

# **MF861**

## User Guide

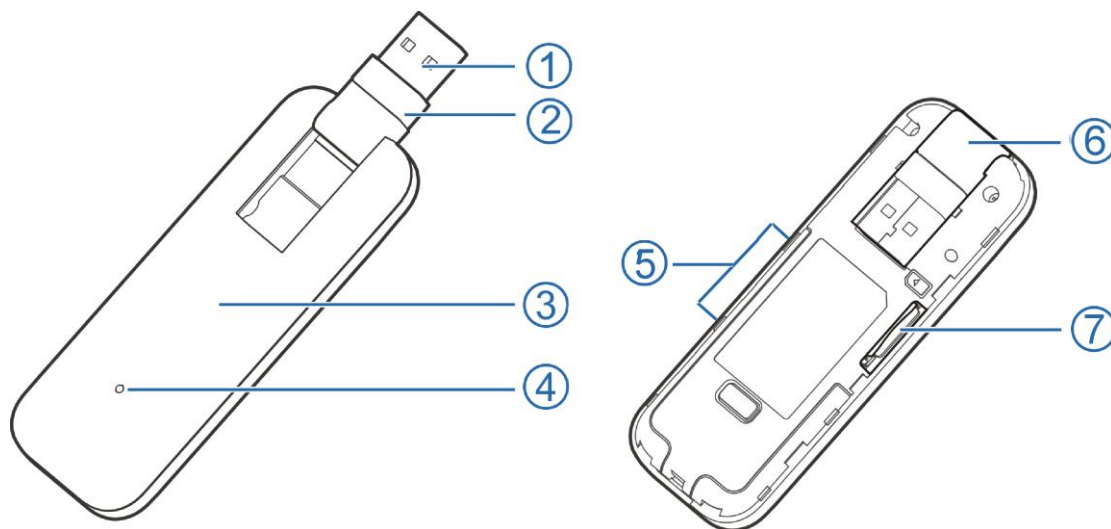
Get Started .....	3
Know Your Device.....	3
Status LED Indicator .....	4
Connecting the MF861 to Your PC .....	4
Connect to the Internet.....	5
Properly Remove the MF861 from Your Computer .....	6
Using Your MF861 .....	7
AT&T USB Modem Configuration Page .....	7
View WAN Information.....	7
Configure Data Network Options .....	8
Messages.....	9
View Details.....	10
Reset the MF861 .....	11
View Local Time and Time Zone .....	11
Advanced Settings .....	12
Configure APN details.....	12
Enable MAC/ IP/Port Filtering.....	13
Enable DMZ .....	15
Configure SIM PIN.....	16
Replace the nano-SIM Card.....	17
Warning and Notice .....	18
To the Owner .....	18
Using Your USB Modem.....	19
Specifications .....	20
Mechanical specifications.....	20
Supported RF bands.....	20
Regulatory and Safety Information .....	21
To the Owner .....	21
Using Your Device.....	22
RF Exposure Information (SAR).....	22
FCC Compliance .....	24
Warranty .....	25
Consumer Limited Warranty .....	25

# Get Started

This chapter provides an overview of the MF861 features, and instructions on how to set up your MF861 and connect to the Internet.

## Know Your Device

Your MF861 enables you to connect at high speeds to the Internet and access your email while you're away from the office.



1. **USB connector** — connects to your computer through a type A USB port.
2. **USB connector pivot**— allows the USB Connector to rotate, making it easier to connect to computers.
3. **Front cover (removable)** — covers the 4G LTE SIM card slot.
4. **Indicator light** — indicates the network and traffic status; it also indicates when there is no SIM or a SIM error, and when a software update is in progress.

5. **External antenna connector** — plugs in antenna if necessary.
6. **USB folding hinge** — folds the USB Connector into your MF861, and allows the USB Connector to be extended and plugged into your computer.
7. **(U)SIM card slot** — insert the 4G LTE SIM card into the spring-loaded SIM card slot.

