5G Mobile Hotspot, RG1000

User Manual



Contents

Getting Started	
 Overview	
System Requirements	
Components	3
Device Display	4
Battery Management	5
Using Your RG1000	6
Accessing the Network	7
Using Your RG1000 for the First Time	7
System Requirements	7
Installing the SIM Card	
Charging the Battery	
Connecting to Your RG1000	
Wi-Fi Name (SSID) and Password Connecting to the Internet	
-	
Using Your RG1000 after Setup is Complete Mobile Hotspot to share connections	
Updating Your RG1000 software	
RG1000 Settings	
Managing Your Mobile Hotspot	
Access the RG1000 Mobile Hotspot Web Admin page	
Web Admin Home	
Messages	
Settings	
Wi-Fi	
Mobile Network Device	
Advanced Router	
About	
Support	
Troubleshooting	
Overview	
First Steps	
Common Problems and Solutions	
Regulatory Information	
Regulatory Statements	
FCC Equipment Authorization ID: XHG-RG1000	35

Body-Worn Operation	35
Safety Hazards	
Glossary	
Glossary	20

1

Getting Started

Overview Components Device Display Battery Management

Overview

Thank you for choosing 5G Mobile Hotspot, RG1000!

Having RG1000 at your fingertips will allow you to access the latest 5G and LTE networks for faster uploads and downloads. You can also connect up to 20 Wi-Fi capable devices to the Internet at once - laptops, tablets, eReaders, Smartphones and more.

System Requirements

- Compatible with all IEEE802.11b/g/n/ac/ax Wi-Fi enabled devices.
- Works with the latest versions of most browsers*.

Components



1. **Power button –** Turn on/off RG1000.

Button Operation

	Operations	Actions
	Turn On	Press and hold the button until "Welcome" message appears.
(==)	Turn Off	Press and hold the button until "Goodbye" message appears.
	Display Wake-Up	When the display is off, the first quick press of the button wakes up the display.

- 2. **Display –** Provides general information of the device status, and device setting menu.
- 3. **Power indicator light –** White light blinks to show the device is on.
- 4. Navigation buttons Left and right arrows and Enter button to navigate device menu.
- 5. Ethernet port Connect your Ethernet (RJ45) cable here to connect via Ethernet.
- 6. Charging port The USB charger connects here.
- 7. Vent Holes Ventilation holes to cool down the device.
- 8. Battery Cover Battery is inside the battery cover.
- 9. Battery cover notch Lift the notch to open the battery cover.

Device Display



Status icon bar

Icons	Status
	Shows network signal strength.
3G LTE 5G	Shows network type the device is connected to.
R	Appears when the device is on roaming network.
<u>↑</u> ↓ ↑↓ ↑↓	Appears when data is being transferred between the mobile network and your mobile hotspot.
») (1~20)	Shows the number of connected devices.
⊠ ?	Shows SIM status (no SIM found, SIM PIN locked, SIM error)
	Shows the remaining battery level. Shows battery charging.

Wi-Fi Information: Displays current Wi-Fi network SSID and password information.

Device Menu: Use the navigation buttons to go through the device menu.



Data usage information displays



Connected device information displays.



Displays Wi-Fi network information.



You can change device settings on Wi-Fi, display, network.



Device Information displays

Battery Management

Your RG1000 is equipped with a replaceable and rechargeable battery. It works from its charged battery alone, or when the device is plugged into a power source.

Note: Please do not attempt to open or disassemble your hotspot and the battery pack. Doing so may cause damage that voids your warranty. Charge the battery with the charger provided together with your hotspot. While the battery is charging, the battery charging icon displays.

IMPORTANT! Please use only an approved charger to charge your hotspot. Improper handling of the charging port, as well as the use of an incompatible charger, may cause damage to your device and void the warranty.

2

Using Your RG1000

Accessing the Network Using Your RG1000 for the First Time Connecting to Your RG1000 Using Your RG1000 After Setup is Complete

Accessing the Network

Work effectively outside the home or office with the reliable broadband speed that the 5G and LTE service provides. You can connect to the internet at speeds fast enough to keep up-to-date on all your email correspondence, download attachments, and access your corporate intranet.

Using Your RG1000 for the First Time

System Requirements

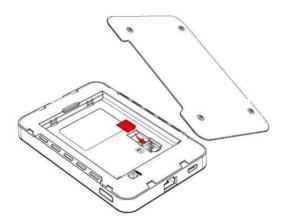
Your computer, tablet, or other wireless devices need Wi-Fi capability and Internet browser software only. Your RG1000 is compatible with most major operating systems and the latest versions of browsers.

Installing the SIM Card

Your SIM (Subscriber Identity Module) card is a small rectangular plastic card that stores important information about your wireless service.

If not already inserted, follow the instructions below to install your SIM card.

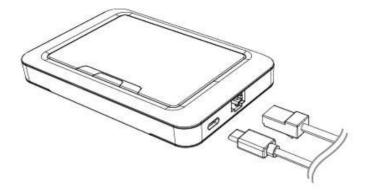
- 1. Remove the battery cover of your device and take the battery out.
- 2. Slide your SIM card in the SIM card slot with Wireless Carrier logo facing up until it clicks.
- 3. Properly install the battery and put the battery cover on.



