## T-Mobile 4G Mobile Hotspot User Guide

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Version No. : V1.3 Edition Time: Mar, 18, 2011 Manual No. : 07958450xxxx

## Contents

Getting Started	5
4G Mobile Hotspot Appearance	5
LCD Screen Indicator	6
Hardware Installation	6
About SIM Card	6
Inserting SIM Card and Battery	7
Inserting microSD Card	8
Switching On/Off Your 4G Mobile Hotspot	8
Charging Your 4G Mobile Hotspot	8
Working Mode	. 10
USB Mode	. 10
Software Installation for Windows XP	. 10
Software Uninstall for Windows XP	. 12
Software Installation for MAC OS	. 13
Software Uninstall for MAC OS	. 19
Wi-Fi Mode	. 20
Operation and Function	. 22
Preparation	. 22
Establish a connection between your 4G Mobile Hotspot and the client	. 22
Access the Internet	. 23
Access the T-Mobile Hotspot Admin Page	. 23
Login	. 24
Home	. 25
Home	. 25
Change SSID and Password	. 25
Settings	. 25
Settings > Broadband Settings	. 26
Settings > Wi-Fi Settings	. 28
Settings > Firewall	. 34
Settings > Advanced	. 37
Text Message	. 41
Messages	. 41
Composing Message	. 43
Configuring Message Settings	. 43
Connection	. 44
Logout	. 45
Disconnecting from the Internet	. 45
Sleep Mode	. 45
Troubleshooting	. 46
Technical Parameters	. 48
Glossary	. 50

Warning and Notice	
To the Owner	
Using Your 4G Mobile Hotspot	
Using Battery	
Limited Warranty	
Limitation of Liability	
FCC Compliance	
Radio Frequency (RF) Energy	

# <u>Chapter</u> 1

## **Getting Started**

T-Mobile's 4G Mobile Hotspot is a <u>3G/4G</u> Mobile Hotspot, which supports 802.11b/g, via <u>Wi-Fi</u> interface; the 4G Mobile Hotspot supports data and text messaging services, enabling you to communicate anytime and anywhere.

## 4G Mobile Hotspot Appearance

The following figure shows the appearance of the 4G Mobile Hotspot. It is only for your reference. The actual device may be different.



1. Power Key	•Press and hold the <b>Power key</b> for three seconds to turn on/off			
	the 4G Mobile Hotspot.			
	•Press the <b>Power Key</b> to turn on the screen when it is in sleep			
	mode.			
2. Memory card slot (microSD card)	The microSD card is inserted with the gold contacts facing up.			
3. <u>WPS</u>	•Short press the button will turn on the Wi-Fi radio when the			
*WPS is an optional Wi-Fi security	4G Mobile Hotspot is not broadcasting.			
method, however the receiving 4G	•Long press and hold of the button for three seconds to activate			
Mobile Hotspot must support WPS	Wi-Fi Protected Setup Authentication (WPS).			
4. LCD Screen	Indicates the 4G Mobile Hotspot status and the icon status on the			
	LCD screen are duplicated in the web UI.			
5. External Antenna Port	Can be used with an external cellular antenna (not included) to			
	enhance the signal strength.			
6. Charger/USB Port	Dual purpose port is used for battery charging and USB			
	connection.			



## **Resetting the 4G Mobile Hotspot**

• Press and hold the **WPS** and **Power** buttons simultaneously until the LCD turns off; then release the buttons and the 4G Mobile Hotspot will restart automatically and restore to the factory default settings. The 4G Mobile Hotspot will display "Restarting..." which indicates a successful reset to factory defaults. You can also reset the 4G Mobile Hotspot settings through the web admin page.

is a trademark of SD Card Association.

## **LCD** Screen Indicator

4G Mobile	Hotspot	Icon	Indicators
-----------	---------	------	------------

Icon	Indication
La	Network signal strength. The antenna to the far left counts as one bar. More bars means better coverage.
4G	4G network type, which means the device is being connected to a 4G network.
E	Edge network type, which means the device is being connected to an Edge network.
G	GPRS network type, which means the device is being connected to a GPRS network.
¶×	Network signal not detected.
5	New message received, and the number beside the icon indicates the number of the unread messages.
(**)) **	Wi-Fi is not being broadcast. A short press of the "WPS" button will turn on the Wi-Fi radio.
<sup>®</sup> ∎01	Wi-Fi is being broadcast, and the number of the connected users is indicated to the right of the Wi-Fi antenna (maximum of 5 total).
	Battery power indication. The battery indicator will flash when the battery is almost drained.

## Hardware Installation

## **About SIM Card**

Avoid handling the <u>SIM</u> 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 T-Mobile wireless service, please ensure:

- 1. Your T-Mobile service has been activated and you have a mobile phone number.
- 2. You are in an area with T-Mobile network coverage

3. Your T-Mobile SIM Card is properly inserted in the SIM card slot.

## **Inserting SIM Card and Battery**



Power off the 4G Mobile Hotspot and remove the external power adapter before removing or inserting the SIM card. Otherwise, the 4G Mobile Hotspot or SIM card may be damaged.

1. Open the battery cover, located on the bottom of the 4G Mobile Hotspot.



- 2. Remove the battery.
- 3. Insert SIM Card into the designated slot.



3. Insert the battery as shown with the contacts located against the metal 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 MicroSD cover too hard, as it could break with excessive force.