## Status LED Indicator

The LED indicates the device's connection status:

Status	Description
Green Solid	Device is ready & cell connection is registered
Green Blinking	Device is powering up, Searching for network to start
Yellow Solid	No cell service due to the coverage
Yellow Blinking	FOTA upgrading or new SMS received
Red Solid	Failure state (No SIM, locked SIM, SIM error, PUK error)
Red Blinking	FOTA failure

## Connecting the MF861 to Your PC

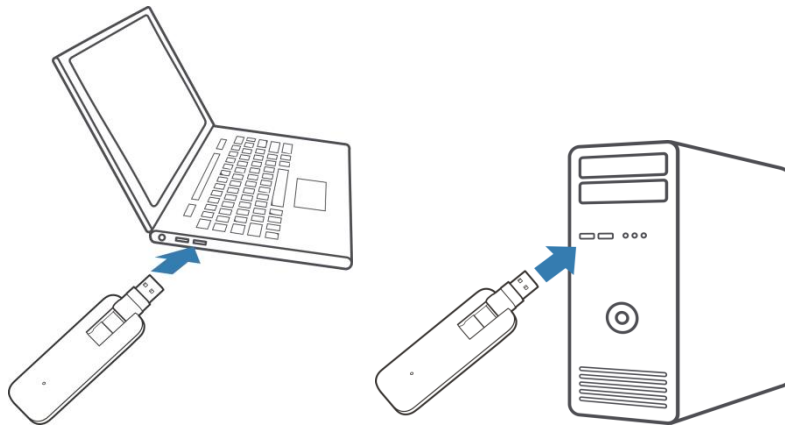
1. Use your thumb to gently flip open the USB connector on your USB modem.

 **NOTE:**

Be sure to avoid over-extending the USB connector past its resistance point.

2. Hold the device along the side edges and gently insert it into your computer's USB port.

The operating system automatically detects and recognizes your device and starts the installation wizard.



## Connect to the Internet

### To connect to the AT&T network:

After your MF861 successfully connected to your PC, the device automatically connect to the network.

### To disconnect from the AT&T network:

1. Launch the Internet browser and enter `http://192.168.1.1` or `http://attusbmodem/` in the address bar.
2. Click **Off** next to **Standard Data**, and then click **Apply**.

## Properly Remove the MF861 from Your Computer

Be sure to disconnect from the network and quit the AT&T USB Modem before you remove the device from your computer.

The MF861 allows you to safely remove the device at any time when you are not connected to the network.

