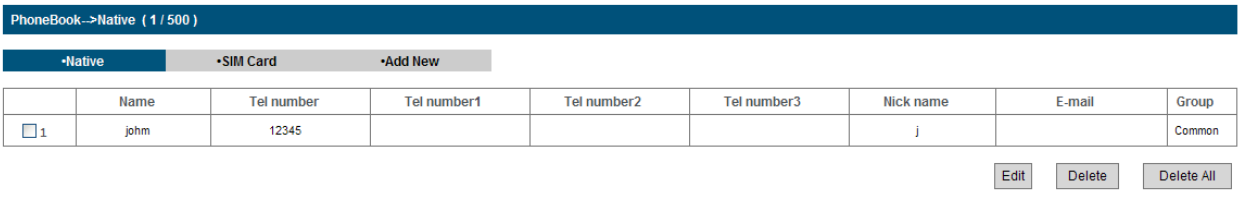
2. Set the related parameters.

Parameters	Description
Location	Select the device or SIM card to save your contacts
Name	Enter the contact's name
Mobile number	Enter the contact's phone number

3. Click **Save** to confirm your configuration.

Operation in native

Select **Phonebook** > **Native** to access the following figure:



All contacts stored in your device will be displayed here.

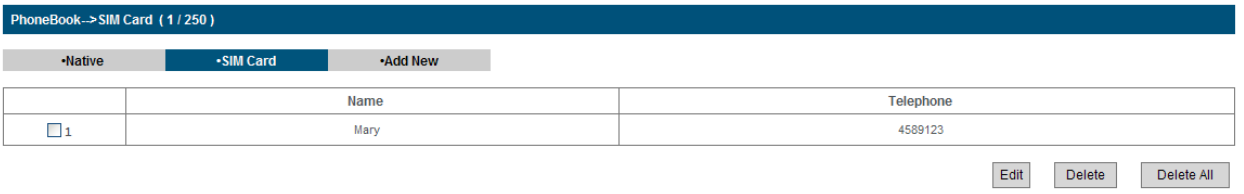
• Click **Edit** to edit the selected contact.

• Click **Delete** to delete the selected contact.

• Click **Delete All** to delete all the contacts.

Operation in SIM Card

Select **Phonebook > SIM Card** to access the following figure:



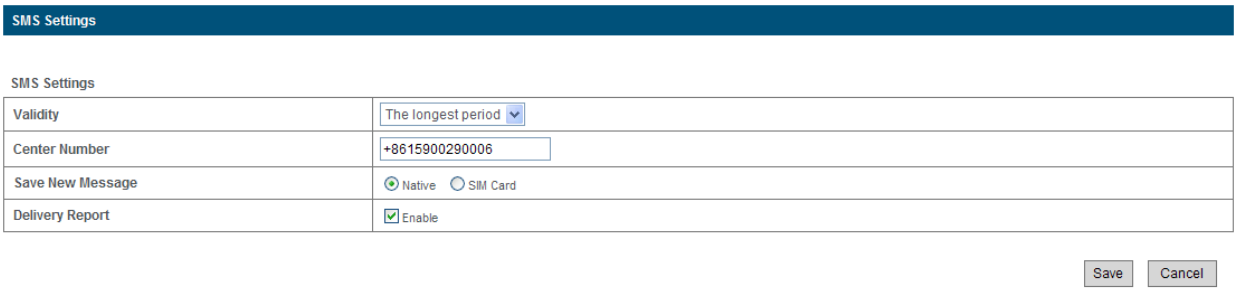
All contacts stored in your SIM card will be displayed here, detailed operation please refer to chapter **Operation in native**.

SMS

This function allows you to send or receive short messages.

Configing SMS

1. Select **SMS > SMS Settings** to access the following figure:



2. Set the related parameters.

Parameters	Description
Validity	Configure the validity period of outgoing messages
Center Number	Enter the short message center number, detailed please consult your service provider
Save New Message	Select the device or SIM card to save your messages

Parameters	Description
Delivery Report	Receive or reject a popup message to inform you when the message is delivered to the recipient

3. Click **Save** to confirm your configuration.

Sending new SMS

1. Select **SMS > New Message** to access the following figure:

2. Enter the recipient's phone number.

3. Enter a message.

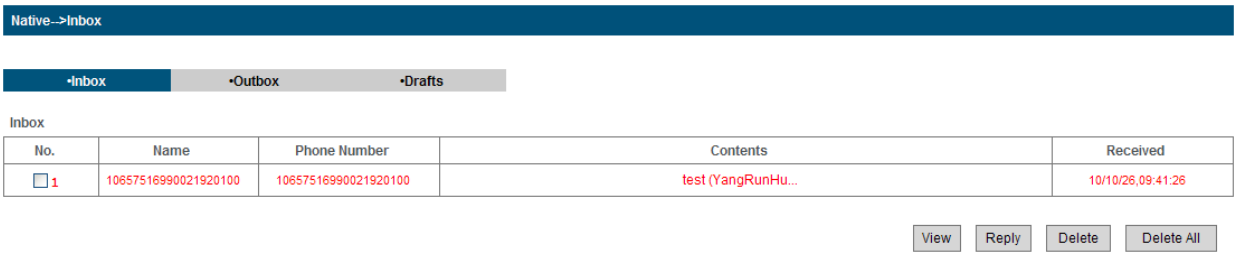
4. Click **Send** to send the message.