IMPORTANT! Do not bend or scratch your SIM card. Avoid exposing your SIM card to static electricity, water, or dirt. Whenever you insert or remove the SIM card, ensure your RG1000 is powered off and is not connected to any power source. Never use tools, knives, keys, or any type of object to force the door open or to remove the SIM card.

Charging the Battery

Before using your mobile hotspot, ensure that the battery is fully charged. Be sure to use the charger that came with your device.



NOTE: Your RG1000 is equipped with a replaceable rechargeable battery. When handling the battery or SIM card, please make sure the device is not connected to any power sources. Do not use any tools, sharp objects or any utensils when dealing with the battery. Doing so may cause damage that voids your warranty.

- It normally takes 3~5 hours, depending your power sources and device status to fully charge the battery.
- The battery discharges faster as additional devices connect to your hotspot.
- Battery life depends on the network, signal strength, temperature, features, and active connection time.
- When charging, keep your device near room temperature.
- Never leave the RG1000 in an unattended vehicle due to uncontrolled temperatures that may be outside the desired temperatures for your device.
- It is normal for batteries to gradually wear down and require longer charging time.

Connecting to Your RG1000

Wi-Fi Name (SSID) and Password

You can find your Wi-Fi Name and Password on the device display main screen.

Connecting to the Internet

- 1 Open the Wi-Fi application or controls on your laptop or Wi-Fi capable device that you want to connect to your RG1000. Then find your RG1000's Wi-Fi name.
- 2 Click **Connect** and enter the Password when prompted.

NOTE: The last four characters of your Wi-Fi Name is unique for your RG1000. You can change the Wi-Fi Name of your own. See "Settings".

Using Your RG1000 after Setup is Complete

Mobile Hotspot to share connections

You can use your RG1000 as a wireless mobile hotspot to connect to a total of 20 Wi-Fi capable devices to the mobile broadband network.

Updating Your RG1000 software

New software is updated automatically in the following scenarios.

- 1) If a new update is available, it will be downloaded in the background and wait to be applied on the next power off.
- 2) The device must have at least 40% battery or 20% on charger to apply an update.
- 3) If the device is on AC power all the time and an update is available, the device will download and wait to apply the update in 48 hours between the hours of 2-4am.
- 4) If there is traffic or data activity for at least 1 minute at the 2-4am window the device will wait until next day 2-4am window (24 hours later) to apply the update.

3

RG1000 Settings

Managing Your Mobile Hotspot Web Admin Home Messages Settings About Support

Managing Your Mobile Hotspot

Access the RG1000 Mobile Hotspot Web Admin page

You can access your Mobile Hotspot device information using an internet browse.

Access RG1000 Mobile Hotspot Web Admin page via internet browsers.

- Connect your Wi-Fi capable device to the RG1000.
 Open a web browser on your connected device and open the Web Admin home page
- 3 Click Login and enter the password. If you entered the correct password, the Web Admin screen appears.

NOTE: The default password is 'admin'. On your first login, you will be directed to 'Change password'

Enter You	r Password		
Password			
		Login	Cancel
If too many inc	correct passwords are tried, ac	cess will be suspended.	

Web Admin Home

The Web Admin page allows you to quickly access all menu options for your RG1000.

- Messages
- Settings
- About
- Support

Check status of network connection and data usage on the Home page.

- <u>Disconnect</u>: Click Disconnect to disconnect the Internet.
- <u>Reset</u>: Reset data usage.

Welcome to you	r RG1000 M	obile Hotspot			uli 5G ★₽ 💌 Log out
Home		Messages	O Settings	(i) About	3 Support
Connection		Data Usage			
Network Status Network	Connected 5G	269.92 MB of	20 GB Used		
Time Connected	3:10:53				Reset
Data Used	229.85 MB				
Discor	nnect				
Main Wi-Fi					
DESKTOP-G180	003				
Guest Wi-Fi			ulation is based on the local em provided by the operator.	-	ata usage might be different
No Connected De	ivice	You can reset u	sage or change usage meter	from settings page.	
				©2019 Franklin Wire	less Corp. All Rights Reserved.

Messages

Messages page displays SMS messages sent to you by Wireless Carrier.

You can see the message contents by pressing the **Messages** menu on your **Web Admin** home page. To delete a selected message, click the trash bin icon to the right of the message date and timeline. To delete all messages, click **Delete All Messages** button.

Home	Messages	¢ Settings	About	Support
Device Messages	Messages			
	From	Message		
		Ν	lo Messages	
				Delete All

Settings

The **Settings** page has the following menu options.

- Wi-Fi
- Mobile Network
- Device
- Advanced Router

Wi-Fi

The Wi-Fi menu contains the following options:

- **Basic**: You can change basic Wi-Fi network settings.