2. Insert the microSD card into the microSD slot. The following picture shows the <u>front of the 4G Mobile</u> <u>Hotspot</u> and how to correctly insert the microSD. You will hear and feel a click when the microSD card locks in place.



3. Close the microSD cover.

## Switching On/Off Your 4G Mobile Hotspot

Press and hold the **Power** button for 3 seconds to turn on/off the 4G Mobile Hotspot.

Notes:

• The 4G Mobile Hotspot is powered on when the LCD lights up and shows "T-Mobile".

## **Charging Your 4G Mobile Hotspot**

Notes:

• You can charge your 4G Mobile Hotspot by using the USB cable provided with your device.

- 1. Insert the charger cable carefully into your 4G Mobile Hotspot 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.



# Chapter 2

## Working Mode

Your 4G Mobile Hotspot supports two working modes: USB mode and Wi-Fi mode. This document uses PC or laptop connectivity for examples of connecting 4G Mobile Hotspot.

## USB Mode

Connect the 4G Mobile Hotspot to your PC or laptop via the included USB cable, and then power on your 4G Mobile Hotspot.



## Software Installation for Windows XP

When you connect your 4G Mobile Hotspot to Windows PC or laptop for the first time, the system will automatically detect and recognize the new hardware and display the new icon since the desktop status bar, indicating that the PC or laptop and the 4G Mobile Hotspot have been connected properly. After a few seconds, the following installation interface will be shown if the laptop and desktop PC supports automatic installation.



In the rare case that your Windows PC or laptop does not auto launch or auto-install automatically, you can run the installation program in path of **My Computer > Mobile Hotspot > AutoRun.exe**.



It is strongly recommend that you exit Windows programs, and click **Next**, wait a minute and the following screen appears:

Mobile Hotspot Admin Wizard				
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed Mobile Hotspot Admin. Click Finish to exit the wizard.			
	< <u>B</u> ack <b>Finish</b> Cancel			

Click **Finish** to complete the installation.

After the installation, select **Start > Programs** and there will be a **Mobile Hotspot Admin** program group, which includes **Mobile Hotspot Admin** and **Uninstall**. Also, you will be able to find the **Mobile** 

Hotspot Admin shortcut icon in the desktop.

## Software Uninstall for Windows XP

Select **Start** > **Programs** > **Mobile Hotspot Admin** > **Uninstall** menu on the laptop or desktop PC.

Mobile Hotspot Admin Wizard
Do you want to completely remove the selected application and all of its features?
Yes No

Click Yes, and the system will ask you to remove the USB modem from your PC before uninstalling.

Mobile Hotspot Admin Wizard
Please remove USB MODEM from PC, before uninstalling!
<u>Y</u> es <u>N</u> o

Click **Yes** according to the indication, then the system begins to uninstall programs, and this interface will indicate the uninstall progress.



Mobile Hotspot Admin Wize	ard
	Uninstall Complete InstallShield Wizard has finished uninstalling Mobile Hotspot Admin.
	< <u>B</u> ack <b>Finish</b> Cancel

When uninstall is finished, the **Uninstall Complete** interface will popup. Click **Finish** to complete the software uninstall.

## Software Installation for MAC OS



The installation process and all the screenshots in this section are based on MAC 10.5.6. It is for your reference only.

When you connect your 4G Mobile Hotspot to a MAC PC or laptop, the system will automatically detect and recognize the new hardware and display a software installation window on the desktop, as shown below.



If the software installation window cannot automatically pop up, please find manually from the desktop and click the "Mobile Hotspot" is disc icon to start your installation process.



Double click the "Mobile Hotspot Admin" icon to start the installation process, as shown below.

00	🥪 Install Mobile Hotspot Admin
	Welcome to the Mobile Hotspot Admin Installer
<ul> <li>Introduction</li> <li>Destination Select</li> <li>Installation Type</li> <li>Installation</li> </ul>	You will be guided through the steps necessary to install this software.
• Summary	
Z	Go Back Continue

Click Continue. Select a destination where you want to install the Mobile Hotspot Admin software.



After selecting "Macintosh HD" as the install destination, you can click **Install** to perform a standard installation. At this step, you can also change the install location, or click **Customize** to personalize your installation.



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By clicking "Install",	the In	staller will	require	you to	type your	password fe	or verification.
------------------------	--------	--------------	---------	--------	-----------	-------------	------------------

0 0	🥪 Install Mobile Hotspot Admin			
⊖ Introduction ⊖ Destination Se	Installer requires that you type your password.			
Installation Ty     Installation     Summary	Name: VOD Password: Details Cancel OK			
	Change Install Location Customize Go Back Install			

After entering the correct password and clicking **OK**, the system will start preparing disk for the installation.



Wait a moment until the installation is finished.



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Click **Close** to complete the installation.

After the installation, you will be able to find the **Mobile Hotspot Admin** shortcut icon **I** on the

desktop.

## Software Uninstall for MAC OS

1. Close the application before the software uninstalls. Select "Finder > Applications > Uninstall Mobile Hotspot Admin" to uninstall the application. Follow the system prompts to complete the software uninstall.