Operation in native

You can check the messages saved in your device.

Inbox

Select **SMS > Native > Inbox** to access the following figure:



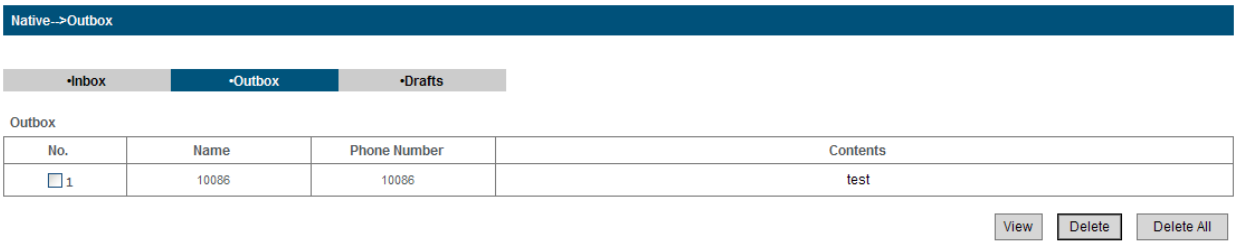
All the received messages saved in your device will be displayed here.

- Click **View** to view the selected message.
- Click **Reply** to reply to the selected message sender.
- Click **Delete** to delete the selected message.

• Click **Delete All** to delete all the messages.

Outbox

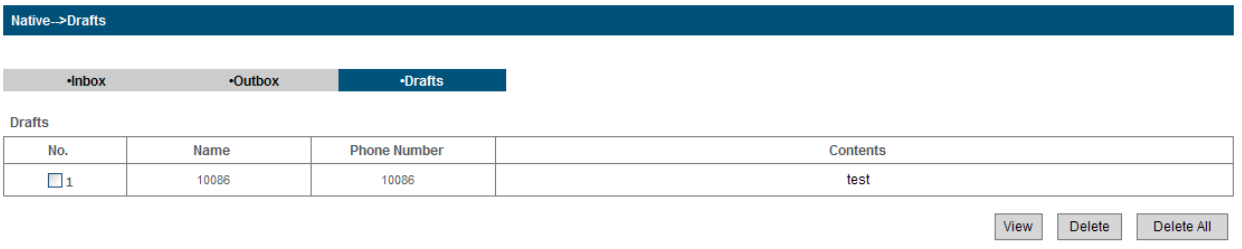
Select **SMS > Native > Outbox** to access the following figure:



All the successfully sent messages in your device will be displayed here.

Drafts

Select **SMS > Native > Drafts** to access the following figure:



All the drafts and unsuccessfully sent messages saved in your device will be displayed here.

• Click **View** to access the selected message edited interface, then click **Send** to send it.

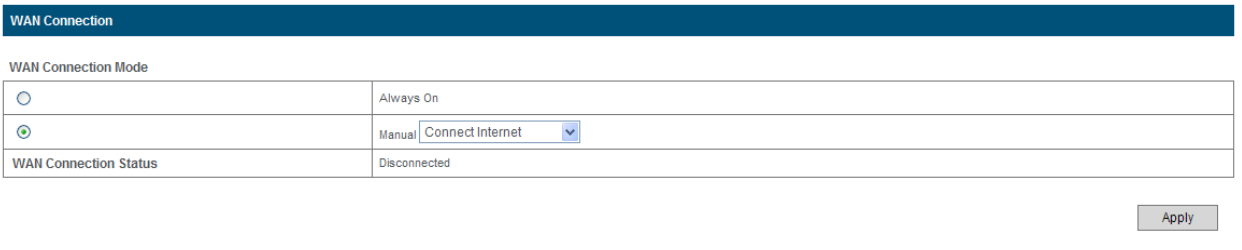
Operation in SIM Card

You can check the messages saved in your SIM card.

Select **SMS > SIM Card** > **Inbox/Outbox/Drafts** to access the corresponding figure, detailed operation please refer to the chapter **Operation in native**.

WAN Connection

Click **WAN Connection**, you can configure how to connect to the Internet in the following figure:



There are two connection modes:

• **Always On**: The device will automatically connect to WAN when it is powered on.

• **Manual**: Connect to the Internet manually.