Home	and the second se	⇔ tings	About	Support
Wi-Fi Basic Advanced Connected Devices Mobile Network Device Advanced Router	 WI-FI Basic Settings Muiti SSID Muiti SSID Isolation Allow guest WI-Fi users II Main WI-Fi WI-Fi Name WI-Fi Password WI-Fi Band Privacy Separator SSID Steaith Authentication Method Encryption Method Display WI-Fi Name and Password Maximum Connections Maximum Connections 	 ON OFF ON OFF ON OFF 0899 85e0a162 2.4G SG ON OFF ON OFF WPA2-PSK AES ON OFF I0 Main Wi-Fi Guest Wi-Fi 	ce.	Save Changes
	WI-FI Settings Reset			
	This operation will return all	WI-FI settings to the def	ault.	Reset

- <u>Multi SSID</u>: Select ON if you like to set up a separate guest Wi-Fi network. Your RG1000 will broadcast two Wi-Fi Names.
- <u>Guest Wi-Fi</u>: If ON is selected for Multi SSID, Guest Wi-Fi menu will appear. You can change Guest Wi-Fi settings.
- <u>Multi SSID Isolation</u>: If On is selected, it prevents your devices from communicating across the Main and Guest Wi-Fi access points.
- <u>Enable Guest Mode</u>: If the box is checked, users on the Guest Wi-Fi is not allowed to access the Web User Interface.
- <u>Wi-Fi Name</u>: Service Set Identifier (SSID). To change it, enter a string less than 32 characters as the name for your wireless local area network (WLAN).
- <u>Wi-Fi Password</u>: To change, enter the new Wi-Fi password. The password needs to be at least 8 characters long. I Privacy Separator: If ON is selected, your devices on the same Wi-Fi Name can't make Local Area Network communication.

- <u>Wi-Fi Band</u>: It supports both the 2.4- and 5GHz bands of wi-fi spectrum for top throughput. You can choose Wi-Fi Band depends on your preference.

NOTE: if you connect WLAN printer to your RG1000, Privacy Separator should be OFF to send file from your PC to the printer

- <u>SSID Stealth</u>: If ON is selected, the Wi-Fi name will not be broadcasted. You need to manually enter the Wi-Fi name and connect.
- <u>Authentication Method</u>: The authentication methods are described below.

Authentication Method	WPA2-PSK V		
Encryption Method	WPA3		
Display Wi-Fi Name and	WPA2/WPA3		
Password	WPA/WPA2-PSK		
Secondary Wi-Fi	WPA2-PSK		
Wi-Fi Name	OPEN		

Mode	Description
WPA3	WPA3 is the latest, updated implementation of WPA2
WPA2/WPA3	Apply both the WPA2 and WPA3 scheme.
WPA/WPA2-PSK	Apply both the WPA-PSK and WPA2-PSK scheme.
WPA2-PSK	WPA-PSK is the securer version of WPA with implementation of the 802.11i standard.
OPEN	Authentication and encryption won't be performed. There are risks that private info will be intercepted or network will be used by unauthorized individuals.

- Encryption Method: Select an encryption method from the drop-down list.
- <u>Display Wi-Fi Name and Password</u>: If ON is selected, the Wi-Fi Name and Password will be displayed on your RG1000 device display.
- <u>Maximum Connections</u>: Choose the maximum number of the devices which connect to your device simultaneously. You can also click the right or left arrow to distribute the maximum number of the connected devices between the Main Wi-Fi and the Guest Wi-Fi.
- <u>Wi-Fi Settings Reset</u>: Click the Reset button to reset all Wi-Fi settings to the default.

- Advanced

These advanced settings should only be changed for specific circumstances. Changes to the advanced settings could result in loss of Wi-Fi connection with your devices. Consult your devices' manuals for Wi-Fi specifications.

Home	Me	⊠ ssages	O Settings	About	Support
Wi-Fi	\sim	Wi-Fi Advanc	ed Settings		
Basic		2.4GHz			
Advanced					
Connected Devices		802.11 Mode	802.11	bgn/ax 🗸	
Mobile Network	>	Wi-Fi Channel	Auto	~	
Device	>	5GHz			
Advanced Router	>	802.11 Mode	802.11	ac/ax 🗸	
		Wi-Fi Channel	Auto	~	
		Inactive Time			
		Inactive Time	10 Min	utes 🗸	
			ime is 10 minutes. If the R er button to connect to Wi-I		than 10 minutes, it is required
					Save Changes

- **802.11 Mode**: Select an 802.11 mode from the drop-down list.
- Wi-Fi Channel: Select a Wi-Fi channel from the drop-down list.
- **Inactive time**: if there is no Wi-Fi connection for inactive time settings, the device goes to sleep mode to save battery power.

NOTE: Default Inactive Time is 10 minutes. If the RG1000 is inactive for more than 10 minutes, it is required to press the power button to connect to Wi-Fi.

- Connected Devices

The Connected Devices menu contains the following options:

Home	Me	Dissages S	O ettings	About	Support
Wi-Fi	~	Connected Devices			
Basic Advanced		Main Wi-Fi Devices	MAC Addr	95S	
Connected Devices		DESKTOP-G180003	c0.b5.d7.2	7.fb.9b Ed	dit Block
Mobile Network	>	Guest Wi-Fi Devices	MAC Addr	MAC Address	
Device	>		No Co	nnected Device	
Advanced Router	>				
		Blocked Devices			
		Blocked Wi-Fi Devices	MAC Addr	955	
			No Co	nnected Device	

- <u>Main Wi-Fi Devices</u> Normally this is the hostname of the connected device as set on the connected device. You can use the pencil tool to change the name of any connected device.
- <u>MAC Address</u> The MAC address is a unique network identifier for this connected device.

To Edit a Connected Device:

- 1. Click on the **Edit**. A page opens, allowing you to edit the name of the device.
- 2. Update the name of the device and click **OK**.

To block connection:

- 1. Press **Block** on the device your want to block connection.
- 2. The device blocked will be listed on the Blocked Devices. The blocked devices will not be allowed to connect to your RG1000.
- 3. To unlock the device, press Unblock.