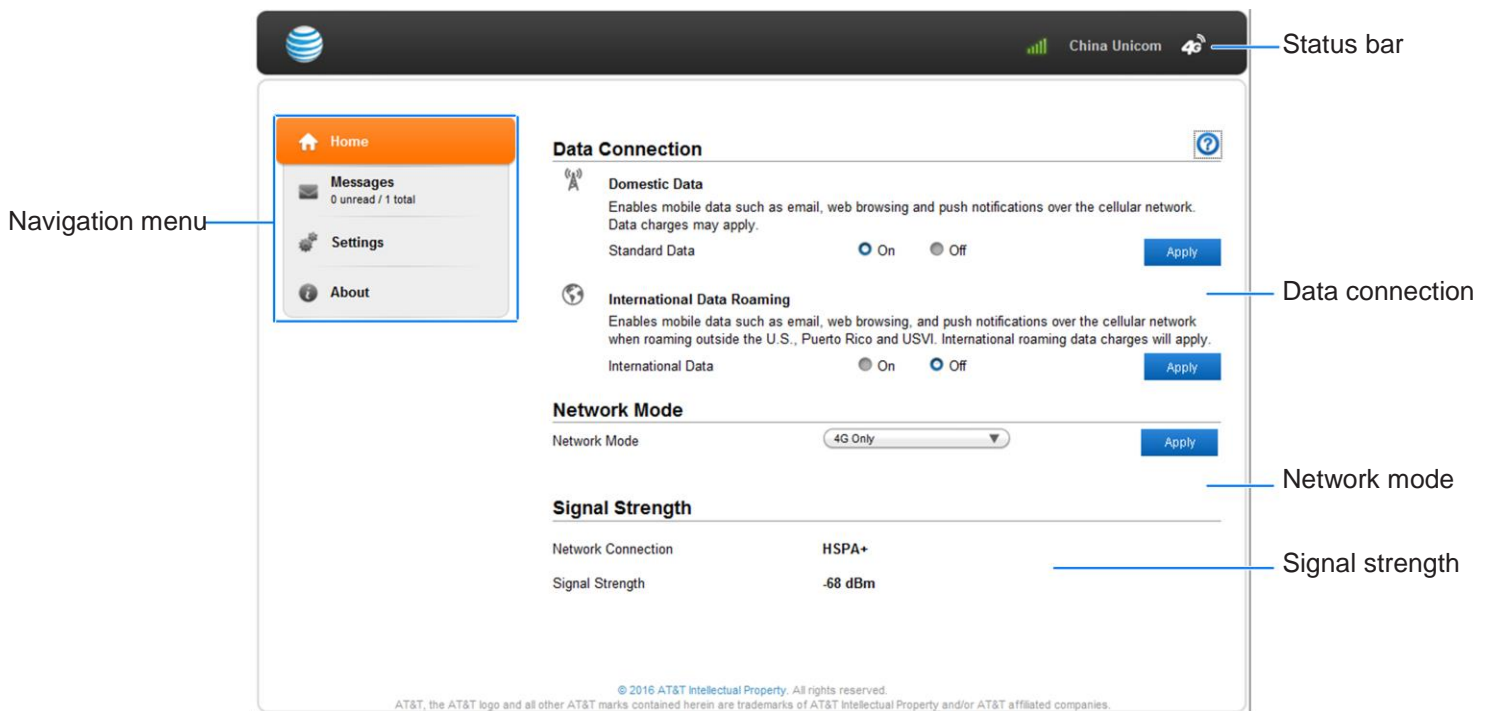
1. Click **Off** next to **Standard Data**, and then click **Apply** in the Data Connection section to disconnect from the network.
2. Exit and close the AT&T USB Modem.
3. Gently grip the MF861 on both sides and pull straight out to avoid damaging the USB connectors.

# Using Your MF861

This chapter describes the main features of the AT&T USB Modem configuration page for managing your MF861.

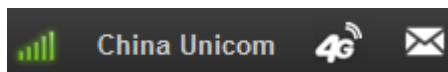
## AT&T USB Modem Configuration Page

Launch the Internet browser and enter `http://192.168.1.1` or `http://attusbmodem/` in the address bar to log in the AT&T USB Modem configuration page.



## View WAN Information

At the top right of AT&T USB Modem configuration page, you can view network information, such as the signal strength, operator, network mode, etc.



## Configure Data Network Options

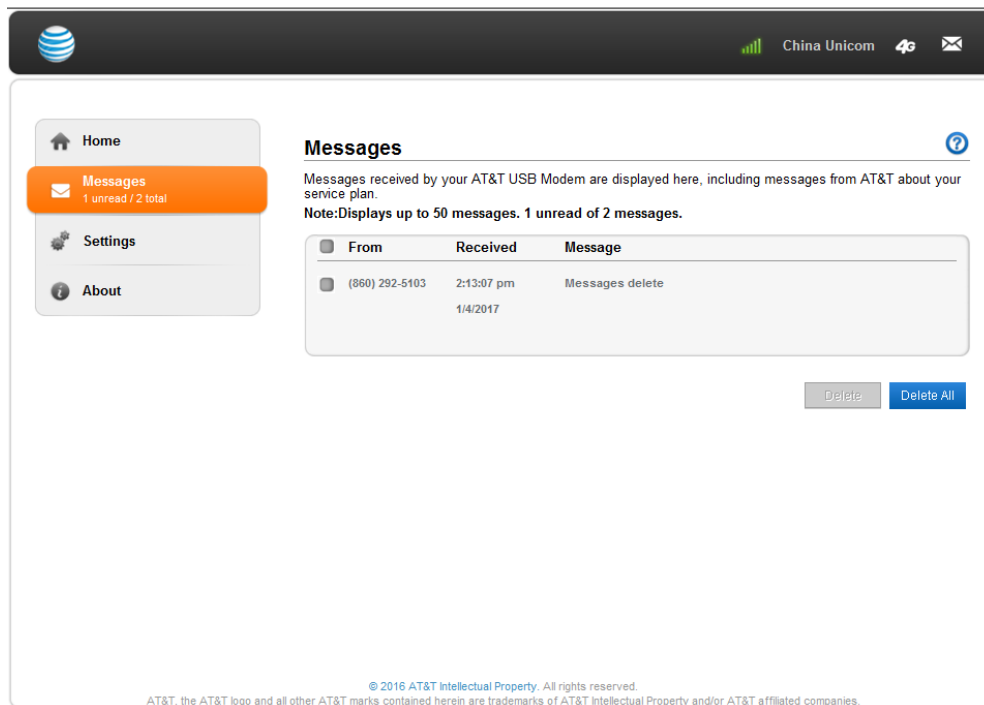
You can set network mode, and choose whether to allow the MF861 to be used when roaming internationally, from the AT&T USB Modem configuration page.