Click **Apply** to confirm your configuration.

Usage of WPS

If your client device supports WPS, you need not to input the password manually after WPS has been available. Please do the following:

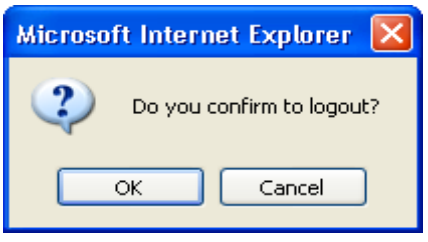
1. Start up your device.
2. Launch the client device connected to your device.
3. Enable the WPS function of your device.
4. Enable the WPS function of the client.

Notes:

For the detailed operations about the client, please refer to the client's instruction.

Logout

Select **Logout**, a pop-up window will appear as the following figure shown:



Click **OK** to logout the web page.

Disconnecting from the Internet

1. Select **Disconnect Internet** from **WAN Connection** page.

2. Click **Apply** to disconnect from the Internet.

Notes:

Turn off the device can also terminate Internet connection.

Sleep Mode

When you enable the Wi-Fi function and use the battery to supply power to the device, once no user connects to the device within 10 minutes or you press the WPS button, the device will enter the sleep mode，and the LED screen will be turned off. In the sleep mode, the Wi-Fi function will

be also disabled. Press **Power** or **WPS** button to wake up the device, and all LEDs will be turned on.

Notes:

With USB connection if no Wi-Fi user connects to the device within 10 minutes, only the Wi-Fi function will be disabled. Press **WPS** button to enable this function.

Chapter 4

Warning and Notice

To the Owner

- Some electronic devices are susceptible to electromagnetic interference sent by device if inadequately shielded, such as the electronic system of vehicles. Please consult the manufacturer of the device before using the device if necessary.
- Operating of laptop and desktop PCs and the device may interfere with medical devices like hearing aids and pacemakers. Please always keep them more than 20 centimeters away from such medical devices when they are turned on. Turn the device off if necessary. Consult a physician or the manufacturer of the medical device before using the device.
- Be aware of the usage limitation when using a device at places such as oil warehouses or chemical factories, where there are explosive gases or explosive products being processed. Turn off your device if required.
- The use of electronic transmitting devices is forbidden in aircrafts, at petrol stations and in hospitals. Please observe and obey all warning signs and switch off your device in these conditions.
- Do not touch the inner antenna area if not necessary. Otherwise it will affect your device's performance.
- Store the device out of the reach of little children. The device may cause injury if used as a toy.
- Do not touch the metallic parts of the device so as to avoid a burn, when the device is working.

Using Your Device

- Please use original accessories or accessories that are authorized. Using any unauthorized accessories may affect your device's performance, and violate related national regulations about telecom terminals.
- Avoid using the device near or inside metallic structures or establishments that can emit electromagnetic waves. Otherwise it may influence signal reception.
- The device is not waterproof. Please keep it dry and store in a shady and cool place.
- Do not use the device immediately after a sudden temperature change. In such case, it will produce dew inside and outside the device, so don't use it until it becomes dry.
- Handle the device carefully. Do not drop, bend or strike it. Otherwise the device will be damaged.
- No dismantling by non-professionals and only qualified technicians can undertake repair work.

• Operating temperature range of 0℃ ~ +35℃ and humidity range of 5% ~ 95% are recommended.

Using Battery

• Do not short-circuit the battery, as this can cause excessive heat and fire.

• Do not store battery in hot areas or dispose of it in a fire to avoid explosion.

• Do not disassemble or modify the battery.

• When not using the battery for a long period, remove it from the phone and store it in a cool dry place.

• Never use any charger or battery damaged or worn out.

• Return the wear-out battery to the provider or put it in the appointed recycle place. Do not put it in familial rubbish.

• Do not disassemble or modify the battery.

• When not using the battery for a long period, remove it from the phone and store it in a cool dry place.

Warning:

If the battery is broken, keep away from content. If it taints your skin, wash your skin with abundant fresh water and ask doctor help if necessary.

Limited Warranty

• This warranty does not apply to defects or errors in the Product caused by:

i. Reasonable abrasion.

ii. End User's failure to follow ZTE's installation, operation or maintenance instructions or procedures.

iii. End User's mishandling, misuse, negligence, or improper installation, disassembly, storage, servicing or operation of the Product.

iv. Modifications or repairs not made by ZTE or a ZTE-certified individual.

v. Power failures, surges, fire, flood, accidents, actions of third parties or other events outside ZTE's reasonable control.

vi. Usage of third-party products, or usage in conjunction with third-party products provided that such defects are due to the combined usage.

vii. Any other cause beyond the range of normal usage intended for the Product.

End User shall have no right to reject or return the Product, or receive a refund for the Product from ZTE under the above-mentioned situations.