Mobile Network

Mobile Network menu help you to manage your mobile network settings.

Home	M	essages	Settings	About	Support
Wi-Fi	>	Mobile Settings			
Mobile Network	\sim	Manage your mobile b	roadband data connecti	on	
Mobile Settings		Cellular Data	011.0	orr	Toron will shall also be to be been to be
APN		Cellular Data	🖲 ON 🔿	OFF	Turn off cellular data to prevent all internet traffic from using the
SIM					mobile broadband connection
Advanced		Manage Connection N	fode You Prefer		
Device	>	Auto Connect	ON O	OFF	Select auto-connection
Advanced Router	>				
		Connection Mode	Automativ	c(5G Preferrec 🗸	Select connection mode with your plan
		Manage Connection T	ype You Prefer		
		Connection Type	WiFi + US	58 🗸	Select connection type with your plan
		Manage Time of Day A	ccess		
		Time of Day Access	0 ON 🔹	OFF	Select Time of Day Access
		Roaming			
		Data Roaming.	O ON 💿	OFF	
					Save Changes

- Mobile Settings

- Cellular Data: Selecting OFF disconnect all data traffic to the network.
- <u>Auto Connect:</u> Select ON or OFF to make your device automatically connects to the network when it is powered on. If OFF is selected, you need to login the Web Admin to connect to the network next time the device is powered on.
- <u>Connection Mode</u>: Select network type to connect to.
- <u>Connection Type</u>: Select connection type between your host devices and RG1000. Wi-Fi + USB Connect / Wi-Fi Only / USB Only
- Time of Day Access: You can set the time span per day to allow data connection.
- Data Roaming: Turn Data Roaming on or off.

CAUTION! Allowing roaming could result in additional service charges.

APN

APN menu displays current APN settings. You can add new APNs.

Home		essages		Settings		() About			Suppo) ort
WI-FI	>	APN S	ettings							
Mobile Network	\sim	LTE API	Ē							
Mobile Settings		Active	Name	APN	Username	Password	Auth		PDP Type	Delete
APN SIM			profile1	fast.tcom			None	۲	IPv4v6 •	Edit
Advanced		0	profile2	B2B mobile.com			None	•	IPv4v6 *	Edit
Device	>									Delete
Advanced Router	>	0	profile3	b2b static			None	۳	IPv4v6 •	Edit Delete
										•
			Add						Save Cha	inges

To add a new APN, follow the steps below:

1. Click **Add** to access the following page.

TE APN	V						
Active	Name	APN	Username	Password	Auth	PDP Type	Delete
۲	profile1	fast.mobile.com			None •	IPv4v6 v	Edit
٥					None *	IPv4 ¥	OK Cance
C.							
	Add					Save Cha	inges

1. Enter the related parameters as described in the following table.

Parameters	Description
Name	Type the profile name.
Username	Username 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.
Auth (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.

2. Click Save Changes to add the new APN.

Additional APN Options

- To select APN to use, click Active circle, then click **Save Changes**.
- To edit APN info, click Edit, change the settings, and then click Save.
- To delete APN, click Delete.

NOTE: The default APN cannot be edited or deleted.

SIM

SIM Pin Lock

The **SIM** menu allows you to lock the SIM (Subscriber Identity Module) card in your device. The SIM card inside your device can be locked with a PIN code for additional security. If locked, the PIN code must be entered before the mobile hotspot can connect to the Internet whenever you turn on your device. You can also change the SIM PIN.

Home	Me	essages	O Settings	About	Support
WI-FI	>	SIM			
Mobile Network Mobile Settings	~	the PIN below be	fore you are able to conne-		card is locked you must enter
APN SIM Advanced		SIM Status Desired Action	Disabled	PIN •	
Device	>	Enter Current Pil			
Advanced Router	>	Enterin and you		PIN unblock code locked. ny times will PIN unblock evice. You will need to cor	
					Save Changes

Enter the SIM PIN and press **Save Changes** to save your settings. The SIM Status will be changed to Enabled. Once the SIM PIN Lock is enabled, you need to enter SIM PIN to connect to the mobile broadband network each time you power on your RG1000.

NOTE: If you enter the wrong SIM PIN three times, your SIM will be disabled permanently until you enter the PUK code from your service provider.

Carrier Unlick

Your RG1000 could be locked to recognize the SIM from your wireless service provider only. To use other SIMs from other wireless service provider, you need to unlock the carrier setting. The unlock code can be provided by your current wireless service provider.

use of SIM from various different carrier	s.
Unlocked	
Carrier Lock 🗸	
	Lock

- Advanced

Advanced Mobile Network Settings should only be used as directed by your provider's Customer Service personnel. Certain advanced options will reset your device's connections and programming and will require reactivation.

Home	Me	essages	Sett	k ngs	About	Support
Wi-Fi	>	Advanced				
Mobile Network	\sim	Manage your m	obile bradban	d data connec	tion	
Mobile Settings APN		Factory Reset	also called Re	everse Logistic	s, will display	
SIM Advanced	_		rmation and	reset the mode	em to the factory	Factory Reset
Device	\rangle	Factory Reset E	utton			
Advanced Router	>	Manage the res Factory Reset B			ck cover of your device. e O Disable	
						Save Changes

<u>Factory Reset</u>: Click Factory Reset to reset the modem to the factory default value.
 <u>Factory Reset Button</u>: Select Disable to prevent the device from performing the factory rest by pressing the factory reset button underneath the battery cover.