2. Enter user name and password to be authenticated, and click OK.

	Uninstall Mobile Hotspot Admin requires that you type your password.
	Name: VOD
	Password:
Details	
?	Cancel OK

3. Wait a moment until the uninstall process finished.



4. Click **Close** to complete the software uninstall.

000	Applications	$\bigcirc$
		٩
<ul> <li>DEVICES</li> <li>Macintosh HD</li> <li>iDisk</li> <li>SHARED</li> <li>123-pc</li> <li>48dd84a6b65</li> <li>anahong</li> <li>anbo178738</li> <li>anlu1</li> <li>antao</li> <li>baihaifeng101</li> <li>All</li> <li>PLACES</li> <li>Desktop</li> <li>vod</li> <li>Applications</li> </ul>	Finished Close KiWeb KiW	
	32 items, 28.78 GB available	1.

## Wi-Fi Mode

Power on; wait until you see 4G or 3G appear on the screen and then connect the 4G Mobile Hotspot to Wi-Fi capable device(s). And the following picture is one application example:



# Chapter 3

## **Operation and Function**

## Preparation

Before using the T-Mobile 4G Mobile Hotspot, make sure:

- 1. SIM card is inserted.
- 2. T-Mobile service has been activated.
- 3. Battery is charged and installed in the 4G Mobile Hotspot.
- 4. 4G Mobile Hotspot is turned on.
- 5. The LCD Indication is working properly.

## Establish a connection between your 4G Mobile Hotspot and the client

## Via USB Cable

- 6. Connect your 4G Mobile Hotspot and the client through the USB cable.
- 7. Power on your 4G Mobile Hotspot.
- 8. Install software.

After the installation, the connection between your 4G Mobile Hotspot and the client will be established successfully.

## Via Wi-Fi

- 1. Power on your 4G Mobile Hotspot directly. It will take a few minutes to initialize.
- 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"192.168.0.1".

3. Select the SSID of your 4G Mobile Hotspot (SSID is listed underneath the 4G Mobile Hotspot battery).



Wi-Fi Network Connection Manager

Notes:

You will be prompted to enter a password. The password is located under the battery of your 4G Mobile Hotspot.

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

## Access the Internet

- 1. Turn on the 4G Mobile Hotspot.
- 2. Establish a Wi-Fi connection between your 4G Mobile Hotspot and your laptop.
- 3. After successfully establishing the connection, access the Internet with the Auto Connect or Manual

Connect mode. The default mode is Auto Connect.

```
Notes:
```

You can browse the T-Mobile Hotspot Admin page and click Connection to set the connection mode.

## Access the T-Mobile Hotspot Admin Page

- 1. Make sure the connection between your 4G Mobile Hotspot and the client is correct.
- 2. Launch your internet browser and enter<u>http://mobile.hotspot/</u>in the address bar.

Notes:

It is recommended that you use IE (7.0 or later), Firefox (3.0 or later), Opera (10.0 or later), Safari (4.0 or later) or Chrome (5.0 or later).

#### 3. The login page appears as follows.



## Login

Enter your password (the default Password is admin, all lower case).

Click Login to log into the web administration page of your 4G Mobile Hotspot.

For network security concern, upon the first login, it is recommended that you change the Wi-Fi Password. After that, you will bypass the SSID/Password screen and will be directed to the Home screen.

Logging back into the Web UI Admin window presents the Home Screen. An example is shown below.

		<b>W 23</b> 12 1-WODIE 40 333-123-4	507		
	Home				
e					
ngs	Router Information			WAN Information	
	SSID	T-Mobile Broadband00		Network Provider	T-Mobile
Message	Wi-Fi Password	12345678		Network Type	4G
	Channel	Auto	1	Roaming	OFF
lection	Security Level	WPA-PSK		Domain	CS_PS
te	IP Address	192.168.0.1		Connection Status	Connected
	Subnet Mask	255.255.255.0	1	IP Address	1.1.117.167
	Default Gateway	192.168.0.1	1	Primary DNS	192.232.33.10
	DHCP Server	Enable	1	Secondary DNS	61.134.1.4
	PDP Status	Connected	1	Phone Number	



## Home

## Home

When you successfully login, the **Home** tab appears in the upper left corner of the window, which contains basic settings information of your 4G Mobile Hotspot, as shown below:

Home	
Router Information	
SSID	T-Mobile Broadband00
Wi-Fi Password	12345678
Channel	Auto
Security Level	WPA-PSK
IP Address	192.168.0.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
DHCP Server	Enable
PDP Status	Connected

WAN Information	
Network Provider	T-Mobile
Network Type	4G
Roaming	OFF
Domain	CS_PS
Connection Status	Connected
IP Address	1.1.116.33
Primary DNS	192.232.33.10
Secondary DNS	61.134.1.4
Phone Number	555-123-4567

## **Change SSID and Password**

urrent Network Name (SSID) T-Mobile Broad	Iband64 Current Se	curity Mode WPA-PSK	*
te: Your new network name can not be more than (	32 characters long. Change Wi-	-Fi Password	
	Password	82276964	

**Network Name (SSID)** is used to uniquely identify your <u>Wi-FI</u> Network. If you enable **SSID Broadcast**, the gateway will broadcast the SSID, and other 4G Mobile Hotspots can detect and connect to it.

The security mode setting cannot be changed at this screen. To make modifications to your Security settings, please go to Settings/Wi-Fi Settings/Security.

**Wi-Fi Password** is used to validate that you can access the SSID. The password is unique to the SSID and is a secondary measure to allow access to the Hotspot.