- This warranty is End User's sole remedy and ZTE's sole liability for defective or nonconforming items, and is in lieu of all other warranties, expressed, implied or statutory, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, unless otherwise required under the mandatory provisions of the law.

Limitation of Liability

ZTE shall not be liable for any loss of profits or indirect, special, incidental or consequential damages resulting from or arising out of or in connection with using of this product, whether or not ZTE had been advised, knew or should have known of the possibility of such damages, including, but not limited to lost profits, interruption of business, cost of capital, cost of substitute facilities or product, or any downtime cost.

FCC Compliance

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.

Caution: Changes or modifications not expressly approved by the manufacturer 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.

Radio Frequency (RF) Energy

This model device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government:

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. *Tests for SAR are conducted using standard operating positions accepted by the FCC with the device 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 device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the poser required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

The highest SAR value for the model device as reported to the FCC when worn on the body, as described in this user guide, is ***1.080 W/kg*** (Body-worn measurements differ among device models, depending upon available enhancements and FCC requirements.)

While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device 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: Q78-ZTEMF60.***

Chapter 5

Troubleshooting

Problem	Suggested Solution
Can not establish the USB connection between your device and PC	1. You need install the software. Run the installation program in path of **My Computer >Portable Hotspot**.
	2. If the driver of your device is abnormal, please install the software again. You need uninstall the software first.
Can not establish the Wi-Fi connection between your device and client	1. Make sure Wi-Fi LED is blue blinking.
	2. Refresh network list and select SSID named "MF60_XXXXXX".
	3. Check the IP address to make sure your client to obtain an IP address automatically in the Internet protocol (TCP/IP) properties.
	4. Type the correct network key when you connect to the device.
The client connected to the device can not access the Internet	1. Make sure your SIM card is available.
	2. Change the location to find a place with good signal.
	3. Check WAN Connection mode setting.
	4. Contact with your service provider and confirm your APN settings.
Forget the password	1. For the Wi-Fi connection password, please check the label on the battery compartment of your device.
	2. For the webGUI configuration page password, the default password is **Admin**.
	3. If you changed the password, and forgot the new password. You need to restore the device to the factory default settings.

For more assistance, please:

- Sending E-mail to **mobile@zte.com.cn**
- Visiting **http://www.zte.com.cn**
- Calling Service Hotline: **+86–755–26779999**

Chapter 6

Technical Parameters

Data Service	HSPA: DL 21.6Mbps UL 5.76Mbps
	WCDMA CS: UL 64kbps/DL 64kbps WCDMA PS: UL 384kbps/DL 384kbps
Interface	USB and Wi-Fi
Wi-Fi Standard	802.11b/g
Wi-Fi Security	WEP/WPA/WPA2/WAPI
USB Version	USB 2.0 HIGH SPEED
USB Interface Type	Micro USB
Weight	77g
Dimensions (W×H×D):	99.7mm*53.7mm*13.9mm
microSD card	Support up to 32GB microSD card
Power Adapter	5V/700mA
Battery	1500mAh Li-ion battery
*Standby time	100hours
*Working time	4hours
Charge time	4hours
Operate system	Windows 7, Windows Vista, Windows XP (SP2 or later), Mac OS (10.4 or later), Linux
Web Browser	IE (6.0 or later), Firefox (1.0 or later), Opera (6.0 or later), Safari (3.0 or later), Chrome (6.0 or later)
Working temperature	0℃ ~ +35℃
Storage temperature	-20℃ ~ +50℃

Charging temperature	0℃ ~ +40℃
Humidity	5%~ 95%

Notes:

The device’s standby and working time are based on ideal working environment.

Chapter 7

Glossary

- AC: Alternating Current
- APN: Access Point Name
- DC: Direct Current
- DHCP: Dynamic Host Control Protocol
- DNS: Domain Name System (or Service or Server)
- EDGE: Enhanced Data GSM Evolution
- Ethernet: A frame-based computer networking technology for local area networks (LANs)
- GSM: Global System for Mobile Communications
- GPRS: General Packet Radio Service
- HSDPA: High Speed Downlink Packet Access
- HSUPA: High Speed Uplink Packet Access
- IP: Internet Protocol
- LAN: Local Area Network
- LED: Light - Emitting Diode
- MHz: Megahertz
- PDP: Packet Data Protocol
- PIN: Personal Identification Number
- PPP: Point to Point Protocol
- PUK: PIN Unlocking Key
- UPNP: Universal Plug and Play
- SIM: (UMTS) Subscriber Identification Module
- WCDMA: Wideband CDMA (Code-Division Multiple Access)
- WEP: Wired Equivalent Privacy
- Wi-Fi：Wireless Fidelity

- WLAN: Wireless LAN
- WPA-PSK: Wi-Fi Protected Access–PreShared Key