Device

- Preferences

Home	Me	issages S	O Settings	f About	Support
Wi-Fi	>	Preferences			
Mobile Network	>	Display			
Device	\sim	Device Display Timeout	30 seconds	*	
Preferences			1		
Data Usage		LED			
Web Interface		LED Enable	ON O OFF		
Software Update Backup and Restore					Save Changes
System Logs					
Advanced Router	>				

- <u>Device Display Timeout</u>: Select a timeout time from the drop-down list. Your RG1000 display turns off after this timeout period if there is no menu button action to save battery power.
- <u>LED Enable</u>: If ON is selected, the Power Indicator light under the display will blink when the device is on. This power indicator light shows the device is on when the device display is off.

- Data Usage

You can select Day of Month the data usage info cycles, usage limit and unit.

Home		essages	Settings	About	Support
WI-FI	>	Data Usage	N.		
Mobile Network	>	Monthly Reset			
Device Preferences	~	Day of Month	21	٠	
Data Usage		Usage Meter			
Web Interface Software Update		Usage Limit	20	e	x) 500MB, 1500MB, 10GB
Backup and Restore System Logs			GB	•	Cours Observes
Advanced Router	>				Save Changes

- Web Interface

You can change Web Admin login password.

Home	Ме	essages	Settings	About	Support
WI-FI	>	Web Interface			
Mobile Network	>	Change Password			
Device Preferences Data Usage Web Interface Software Update Backup and Restore		If you enter an inco * Password must be * To increase the se	e 8 characters or more. scurity, avoid sequential o add at least 1 number ar word	a row, you will be locked o	#\$%)
System Logs		Confirm New Passa	word		
Advanced Router	>				Save Changes

To change the password:

- Current Password: Enter the current password.
- New Password: Enter the new password.
- Confirm New Password: Enter the new password again.

Click **Save Changes** to save your settings.

Software Update

-

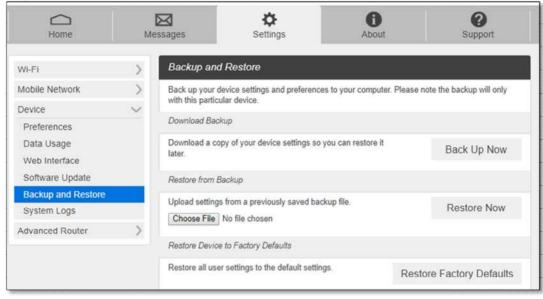
You can check current software version or check if there is a new update is available from this page.

Home	M	essages	Settings	() About	Support
Wi-Fi	>	Software L	Jpdate		
Mobile Network	>	Firmware			
Device	\sim	Current Softw	am Version PG1000	FR 1870	
Preferences Data Usage Web Interface		Upload Softwa			
Software Update					Upload Software
Backup and Restore System Logs		Check for Nev	w Software		
Advanced Router	>				Check

<u>Manual Update</u>: In case you have a new software file provided by your operator, select the file, then press **Upload Software** to update your device software.

<u>Automatic Update:</u> Click **Check** button. Message windows will pop up and guide you through the update process.

Backup and Restore



To back up your device settings to your computer, follow the steps below:

- a. Click Back Up Now.
- b. Click **Save** on the pop-up window.
- c. Choose a location on your computer to save the backup file.
- d. Click Save.
- To restore from the backup, follow the steps below:
 - a. Click **Choose File** to select the backup file in your computer.
 - b. Click Restore now.
- To restore your device to its factory default settings, follow the steps below:
 - a. Click Restore Factory Defaults.
 - b. Click **OK** to confirm the command.

Advanced Router

Configure LAN, Firewall, and Customization settings.

- LAN

From the Web UI, click Settings > Advanced Router > LAN Settings to display the router information shown in the following figure.

Home	Me	essages	Settings	() About	Support
WI-FI	>	LAN Settings			
Mobile Network	\rightarrow	Manage your mobile	broadband data connecti	on	
Device	>	IP Address	192.168.	10 1	Network Access Identifier
Advanced Router	~	Subnet Mask	255.255.2	55.0	
DNS Mode MAC Filtering Firewall IPv4 Firewall IPv6		VPN Passthrough DHCP Server DHCP IP Range			192.168. 10 60
		DHCP Lease Time	43200		Save Changes

- IP address The IP address for your Mobile Hotspot Web Admin
- **Subnet mask** The Subnet mask network setting for your mobile hotspot. The default value 255.255.255.0 is standard for small (class "C") networks. If you change your LAN IP Address, ensure that you use the correct Subnet mask for the IP address range containing the LAN IP address.
- VPN Passthrough ON/OFF Allowing or preventing connected devices to establish a secure VPN connection. When turned ON, this feature allows VPN clients on your connected device to connect through your mobile hotspot to remote VPN servers. The default setting for this feature is ON. When turned OFF, the VPN clients are not allowed to connect.
- DHCP (Dynamic Host Configuration Protocol) server The DHCP server is ON by default. When turned ON, your mobile hotspot automatically assigns local IPs to your other devices you connect to your mobile hotspot. When turned OFF, you will need to set it up manually from the device you want to connect to your mobile hotspot.
- **DHCP IP Range** Defines the local IP range that DHCP server can assign to connected devices.
- DHCP Lease Time DHCP lease time represents the period between when your connected device obtained its IP address from your mobile hotspot and the time when it expires. When the DHCP lease time expires, your connected device automatically releases IP address and asks your mobile hotspot to give it a new one.