## Settings

• It is recommended that you only change the settings which you are familiar with.

## **Settings > Broadband Settings**

## Wireless Info

## Select Settings > Broadband Settings > Wireless Info,

Broadband Settings > Wireless Info

Wireless Info	Network Select	APN Settings
Wireless Information		
Network Provider	T-Mobile	
Network Type	4G	
Roaming	OFF	
RSSI	-65 dBm	
RSCP	-97.5 dBm	
Ec/lo	-32.5 dB	
Cell ID	103FD	
LAC Code	A	

Refresh

#### Click **Refresh** to update the wireless information page

## **Network Select**

# Select Settings > Broadband Settings > Network Select, Broadband Settings > Network Select APN Settings Wireless Info Network Select APN Settings Band Selection Mode Manual Image: Color Select Image: Color Select Setting Select Manual Image: Color Select Select Select Image: Color Select Setting Select Sel

Apply

• Manual: Search the available network manually.

- Automatic: 4G Mobile Hotspot searches for available networks automatically. Set as default.
- 4G Only: 4G Mobile Hotspot searches for 4G network only.

• **GSM Only**: 4G Mobile Hotspot searches for GSM network only.

Click **Apply** to confirm your configuration.

## **APN Setting**

Select **Settings > Broadband Settings > APN Setting**, It is suggested that you do not make changes to these settings.

Wireless Info	Network Select	APN Settings
PN Settings		
Profile Selection	T-Mobile 💌	
Profile Name	T-Mobile	
APN	epc.tmobile.com	
DNS	Auto DNS O Manual DN	IS
Authentication	PAP	
User Name		
Password		

Parameter	Function
Profile Selection	Choose one profile from the list.
Profile Name	Type the profile name.
APN	Type the <u>APN</u> string.
DNS	Set <u>DNS</u> 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	1.											

- Click **Save** to save your changes made to the APN parameters.
- Click Set default to set current profile as the default profile.
- Click **Add** to add new APN.
- Click **Delete** to remove the current profile.

If you would like to add a new APN, please click **Add** and enter the required parameters as shown below. Then click **Save**.

Broadband Settings > APN Settings						
Wireless Info	Network Select	APN Settings				
APN Settings						
Profile Selection	Add new 💌					
Profile Name						
APN						
DNS	💿 Auto DNS 🔘 Manual [	DNS				
Authentication	PAP					
User Name						
Password						
[	Save Set default	Add Delete				

## Settings > Wi-Fi Settings

## **Device List**

Select **Settings > Wi-Fi Settings > Device List**, devices connected to the Hotspot will be listed in the following figure:

Basic	Security	WPS
	MAC Address	
	Basic	Basic Security MAC Address

Basic

Select Settings > Wi-Fi Settings > Basic,

Wi-Fi Settings > Basic				
Device List	Basic	Security	WPS	
Wireless Network				
Network Mode	11b/g Mixed M	11b/g Mixed Mode 🔽		
Network Name (SSID)	T-Mobile Broad	T-Mobile Broadband64		
Broadcast Network Name (SSID)	⊙Enable ○D	● Enable        ○ Disable		
Country	US (United Sta	US (United States) 💌		
Frequency (Channel)	AutoSelect	AutoSelect 🗸		
Rate	Auto	Auto		
MAX Station Number	5	5		

Note: After you click Apply any connected Wi-Fi devices will need to reconnect.

• **Network Mode**: If all of the wireless devices connect with this 4G Mobile Hotspot in the same transmission mode, performance will be improved by choosing the appropriate wireless mode.

Apply

Cancel

Network Mode	Description
11b/g Mixed Mode	Supports both 11b and 11g transmission mode.
11b Only	Supports 11b transmission mode only.
11g Only	Supports 11g transmission mode only.

- Network Name (SSID): Service Set Identifier (SSID). Enter a string less than 32 characters as the name for your Wi-Fi Network.
- **Broadcast Network Name (SSID)**: Disable or Enable (Default) this function. If **Enable** is selected, the 4G Mobile Hotspot broadcasts the SSID, and other devices can search and connect to it. When you select **Disable**, other devices cannot search out the SSID. If you want someone to connect, you will need to tell them the SSID, and let them setup manually.
- **Country**: Choose the right country.
- Frequency Channel: Choose the appropriate channel to optimize the performance and coverage of your wireless network.
- Maximum Connected Devices: Choose the maximum number of the 4G Mobile Hotspots which connect the AP simultaneously. Currently, the maximum number of connected 4G Mobile Hotspots is five (5).

Click **Apply** to confirm your configuration.

## Security

Select Settings > Wi-Fi Settings > Security,

 Wi-Fi Settings > Security
 Basic
 Security
 WPS

 Security Policy

 </t

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.

Apply

Cancel

Security M	ode: The se	curity mode	es are describe	ed 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.
<u>WPA-PSK</u>	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.

•It is suggested that users secure their 4G Mobile Hotspots using one of the WPA schemes.

## WPA Algorithm: TKIP, AES or AUTO.

WPA Algorithm	Description
TKIP	Select TKIP as the encryption type.

AES	Select AES as the encryption type.
AUTO	Both TKIP and AES are selected as the encryption type.

• Pass phrase: Enter the password manually.