1. Launch the Internet browser and enter `http://192.168.1.1` or `http://attusbmodem/` in the address bar.
2. Select **Home** on the navigation menu on the left side.
3. Choose the appropriate option:
  - To enable / disable mobile data, click **On** or **Off** next to **Standard Data** in Data Connection section, and click **Apply**.
  - To enable / disable international roaming, click **On** or **Off** next to **International Data** in Data Connection section, and click **Apply**.
  - To set network mode, click drop-down box beside **Network mode** and select your prefer network mode, and then click **Apply**.



# Messages

You can view SMS messages on the AT&T USB Modem configuration page.

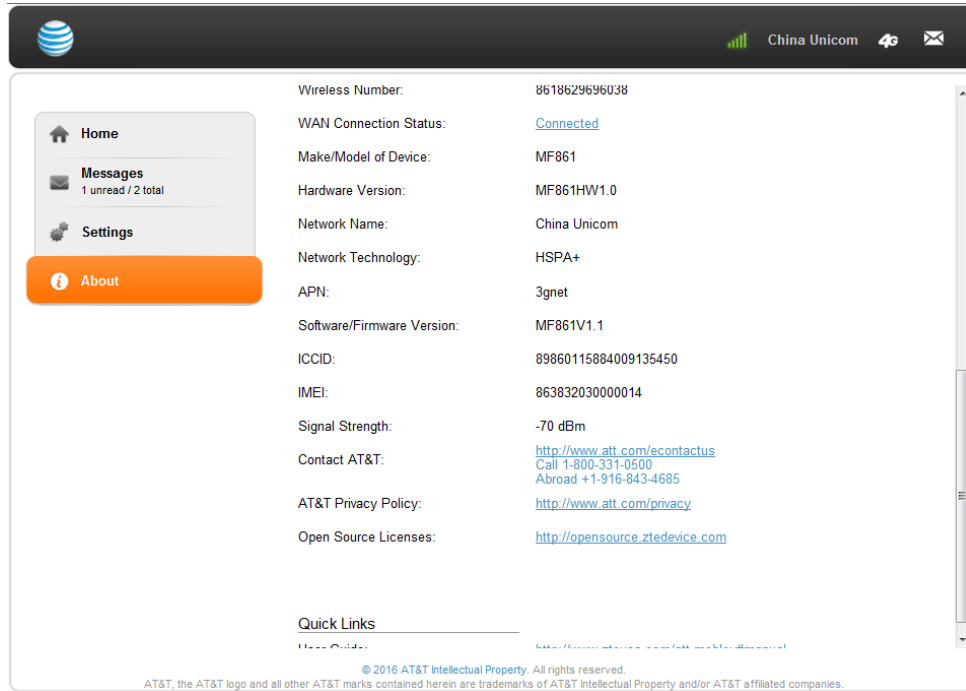


## To view or delete messages:

1. Launch the Internet browser and enter `http://192.168.1.1` or `http://attusbmodem/` in the address bar.
2. Select **Messages** on the navigation menu on the left side. A list of messages appears.
3. For any message in the list, click the message to read.
4. If you want to delete the message, click the checkbox in front of the message and select **Delete**. You can also click **Delete All** to delete all messages.