- DNS Mode

Your mobile hotspot automatically selects a Domain Name Server (DNS) assigned by your network. The **DNS Mode** option allows you to manually set up two DNS IP addresses.

Home	M	essages Se	Ö ettings	About	Support
Wi-Fi	>	DNS Mode			
Mobile Network	>	Your device automatically s	elects a Domain Name	Server (DNS) or you o	an manually select one.
Device	>	DNS Manual Mode	O ON @ OF	F	
Advanced Router	~	Out of Service Notification		F	
DNS Mode		NAT Timeout	200		
MAC Filtering Firewall IPv4 Firewall IPv6					Save Changes

To manually set a Domain Name Server:

- 1 Click the **ON** button to enable **Manual DNS**.
- 2 Enter the IP address of the first DNS in the DNS 1 IP address field.
- 3 Enter the IP address of the second DNS in the DNS 2 IP address field.
- 4 Click Save Changes button.

- MAC Filtering

The MAC filtering allows only selected devices to access your mobile hotspot Wi-Fi network. By default, MAC filtering is turned **OFF**.

Home	Me	essages	Settings	About	C Support		
Wi-Fi	>	Wi-Fi MAC Filt	ering				
Mobile Network	\rangle	WI-Fi MAC Filterin	O OFF (A	llow all devices to access with	Password)		
Device	>		ON (All	 ON (Allow only users on permitted list) 			
Advanced Router	\sim	Permitted Device	List MAC Add	ress			
LAN Settings DNS Mode				ок с	ancel		
MAC Filtering		Add					
Firewall IPv4					Save Changes		
Firewall IPv6							

To enable MAC Filtering,

- 1. Select ON.
- Press Add to add a line to enter permitted device name and MAC address, then click OK. When entering MAC addresses, use ":" as the separators (for example, c2:b5:d7:27:fb:9b).
 - To add more, press **Add** to add another line.
- 3. When completed adding devices, press Save Changes.

NOTE: Once MAC filtering is set up, only listed device can access your mobile hotspot Wi-Fi network. The MAC filtering has no effect on devices connected via USB connection or Ethernet connection.

- Firewall IPv4

From the Web UI, click **Settings > Advanced Router > Firewall IPv4**. You may set up firewall rules to protect your network from virus and malicious activity on the Internet.

Vi-Fi	>	Firewal	1					
Nobile Network	>	Please co	onfigure IP Addr	ess Filtering or Port F	orwarding in or	der to apply a	dvanced fir	ewall features
Device	>	Firewall S	witch	ON O	OFF			
dvanced Router	\sim	Port Blac	klist					
LAN Settings								
DNS Mode		Port Black	klist	O ON 💿	OFF			
MAC Filtering		Filter paci	kets using the f	ollowing rules when sp	pecified with pro	otocol, port ar	nd IP addres	SS.
Firewall IPv4		Port Forw	arding					
Firewall IPv6		10.0			2000 C			
		Port Forw	arding	ON O	OFF			
		Port Forw	arding enables	computers to access	WWW, FTP or	other service:	s provided b	y the LAN
		to this ad	dress.	N address. Packets with the computer providir				
		- Protocol	Protocols app	lied by services.				
		- Save Ch	nanges to apply	settings.				
		Name	WAN Port	LAN IP Address	LAN Port	Protocol	Status	Options
					No Item			
			Add					

- **Firewall Switch** To set up Port Blacklist and Port Forwarding, turn Firewall Switch **ON**. If Firewall Switch is **OFF**, both Port Blacklist and Port Forwarding settings are not active.
- **Port Blacklist** You can block outbound forward packet by setting up a rule in the blacklist. To set up the rule,
 - 1. Turn **ON** Port Blacklist.
 - 2. Press Add to create a line to setup a rule.
 - 3. Enter the name of the rule you want to set up.
 - 4. Enter IP address of the site you want to restrict outbound forward packet.
 - 5. Enter Port number of the outbound forward packet.
 - 6. Select Protocol and Status **ON/OFF**: **ON** means the rule is in active. **OFF** means the rule is not active.
 - 7. Press **OK** to complete set up, then press **Save Changes**.
- **Port Forwarding** You can allow inbound packet for specific port number by setting up port forwarding rule. To set up Port Forwarding,
 - 1. Turn **ON** Port Forwarding.

- 2. Press **Add** to create a line to set up a rule.
- 3. Enter the name of the rule you want to set up.
- 4. Enter WAN port number of allowed inbound forward packet.
- 5. Enter LAN IP address your connected device that is assigned by your mobile hotspot.
- 6. Enter LAN port number of allowed inbound forward packet.
- 7. Select Protocol and Status **ON/OFF**: **ON** means the rule is in active. **OFF** means the rule is not active.
- 8. Press **OK** to complete set up, then press **Save Changes**.