If the security mode is SHARED, the bottom part of the configuration page displays parameters as shown below:

Wi-Fi Settings > Security			
Device List	Basic	Security	WPS
Security Policy			
Security Mode	SHARED	~	

Wire Equivalence Protection (WEP)				
Default Key		Key 1		
	WEP Key 1:	Hex		
WED Kove	WEP Key 2 :	Hex		
VVEP Neys	WEP Key 3 :	Hex		
	WEP Key 4 :	Hex		

Note: After you click Apply any connected Wi-Fi devices will need to reconnect.

Apply Cancel

WEP Keys: At most four keys can be set in the WEP key fields. 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; and WEP key 2 the same. A WEP can be in HEX form with either 10 or 26 hexadecimal digits (0~9,a~f and A~F) and in ASCII form with either 5or 13 ASCII code.

If the security mode is **OPEN**, the bottom part of the configuration page displays WPA parameters.

Wi-Fi Settings > Security			
Device List	Basic	Security	WPS
Security Policy			
Security Mode	ecurity Mode OPEN		
Encrypt Type	WEP	~	

#### Wire Equivalence Protection (WEP)

Default Key		Key 1	
	WEP Key 1:	Hex	
WED Kous	WEP Key 2 :	Hex	
VVEP Neys	WEP Key 3:	Hex	
	WEP Key 4 :	Hex	

Note: After you click Apply any connected Wi-Fi devices will need to reconnect.

Apply Car	ncel
-----------	------

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

## WPS

Select Settings > Wi-Fi Settings > WPS,

Wi-Fi Settings > WPS			
Device List	Basic	Security	WPS
WPS Progress			
WPS Mode	O AP PIN O	Client PIN 🔘 PBC	
			Apply

• WPS mode: Choose the desired mode.

## **AP PIN:**

AP PIN will be displayed when WPS is activated.

Wi-Fi Settings > WPS			
Device List	Basic	Security	WPS
WPS Progress			
WPS Mode	💿 AP PIN 🔘	Client PIN O PBC	
AP PIN	00660518		

## **Client PIN:**

Enter the client PIN. As required, the PIN should be 8 digits.

Wi-Fi Settings > WPS			
Device List	Basic	Security	WPS
WPS Progress			
WPS Mode	O AP PIN 💿	Client PIN O PBC	
Client PIN			
L	· · · ·		Apply

## PBC:

1. Select **PBC** mode in the Client WPS UI;

2. Select PBC mode in the WPS page of the 4G Mobile Hotspot and submit; H

3. Once the WPS is enabled, please press the "**next**" button on the Client WPS UI. After a few seconds the client can access the WLAN, and the result will be shown in the Client WPS UI.

Wi-Fi Settings > WPS			
Device List	Basic	Security	WPS
WPS Progress			
WPS Mode		) Client PIN 💿 PBC	

Click **Apply** to confirm your configuration.

## Usage of WPS

WPS of your 4G Mobile Hotspot is disabled by default. Before using, you need to enable it in the

Apply

WebGUI configuration page (**Settings** > **Wi-Fi Settings** > **WPS**) or by pressing the **WPS** button at right side of the device.

If your client device supports WPS, you will not need to input the password manually after WPS has been available. Please follow the steps below:

- 1. Start up your 4G Mobile Hotspot.
- 2. Launch the client device connected to your 4G Mobile Hotspot.
- 3. Enable the WPS function of your 4G Mobile Hotspot.
- 4. Enable the WPS function of the connecting client.

NOTE Notes:

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

## **Settings > Firewall**

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

Notes:

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

## MAC/IP/Port Filtering

## Select Settings > Firewall > Mac/IP/Port Filtering,

MAC/IP/Port Filtering	Port Forwarding	System Security
Basic Settings		
MAC/IP/Port Filtering	Disable	*
	1	
		Apply
If you select <b>Enable</b> , the filt	er settings will appear:	
Firewall > MAC/IP/Port Filtering		
MAC/IP/Port Filtering	Port Forwarding	System Securi
Basic Settings		
MAC/IP/Port Filtering	Enable	~
Default Policy The packet that doesn't n rules would be:	Accepted	~

MAC/IP/Port	Filtering	Settings
-------------	-----------	----------

MAC Address	(XX:XX:XX:XX:XX:XX; eg: 00:1E:90:FF:FF)		
Dest. IP Address	( XXX.XXX.XXX.XXX, eg: 192.168.5.101)		
Src. IP Address			
Protocol	None		
Dest. Port Range	- (1~65535)		
Src. Port Range	( 1~65535)		
Action	Drop		
Comment			

The maximum rule count is 10.

						l	Apply	Reset
Current MAC/IP/Port Filte	ring Rules	in System:						
No. MAC Ad	iress	Dest. IP Address	Src. IP Address	Protocol	Dest. Port Range	Src. Port Range	Action	Comment
			Others w	ould be accept	ted			

- **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 the rule.
- **Comment**: Type comment for the filter settings.

## Notes:

Filtering rules are matched one by one. Once a provision is met, it will not continue to match the rules listed below.

- Click **Apply** to confirm your configuration.
- Click **Delete** to remove the rule which you selected.
- Click **Reset** to restore default values.

To add a new rule:

- 1. Select **Enable** in the **Basic Settings** area.
- 2. Click Apply.