## View Details

You can view details about your device such as the wireless number, hardware version, and IMEI on the AT&T USB Modem configuration page.



1. Launch the Internet browser and enter <http://192.168.1.1> or <http://attusbmodem/> in the address bar.
2. Select **About** on the navigation menu on the left side.

## Reset the MF861

You can reset the MF861 to the factory setting on the AT&T USB Modem configuration page.



### **NOTE:**

If you reset the modem to factory settings, all of your customizations will be lost.

1. Launch the Internet browser and enter <http://192.168.1.1> or <http://attusbmodem/> in the address bar.
2. Select **Settings > Advanced > Device Reset**.
3. Click **Reset**.

## View Local Time and Time Zone

You can view the current local time and time zone on the AT&T USB Modem configuration page.

1. Launch the Internet browser and enter <http://192.168.1.1> or <http://attusbmodem/> in the address bar.
2. Select **Settings > Advanced > Time/Date**.

# Advanced Settings

This chapter provides information on how to configure advanced settings for various aspects of the device such as APN settings, firewall settings, SIM PIN, etc.



## NOTE:

Please disconnect the MF861 from the network before changing the settings.

## Configure APN details

The APN is checked to determine the type of network connection to establish.

Your MF861 comes preconfigured with the APN (Access Point Name) for AT&T.

### To add an APN for another network:

1. On the AT&T USB Modem configuration page.
2. Click **Settings > Network**.
3. Click **Manual** in the **APN Settings** section.
4. Click **Add**.
5. In the blank line, enter the profile name, APN (obtained from your carrier).
6. Select the PDP type.
7. Select the DNS mode. If set to **Manual DNS**, you need to enter **Primary DNS** or **Secondary DNS**(optional).
8. Select the network **Authentication** mode. The options are:

- None (default)
- CHAP
- PAP

9. Enter the Username and Password.

10. Click **Set Default** .

#### **To select the APN entry to use:**

1. From the drop-down box beside **Profile Selection**, select the desired APN to use.

2. Click **Set Default**.

#### **To remove an APN entry:**

Select the APN you want to remove, and click **Delete**.

## **Enable MAC/ IP/Port Filtering**

You can enable or disable the MAC/IP/Port Filtering feature as needed to block certain Internet traffic. If this setting is enabled, you can then choose whether traffic is **Accepted** or **Dropped** by default.

#### **To enable port filtering:**

1. On the AT&T USB Modem configuration page .

2. Click **Settings**.

3. Click **Firewall > MAC/IP/Port Filtering** tab.

4. Enable **MAC/IP/Port Filtering** and select default policy.
5. Click **Apply**.
6. Check the applications you allow to access the Internet and click **Apply**.

Or click **Add Custom Application** to add application and the filter settings will appear as shown below.

### MAC/IP/Port Filtering Settings

MAC Address	<input type="text"/>	(eg: 00:1E:90:FF:FF:FF)
Destination IP Address	<input type="text"/>	(eg: 192.168.1.101)
Source IP Address	<input type="text"/>	
Protocol	<input type="text" value="NONE"/>	
Action	<input type="radio"/> Accept <input checked="" type="radio"/> Drop	
Comment *	<input type="text"/>	

### Current MAC/IP/Port filtering rules in system

No.	MAC Address	Destination IP Address	Source IP Address	Protocol	Dest Port Range	Source Port Range	Action	Comment
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-

- **MAC Address:** Set the MAC address that will be filtered.
- **Destination 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.
- **Action:** Set how to handle the packet if it matches with the rule.
- **Comment:** Type comment for the filter settings.