- Firewall IPv6

WI-FI	>	Firewall IPv	6			
Mobile Network	>	Firewall for IPv	6			
Device	>	Firewall Switch	2	ON O OFF		
Advanced Router	\sim	Port Whitelist				
LAN Settings DNS Mode MAC Filtering Firewall IPv4 Firewall IPv6		Port Whitelist Port Whitelist v	rt: The Value ra locols applied b			
		Name	Port	Protocol	Status	Options
				No II	em	
		Add	i			
						Save Changes

- Firewall Switch To set up Port Whitelist, turn Firewall Switch ON. If Firewall Switch is OFF, Port Whitelist settings is not active. By default, the Firewall Switch for IPv6 is ON to restrict inbound forward packet from outside.
- **Port Whitelist** You can allow inbound forward packet of specific port number by setting up Port Whitelist. To set up Port Whitelist,
 - 1. Turn **ON** Port Whitelist.
 - 2. Press Add to create a line to set up a rule.
 - 3. Enter the name of the rule you want to create.
 - 4. Enter the port number you want to allow inbound forward packet.
 - 5. Select Protocol and Status **ON/OFF**: **ON** means the rule is in active. **OFF** means the rule is not active.
 - 6. Press **OK** to complete set up, then press **Save Changes**.

About

View your device's connection information, firmware information, WWAN information, Wi-Fi details and device information.

From the Web UI main screen, click the **About** tab to view the available information.

Home	Messages	Settings	About	? Support
Account		Device		
My Number ICCID IMSI IMEI Wi-Fi Details	14254997830 8901260171789460370F 310260178946037 358507752005019	Model Manager Hardware Revisio Power State Current Voltage Battery Charge Le	Online 3.953V	spot
WI-FI Name WI-FI Password MAC Address Encryption WI-FI Devices Max WI-FI Devices	RG1000a 076A 3161a38b F4:63:49:BC:07:6A WPA2 AES 10	Battery Status WWAN Info IP Address Lifetime Transferr		7, 2607 fb90 4a29 f6 60 61 f2 1a81
Broadcast Network Name	Show			Save to File
Software Version Modem Version	RG1000.FR.1870 RG1000.FR.M1870			
Debug Info				
fiew detailed diagnostic infor	mation about your device.			

Support

Obtain support information from the Web UI Support Tab. From the Web UI main screen, click the **Support** tab to view the available options.

Home	Messages	C Settings	About	Support
User Guide		Terms ar	nd Conditions	
Download		0	pen	
		Custome	er Care	
Device Support Go to Support, find inform tutorials, and community fi	ation on your device along with	videos,		
toonals, and community i	and the point of the	Manufac	turer	

4

Troubleshooting

Overview First Steps Common Problems and Solutions

Overview

The following tips can help solve many common problems encountered while using the RG1000.

First Steps

- 1 Make sure you are using your RG1000 in the correct geographic region (within coverage).
- 2 Ensure that your wireless coverage extends to your current location by using the interactive Wireless Carrier's coverage map tool.
- 3 Ensure that you have an active service plan.
- 4 Restarting your computer and your RG1000 can resolve many issues.

IMPORTANT! Before contacting customer care, be sure to restart both your RG1000 and any device that is currently connected.

Common Problems and Solutions

RG1000 just powered off without pressing the Power/Menu button. Why?

This may occur under Battery depletion or overheating from excessive usage for a long time. To restore power, manually press and hold the Power button to turn on your RG1000. If the battery is depleted, charge the battery with the AC charger provided.

IMPORTANT! If the power button will not start your RG1000, please try Power Reset (see **How do I perform a Power Reset on RG1000?** below).

How do I perform a Power Reset on RG1000?

<u>Using the power button</u>: Press and hold the power button for 10 seconds until the RG1000 restarts.

<u>By replacing the battery</u>: If pressing and holding the power button for 10 seconds does not restart the RG1000, open the battery cover, take out the battery and re-install the battery after 5 seconds. Put the battery cover back and turn on the RG1000 by pressing the power button.

How do I perform a Reset?

<u>Using the factory reset button</u>: Remove the battery back cover. Make sure the battery is installed and your RG1000 is on. Press down the reset button for 3 seconds and release. Then, your RG1000 will perform the reset and restart automatically.



RESET BUTTON

5

Regulatory Information

Regulatory Statements Safety Hazards

Regulatory Statements

FCC Equipment Authorization ID: XHG-RG1000

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.

SAR Information

The exposure standard for your device uses a unit of measurement called the Specific Absorption Rate ("SAR").

SAR is the unit of measurement for the amount of RF energy absorbed by the body when using a mobile device. Although the SAR is determined at the highest certified power level, the actual SAR value of the device while in operation can be well below the level reported to the FCC. This is due to a variety of factors including its proximity to a base station, the design of the device and other factors. What is important to remember is that each device meets strict Federal Government guidelines. Variations in SARs do not represent a variation in safety. All devices must meet the federal standard, which incorporates a substantial margin of safety. SAR values at or below the federal standard of 1.6 watts/kg (W/kg) are considered safe for use by the public. This product meets current FCC Radio Frequency Exposure Guidelines. Additional details at FCC website:

www.fcc.gov/oet/ea

Body-Worn Operation

Please note this important safety information regarding radio frequency (RF) radiation exposure and near-body operation. To ensure compliance with RF exposure guidelines, the device must be used at least 10 mm from your body. Failure to observe this warning could result in RF exposure exceeding the applicable guideline limits.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC CAUTION: Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

NOTE: The Radio Frequency (RF) emitter installed in your modem must not be located or operated in conjunction with any other antenna or transmitter, unless specifically authorized by Franklin Wireless.