Delete

Reset

3. Input the detailed 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,

Firewall > Port Forwardin	g		
MAC/IP/Port Filtering	Port Forwardin	g Syst	tem Security
Virtual Server Settings			
Virtual Server Settings	Disable	*	
If you select <b>Enable</b> , the Virt	tual Server Settings v	vill appear:	Apply
MAC/IP/Port Filtering	Port Forwardin	g Syst	tem Security
Virtual Server Settings			
Virtual Server Settings	Enable	~	
IP Address	eg: 192.168.5.1	( XXX 01)	.xxx.xxx.xxx,
Port Range		- (1~6	65535)
Protocol	TCP+UDP	~	
Comment			
The maximum rule count is Current Virtual Servers in :	10 . system:		Apply
No. IP Address	Port Range	Protocol	Comment
• <b>IP Address</b> : Set IP address	for the virtual server	Delete	Reset
• Port Range: Set port numb	ers for the virtual ser	ver.	

- **Protocol**: Set protocol for the virtual server.
- **Comment**: Type comment for the virtual server settings.

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

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

Click **Reset** to restore default values.

## System Security

You can configure system firewall to protect the 4G Mobile Hotspot from being attacked. Select **Settings > Firewall > System Security**,

Firewall > System Security		
MAC/IP/Port Filtering	Port Forwarding	System Security
Remote management		
Remote management (via WAN)	Disable	~
Ping from WAN Filter		
Ping from WAN Filter	Disable	*
		Apply Reset

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

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

## Settings > Advanced

#### Status

#### Select Settings > Advanced > Status,

Advanced > Status				
Status	Management	Restore	SIM PIN Manage	Router
System Info				
Software version	BD_	MF61V1.0.0B04		
Hardware version	MF6	1-1.0.0		
IMEI	004	401782276964		
	· · · · · · · · · · · · · · · · · · ·			

Refresh

#### Management

Select Settings > Advanced > Management,

Advanced > Management						
Status	Management	Restore	SIM PIN Manage	Router		
Administrator Setting						
Current Password						
New Password						
Verify Password						
				Apply Cancel		

After successful login, you can change the administrator's password. Click **Apply** to confirm your configuration. The password is for use on the T-Mobile Hotspot Admin page. This is not the password to be used when connecting to your Mobile Hotspot.

## Notes:

In case you forget your administrator's password, please restore the 4G Mobile Hotspot (see below figure) to factory default settings and login with the default password **admin**.

#### Restore

Select **Settings** > **Advanced** > **Restore**, click **Restore** to set all the settings to their factory default values, and then the 4G Mobile Hotspot will restart automatically.

Advanced > Restore				
Status	Management	Restore	SIM PIN Manage	Router
Load Factory Defaults				
Load Default Button		Restore		

#### **SIM PIN Manage**

This section is for you to set or change PIN code for your SIM card.

## Select Settings > Advanced > SIM PIN Manage,

Advanced > SIM PIN M	anage			
Status	Management	Restore	SIM PIN Manage	Router
SIM PIN Management				
SIM PIN Status	Disable	•		
Action	Enab	le 🗸		
SIM PIN				
	3 attem	npt(s) remaining for your	· PIN!	

Apply

Apply

#### SIM PIN Save Management

SIM PIN	
SIM PIN Save	Save

• SIM PIN Status: Displays the current PIN status.

• Action: Enable, Disable or Modify, and then click Apply to activate the corresponding function.

• **SIM PIN:** Type the PIN code.

• **SIM PIN Save**: Check the Save box, then click **Apply** to enable PIN save function. After you enable this function, the 4G Mobile Hotspot will save your PIN code, and you do not need to input PIN code each time when the device is powered on.

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

Advanced > SIM PIN	l Manage			
Status	Management	Restore	SIM PIN Manage	Router
SIM PIN Managemen	t			
SIM PIN Status	D	isable		
Action		Modify 🗸 🗸		
SIM PIN	Γ			

	3 attempt(s) remaining for your PIN!
Confirm New SIM PIN	
New SIM PIN	

Apply

#### SIM PIN Save Management

SIM PIN	
SIM PIN Save	Save

Enter the old PIN code. You will then need to enter the new PIN code twice Click **Apply** to confirm your configuration.

## Notes:

• Entering the wrong PIN code for three consecutive times will block the SIM card.

• After you changed the PIN code, you still need to input PIN code again, even though you enable PIN save function.

## Router

Select Settings > Advanced > Router,

Advanced > Router				
Status	Management	Restore	SIM PIN Manage	Router
LAN Interface Setup				
IP Address		192.168.0.1		
Subnet Mask		255.255.255.0		
MAC Address		00:00:00:01:02:03		
DHCP Server		Enable 💌		
DHCP IP Pool		192.168.0.100	- 192.168.0.200	]
DHCP Lease Time		24	hour(s)	

Note: Your settings will be effective after rebooting your device.

Apply	Cancel
-------	--------

- **IP Address**: IP address for LAN interface.
- Subnet Mask: Subnet mask for the IP address.
- MAC Address: MAC address for the LAN interface.
- **<u>DHCP</u> 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 new IP address will be relocated.

Click **Apply** to confirm your configuration.

## Text Message

This function allows you to send or receive short messages.

## Messages

You can check the messages saved in your 4G Mobile Hotspot.

Notes:

The message indicator will be displayed on your 4G Mobile Hotspot when there is unread message.