### **To add a new Port filtering rule:**

Input the detail information in the MAC/IP/Port Filtering Settings area and click **Apply** to save the rule.

### **To delete a Port filtering rule:**

Select a rule in Current MAC/IP/Port filtering rules in system area and click **Delete > Yes** to delete it.

## **Enable DMZ**

In a DMZ (demilitarized zone) network configuration, a computer runs outside the firewall in the DMZ. This computer intercepts incoming Internet traffic, providing an extra layer of protection for the rest of the network.

### **To enable DMZ and designate a computer to screen incoming traffic:**

1. On the AT&T USB Modem configuration page.
2. Click **Settings > Firewall > DMZ**.
3. Select **Enable** next to DMZ Settings.
4. Click **Apply**.

# Configure SIM PIN

## Enable SIM PIN:

1. On the AT&T USB Modem configuration page.
2. Click **Settings > Advanced > SIM PIN**.
3. Click **Enable** next to **PIN Status**.

## Verifying the PIN Code:

If the PIN code of your nano-SIM card is enabled, you will need to input the PIN code when you log in at the first time.

### System Information



SIM card is locked, please input PIN to unlock.  
Attempts Left: 3

SIM PIN \*

Apply

### NOTE:

The SIM card will be locked if you enter wrong PIN code consecutively for three times.

If you want to modify the PIN Status, select **Settings > Advanced > Change PIN** to do the actions.



## SIM PIN



PIN Status  Enable  Disable

Current PIN \*

New PIN \*

Confirm New PIN \*

Attempts Left: 3

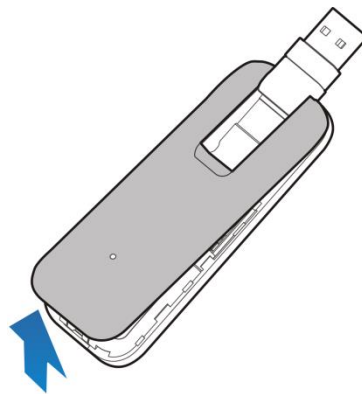
Apply

Cancel

## Replace the nano-SIM Card

Your MF861 comes with the nano-SIM card inserted. If you need to replace the nano-SIM card:

1. Open the front cover and remove it.

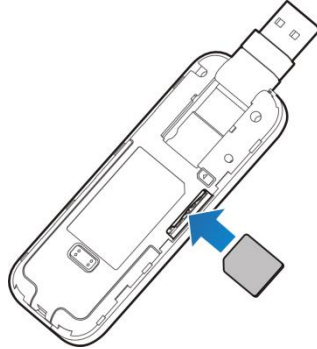


2. Remove the existing nano-SIM card (if present).
3. Install the nano-SIM card to the nano-SIM card slot.

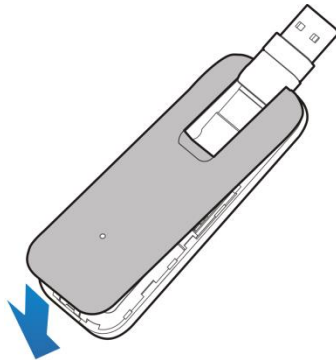
### **WARNING!**

To avoid damage to the phone, do not use any other kind of SIM cards, or any

non-standard nano-SIM card cut from a SIM card. You can get a standard nano-SIM card from your service provider.



4. Replace the front cover.



## Warning and Notice

### To the Owner

- If inadequately shielded, some electronic devices may be affected by the electromagnetic interference caused by the modem, such as the electronic system of vehicles. Consult the manufacturers of such devices before using the modem if necessary.
- Operating the modem may interfere with medical instruments such as hearing aids and pacemakers. Always keep the modem more than 20 centimeters

away from such medical instruments when your modem is turned on. Turn the modem off if necessary. Consult a physician or the manufacturers of medical instruments before using the modem if necessary.