Product Certifications and Declaration of Conformity

Product certifications and Declarations of conformity documentation may be consulted at Franklin Wireless, 9707 Waples Street, Suite 150, San Diego CA 92121, U.S.A, <u>https://www.franklinwireless.com</u>

Safety Hazards

Follow Safety Guidelines

Always follow the applicable rules and regulations in the area in which you are using your device. Turn your device off in areas where its use is not allowed or when its use may cause interference or other problems.

Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, inadequately shielded electronic equipment may be affected by the RF signals generated by your device.

Medical and Life Support Equipment

Do not use your device in healthcare facilities or where medical life support equipment is located as such equipment could be affected by your device's external RF signals.

Pacemakers

- The Health Industry Manufacturers Association recommends that a minimum separation
 of six inches must be maintained between a device and a pacemaker in order to avoid
 potential interference with the pacemaker. These recommendations are consistent with
 the independent research by and recommendations of Wireless Technology Research.
 Persons with pacemakers should always follow these guidelines:
- Always keep the device at least six inches away from a pacemaker when the device is turned on.
- Place your device on the opposite side of your body where your pacemaker is implanted in order to add extra distance between the pacemaker and your device.
- Avoid placing a device that is on next to a pacemaker (e.g., do not carry your device in a shirt or jacket pocket that is located directly over the pacemaker).
- If you are concerned or suspect for any reason that interference is taking place with your pacemaker, turn your device OFF immediately.

Hearing Devices

When some wireless devices are used with certain hearing devices (including hearing aids and cochlear implants) users may detect a noise which may interfere with the effectiveness of the hearing device.

Use of Your Device while Operating a Vehicle

Please consult the manufacturer of any electronic equipment that has been installed in your vehicle as RF signals may affect electronic systems in motor vehicles.

Please do not operate your device while driving a vehicle. This may cause a severe distraction and in some areas, it is against the law.

Use of Your Device on an Aircraft

Using your device during flight may violate FAA regulations. Because your device may interfere with onboard electronic equipment, always follow the instructions of the airline personnel and turn your device OFF when instructed to do so.

Blasting Areas

In order to avoid interfering with blasting operations, your device should be turned OFF when in a blasting area or in an area with posted signs indicating that people in the area must turn off two-way radios. Please obey all signs and instructions when you are in and around a blasting area.

Proper Battery & Adapter Use and Disposal

- Do not disassemble or open crush, bend or deform, puncture or shred.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or another hazard.
- Only use the battery for the system for which it is specified.
- Only use the battery with a charging system that has been qualified with the system per CTIA Certification Requirements for Battery System Compliance to IEEE 1725. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or another hazard.
- Do not short circuit a battery or allow metallic conductive objects to contact battery terminals.
- Replace the battery only with another battery that has been qualified with the system per this standard, IEEE-Std-1725. Use of an unqualified battery may present a risk of fire, explosion, leakage or other hazard. Only authorized service providers shall replace the battery.
- Promptly dispose of used batteries in accordance with local regulations.
- Battery usage by children should be supervised.
- Avoid dropping the battery. If the battery is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.
- Improper battery use may result in a fire, explosion or another hazard.
- The host device shall only be connected to CTIA certified adapters, products that bear the USB-IF logo or products that have completed the USB-IF compliance program.

Document Revision History

Revision: Rev.1.1 Date: Jul.19, 2021

Glossary

Glossary

Term	Definition
LTE	Long-Term Evolution
802.11(b/g/n/ac)	A set of WLAN communication standards in the 2.4GHz frequency band.
Bps	Bits per second
Broadband	High capacity, high-speed transmission channel with a wider bandwidth
	than conventional modem lines.
DHCP	Dynamic Host Configuration Protocol
DHCP Server	A server or service with a server that assigns IP addresses.
DNS	Domain Name System
Firmware	A computer program embedded in electronic devices. Firmware usually
	contains operating code for the device.
GB	Gigabyte
Hotspot	A Wi-Fi (802.11b/g/n/ac) access point or the area covered by an access
	point.
HTTP	Hyper Text Transfer Protocol
IMEI	International Mobile Equipment Identity
IMSI	International Mobile Subscriber Identity
IP	Internet Protocol
IP Type	The type of service provided over a network.
IP Address	The address of a device attached to an IP network.
ISP	Internet Service Provider
Kbps	Kilobits per second
LAN	Local Area Network
MAC Address	Media Access Control address
Mbps	Megabits per second
MSID	Mobile Station Identifier
Network Operator	The vendor who provides your wireless access.
Port	A virtual data connection used by a program to exchange data.
Port Forwarding	A process that allows remote devices to connect to a specific computer within a private LAN.
Port Number	A 16-bit number used by the TCP and UDP protocols to direct traffic.
PRL	Preferred Roaming List
Protocol	A standard that allows connection, communication, and data transfer
	between computing endpoints.
Proxy	A firewall mechanism that replaces the IP address of a host on the internal
	(protected) network with its own IP address.
Router	A device that directs traffic from one network to another.
SIM	Subscriber Identification Module
SSID	Service Set Identifier
TCP/IP	Transmission Control Protocol/Internet Protocol
USB	Universal Serial Bus
VPN	Virtual Private Network
WLAN	Wireless Local Area Network
WWAN	Wireless Wide Area Network