## Inbox

Select **Text Message > Message > Inbox** to access the following figure:

Message	es > Inbox		
	Inbox	Sent O	utbox
No.	Phone Number	Contents	Received
1	555-123-4567	fic. Sorry I wi	10/08/10,19:43:55
2	555-123-4567	Stuck in traffi	10/08/10,19:43:34
3	555-123-4567	tuck in traffic	10/08/10,19:44:22
4	555-123-4567	raffic. Sorry I	10/08/10,19:44:01
	· · · · ·	View Reply	Delete Delete All

All the received messages saved in your 4G Mobile Hotspot will be displayed here.

- Click **View** to view the selected message.
- Click **Reply** to respond to the selected message sender.
- Click **Delete** to remove the selected message.
- Click **Delete All** to remove all the messages.

## Sent

Select Text Message > Message > Sent

Inbo	K .	Sent	Outbox	
No.	Phone Number		Contents	
1	555-123-4567		test	
2	555-123-4567		hello	
3	555-123-4567		hi	

All messages that are successfully sent will be displayed here.

## Outbox

## Select **Text Message > Message > Outbox** to access the following figure:

Inbo	K	Sent	Outbox
No.	Phone Number		Contents
1	12345678		hi
2	87654321		hello

All drafts and unsuccessfully sent messages will be displayed here.

• Click View to access the editing interface of the selected message, and then click Send to send it.

## **Composing Message**

1. Select **Text Message > Compose Message** to access the following figure:

Compose Message		
Compose Message		
Phone Number		
Contents	(0/160)	~
		Send Cancel

- 2. Enter the recipient's phone number.
- 3. Enter a message.
- 4. Click **Send** to deliver the message.

## **Configuring Message Settings**

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

## Settings

#### Settings

Validity	The longest period 💌
Center Number	+12063130004
Delivery Report	Enable

Save

Cancel

## 2. Set the related parameters.

Parameters	Description
Validity	Configure the validity period of outgoing messages.
Center Number	Enter the short message center number. For more details, please consult your service provider. *This number should not be changed.
Delivery Report	Receive or reject a popup message to inform you when the message is delivered to the recipient.

2. Click Save to save your configuration.

## **Connection**

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

Connection

Connection Mode

$\odot$	Auto Connect		
0	Manual Connect	Connect Internet	*
Connection Status	Disconnected		

Apply

There are two connection modes:

• Auto Connect: The 4G Mobile Hotspot will automatically connect to WAN when it is powered on.

• Manual Connect: Connect to the Internet manually.

Connect Internet	Select to connect to the Internet.
Disconnect Internet	Select to disconnect from the Internet.

Click **Apply** to confirm your configuration.

Notes: Turning off the 4G Mobile Hotspot will also terminate Internet connection.

## Logout

Select **Logout** (located on upper right corner of the T-Mobile Hotspot Admin page), to discontinue your session.

Microsoft Internet Explorer 🔀
Do you confirm to logout?
OK Cancel

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 4G Mobile Hotspot can also terminate Internet connection.

## Sleep Mode

When you enable the Wi-Fi function and use the battery to supply power to the 4G Mobile Hotspot, once no user connects to the 4G Mobile Hotspot within 10 minutes or you press the WPS button, the 4G Mobile Hotspot will enter the sleep mode and the LCD screen will be turned off. In the sleep mode, the Wi-Fi function will be disabled. Press **Power** or **WPS** button to wake up the 4G Mobile Hotspot, and the LCD screen will be turned on.

# Chapter 4

## Troubleshooting

Problem Description	Possible Causes	Problem Solving
The system cannot run the installation program automatically.	The system configuration is having difficulty with the auto-run software.	The 4G Mobile Hotspot will appear as a virtual CDROM on the PC's start menu. Click on the icon and start the <b>Autorun.exe</b> . If you have previously installed a version of the program, please uninstall it first.
After installation, the system doesn't install the driver program properly.	The system configuration is having difficulty with the auto-run software.	Please install the driver program manually. The driver program can be found in the path of <b>My</b> <b>Computer &gt; Mobile Hotspot &gt; AutoRun.exe.</b>
After restarting the device, no signal can be detected, even if the SIM is inserted.	1. You are in a place where there is no 3G/4G network coverage. Such places include underground parking garages, tunnels, and some remote rural areas.	1. Change location to find a good where having signal.
	2. The SIM card isn't inserted properly.	2. Remove and reinsert the SIM card correctly.
	3. The 4G Mobile Hotspot is positioned in such a way that signal reception is adversely affected.	3. Adjust the angle / position of the 4G Mobile Hotspot or its proximity to other electronic 4G Mobile Hotspots.
Sent Message failure.	1. The SMS center number is incorrect.	<ol> <li>Your 4G Mobile Hotspot is preconfigured so it is unlikely that it will need changing. However if it is missing or incorrect contact your operator.</li> </ol>
	2. The network is busy or you are in an area with no signal.	2. Try later or move to an area with a stronger signal.
Data connection failed.	1. You are in the place where there is no 3G/4G network coverage.	1. Move to an area with good signal.
	2. The network is busy.	2. Try later.