- Be aware of the usage limitation when using the modem at places such as oil warehouses or chemical factories, where there are explosive gases or explosive products being processed. Turn off the modem if necessary.
- Do not use electronic transmission devices in aircrafts, at petrol stations or in hospitals. Observe and obey all warning signs, and turn off the modem in these conditions.
- Do not touch the inner antenna area unless it is necessary. Otherwise the performance of the modem may be affected.
- Keep the modem out of the reach of little children. The modem may cause an injury if used as a toy.
- When the modem is operating, do not touch the metallic parts. Failing to do so may cause burns.

## **Using Your USB Modem**

- Use original accessories or accessories that are authorized. Using any unauthorized accessories may affect the performance of the modem and violate the related national regulations about telecom terminals.

- Avoid using the modem near or inside metallic structures or establishments that can emit electromagnetic waves, because signal reception may be affected.
- The modem is not waterproof. Keep the modem dry and store it in a shady and cool place.
- Do not use the modem immediately after a sudden temperature change. In such case, dew may be generated inside and outside the modem, so do not use it until it becomes dry.
- Handle the modem carefully. Do not drop, bend or strike it. Otherwise the modem may be damaged.
- Only qualified personnel can dismantle and repair the modem.

## Specifications

### Mechanical specifications

Dimensions	97*33*16mm
Memory	256MB RAM; 512MB ROM

### Supported RF bands

Technology	Bands
Cat 6 LTE	Band 2 / Band 4 / Band 5 / Band 12 / Band 29 / Band 30
2CA	Band 4+Band 29 / Band 2+Band 29/ Band 2+Band 12 /

	Band 4+Band 12 / Band 2+Band 5 / Band 4+Band 5
HSPA	2100/850/900/1900

## Regulatory and Safety Information

### To the Owner

- Operating your device may interfere with medical devices such as hearing aids and pacemakers. Please always keep them more than 20 centimeters away from such medical devices when they are powered on. Stop using your device if necessary. Consult a physician or the manufacturer of the medical device before using your device.
- Be aware of the usage limitation when using your device at places such as oil warehouses or chemical factories, where there are explosive gases or explosive products being processed. Stop using 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 Stop using your device in these conditions.
- Store your device out of the reach of little children. Your device may cause injury if used as a toy.
- Do not touch the metallic parts of your device. Otherwise it will affect your device's performance.

## 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 your device near or inside metallic structures or establishments that can emit electromagnetic waves. Otherwise it may influence signal reception.
- Your device is not waterproof. Please keep it dry and store in a shady and cool place.
- Do not use your device immediately after a sudden temperature change. In such case, it will produce dew inside and outside your device, so don't use it until it becomes dry.
- Handle your device carefully. Do not drop, bend or strike it. Otherwise your device will be damaged.
- No dismantling by non-professionals and only qualified technicians can undertake repair work.
- Operating temperature range of -20°C ~ +70°C and humidity range of 5% ~ 95% are recommended.

## RF Exposure Information (SAR)

This 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 device 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 power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. SAR compliance has been established in the host product(s) (laptop computers), tested at 5mm separation distance to the human body, and tested with USB slot configurations including Horizontal-UP, Horizontal-Down, Vertical-Front, Vertical-Back. This device can be used in host product(s) with substantially similar physical dimensions, construction, and electrical and RF characteristics. The highest SAR value, tested per FCC RF exposure guidelines for USB dongle, as described in this user guide, is 1.39 W/kg. The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC

and can be found under the Display Grant section of [www.fcc.gov/oet/ea/fccid](http://www.fcc.gov/oet/ea/fccid) after searching on FCC ID: SRQ-MF861

## **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. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

## **Warranty**

### **Consumer Limited Warranty**

ZTE (“Seller”) offers you a limited warranty that the enclosed product or products (the “Product”) will be free from defects in material and workmanship for a period that expires one year from the date of sale of the Product to you, provided that you are the original end-user purchaser of the Product and provided that your purchase was made from a supplier authorized by the Seller. Transfer or resale of a Product will automatically terminate warranty coverage with respect to that Product. This limited warranty is not transferable to any third party, including but not limited to any subsequent purchaser or owner of the Product. This limited warranty is applicable to end users in the United States.