Problem Description	Possible Causes	Problem Solving
	3. The APN in the user configuration file is incorrect.	3. Check the APN in the user configuration file in the <b>Setting &gt; Broadband Settings &gt; APN</b> <b>Setting</b> .
	4. The 4G Mobile Hotspot data is corrupted.	4. Local network access or the target server maybe experiencing problems. Retry data request.
	5. The network type has been selected manually, but is incorrect.	5. Reselect the network type according to the type of the SIM card. For example, if you are using a SIM card for GSM network, then the network mode will not be selected as WCDMA.
Connected to the Internet, but it cannot	1. After connection, you are unable to open web pages.	1. Check that the APN in the configuration files is correct.
open any website page.	2. IE browser is causing problems.	2. Upgrade to the new version or reinstall the IE browser.
	3. Your operating system maybe infected by a virus. Worm Blaster for example can affect upload and downloaded data flow, resulting in an inability to access a website.	3. Use the professional anti-virus software to check and remove the virus.
	4. You have connected to an APN which cannot connect to the Internet.	<ul><li>4. This happens when you are changing any preset operator value in the setting section.</li><li>Check the entry and enter the correct APN from your operator.</li></ul>



## **Technical Parameters**

Data Service	HSPA: DL 21 Mbps UL 5.76 Mbps
	WCDMA: 384 kbps
Interface	USB and Wi-Fi
Wi-Fi Standard	802.11b/g
Wi-Fi Security	WEP/WPA/WPA2
USB Version	USB 2.0 HIGH SPEED
USB Interface Type	Mini USB-B
Weight	2.64 oz
Dimensions (W×H×D):	3.9" x 2.11" x .54"
microSD card	Support up to 32GB microSD card
Power Adapter	5 V/700 mA
Battery	1500 mA Li-ion battery
*Standby time	11 hours
*Working time	4 hours
Charge time	4 hours
Operate system	Windows 7, Windows Vista, Windows XP (SP2 or later), MAC 10.4 or later
Web Browser	IE (7.0 or later), Firefox (2.0 or later), Opera (10.0 or later), Safari (4.0 or later), Chrome (5.0 or later)
Operating temperature	0 °C ~ +35 °C
Storage temperature	-20 °C ~ +50 °C
Charging temperature	0 °C ~ +45 °C

Humidity	5%~ 95%



The 4G Mobile Hotspot's standby and working time are based on ideal working environment.

# <u>Chapter</u> 6

## Glossary

- AC: Alternating Current
- AES: Advanced Encryption Standard
- 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
- LCD: Liquid Crystal Display
- MHz: Megahertz
- PDP: Packet Data Protocol
- PIN: Personal Identification Number
- PPP: Point to Point Protocol
- PUK: PIN Unlocking Key
- SIM: (UMTS) Subscriber Identification Module
- TKIP: Temporary Key Integrity Protocol
- UPNP: Universal Plug and Play
- 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
- WPS: Wi-Fi Protected Setup

# <u>Chapter</u> 7

## Warning and Notice

## To the Owner

- Some electronic devices are susceptible to electromagnetic interference sent by other device if it is inadequately shielded, such as the electronic system of vehicles. Please consult the manufacturer of the device before using it if necessary.
- Operating laptop and desktop PCs and the 4G Mobile Hotspot 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 4G Mobile Hotspot off if necessary. Consult a physician or the manufacturer of the medical device before using the 4G Mobile Hotspot.
- Be aware of the usage limitation when using a 4G Mobile Hotspot at places such as oil warehouses or chemical factories, where there are explosive gases or explosive products being processed. Turn off your 4G Mobile Hotspot 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 4G Mobile Hotspot in these conditions.
- Do not touch the inner antenna area if not necessary. Otherwise it will affect your 4G Mobile Hotspot's performance.
- Store the 4G Mobile Hotspot out of the reach of little children. The 4G Mobile Hotspot may cause injury if used as a toy.
- Do not touch the metallic parts of the 4G Mobile Hotspot so as to avoid a burn, when the 4G Mobile Hotspot is working.

## Using Your 4G Mobile Hotspot

- Please use original accessories or accessories that are authorized. Using any unauthorized accessories may affect your 4G Mobile Hotspot's performance, and violate related national regulations about telecom terminals.
- Avoid using the 4G Mobile Hotspot near or inside metallic structures or establishments that can emit electromagnetic waves. Otherwise it may influence signal reception.
- The 4G Mobile Hotspot is not waterproof. Please keep it dry and store in a shady and cool place.
- · Do not use the 4G Mobile Hotspot immediately after a sudden temperature change. In such case, it will

produce dew inside and outside the 4G Mobile Hotspot, so don't use it until it becomes dry.

- Handle the 4G Mobile Hotspot carefully. Do not drop, bend or strike it. Otherwise the 4G Mobile Hotspot will be damaged.
- No dismantling by non-professionals and only qualified technicians can undertake the repair work.
- Operating temperature range of  $0^{\circ}$ C ~ +35  $^{\circ}$ C 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 which is 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.

## Marning:

If the battery is broken, keep away from content. If it taints your skin, wash your skin with abundant fresh water and ask doctor for 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 4G Mobile Hotspot complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This 4G Mobile Hotspot may not cause harmful interference, and (2) this 4G Mobile Hotspot 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 4G Mobile Hotspot meets the government's requirements for exposure to radio waves.

This 4G Mobile Hotspot 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 4G Mobile Hotspot while operating can be well below the maximum value. This is because the 4G Mobile Hotspot 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 4G Mobile Hotspot 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 4G Mobile Hotspot with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this 4G Mobile Hotspot 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-ZTEMF61*