Seller will, at its sole and absolute discretion, either repair or replace a Product (which unit may use refurbished parts of similar quality and functionality) if found by Seller to be defective in material or workmanship, or if Seller determines that it is unable to repair or replace such Product, Seller will refund the purchase price for such Product, provided that the subject Product (i) is returned to a Seller authorized service center within the one year warranty period, and (ii) is accompanied by a proof of purchase in the form of a bill of sale or receipted invoice which evidences that the subject Product is within the one year warranty period. After the one year warranty period, you must pay all shipping, parts and labor charges. In the event that the product is deemed unrepairable or has been removed from the list of products supported by the Seller, you will only be liable for shipping and labor charges.

This limited warranty does not cover and is void with respect to the following: (i) any Product which has been improperly installed, repaired, maintained or modified; (ii) any Product which has been subjected to misuse (including any Product used in conjunction with hardware electrically or mechanically incompatible or used with accessories not approved by Seller), abuse, accident, physical damage, abnormal operation, improper handling, neglect, exposure to fire or liquid; (iii) any Product operated outside published maximum ratings; (iv) cosmetic damage; (v) any Product on which warranty stickers or Product serial numbers have been removed, altered, or rendered illegible; (vi) cost of

installation, removal or reinstallation; (vii) signal reception problems (unless caused by defects in material and workmanship); (viii) damage the result of fire, flood, acts of God or other acts which are not the fault of Seller and which the Product is not specified to tolerate, including damage caused by mishandling, shipping and blown fuses; (ix) consumables (such as fuses); or (x) any Product which has been opened, repaired, modified or altered by anyone other than Seller or a Seller authorized service center.

USE ONLY SELLER APPROVED ACCESSORIES WITH SELLER DEVICES. USE OF ANY UNAUTHORIZED ACCESSORIES MAY BE DANGEROUS AND WILL INVALIDATE THE DEVICE WARRANTY IF SAID ACCESSORIES CAUSE DAMAGE OR A DEFECT TO THE DEVICE. SELLER SPECIFICALLY DISCLAIMS LIABILITY FOR ANY AND ALL DIRECT, INDIRECT, SPECIAL, GENERAL, PUNITIVE, EXEMPLARY, AGGRAVATED, INCIDENTAL OR CONSEQUENTIAL DAMAGES, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER FORESEEABLE OR UNFORESEEABLE OF ANY KIND WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, UNANTICIPATED BENEFITS OR REVENUE, ANTICIPATED PROFITS ARISING OUT OF USE OF OR INABILITY TO USE ANY PRODUCT (FOR EXAMPLE, WASTED AIRTIME CHARGES DUE TO THE MALFUNCTION OF A PRODUCT) OR CONTRIBUTION OR INDEMNITY IN RESPECT OF ANY CLAIM RELATED TO

A PRODUCT. REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT OR REFUND OF THE PURCHASE PRICE RELATING TO A DEFECTIVE PRODUCT, AS PROVIDED UNDER THIS WARRANTY, ARE YOUR SOLE AND EXCLUSIVE REMEDIES FOR BREACH OF THE LIMITED WARRANTY, AND SUBJECT TO THIS WARRANTY, THE PRODUCTS ARE APPROVED AND ACCEPTED BY YOU "AS IS". SELLER MAKES NO OTHER WARRANTIES, REPRESENTATIONS OR CONDITIONS OF ANY KIND, ORAL OR WRITTEN, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, WITH RESPECT TO THE PRODUCTS, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR AGAINST INFRINGEMENT OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF TRADE USAGE OR OUT OF A COURSE OF DEALING OR COURSE OF PERFORMANCE. NO DEALER, DISTRIBUTOR, AGENT OR EMPLOYEE IS AUTHORIZED TO MAKE ANY MODIFICATION OR ADDITION TO THIS WARRANTY.

Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

For warranty service information, please call the following telephone number:

1-800-617-5065.

**IMPORTANT:**

Please provide warranty information (proof of purchase) to ZTE in order to receive warranty service at no charge. If the warranty has expired on the device, charges may apply.