# User guide.

verizon

Verizon 5G MiFi® M1000

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Please visit www.inseego.com for the latest information about your device.

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# 1

# Overview

Overview
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# Overview

Congratulations on your purchase of Verizon's 5G MiFi M1000.

With the M1000 you can access 5G NR networks for faster apps, uploads and downloads. Connect up to 15 Wi-Fi enabled devices to the Internet at once - laptops, tablets, e-readers, gaming consoles and more* - and experience download speeds up to 10 times faster than with Verizon's 4G*.

The M1000 is also backwards compatible to 4G networks, ensuring reliable connectivity when you need it most.

## Package Contents

The Verizon 5G MiFi M1000 package includes:

- 5G MiFi M1000
- Pre-installed 4400mAh Standard Lithium Ion Battery
- Pre-installed SIM Card
- QuickCharge Charger
- Type A to Type C USB Cable
- Quick Start Guide

## System Requirements

- Compatible with all major operating systems
- Works with the latest versions of browsers, including Google Chrome®, Firefox®, Internet Explorer®, Safari™ and Mobile Safari™.

To use Wi-Fi mode, your computer or other device needs Wi-Fi capability and Internet browser software. If your computer does not have Wi-Fi capability you can use Ethernet or USB tethering.

Your M1000 must have proper data service to function.

## About M1000's Internet Connection

With 5G NR you can get the speed you require to work efficiently outside the home or office. You can connect to the Internet, access your corporate intranet, check your email and download attachments.*

## Caring for Your M1000

Like any electronic device, the M1000 must be handled with care to ensure reliable operation. Verizon Wireless recommends the following guidelines:

- Protect the M1000 from liquids, dust, and excessive temperatures.
- Do not apply adhesive labels to the M1000; they might cause the M1000 to potentially overheat and they might alter the performance of the antenna.
- Store the M1000 in a safe place when not in use.

* Actual throughput speed and coverage may vary.

# About Your M1000




❶ **Power Button —** Powers the M1000 on and off.

❷ **Ethernet Port —** Use to connect your device to the M1000 via Ethernet.

❸ **Color Touchscreen (2.4 in) —** Displays device status, data usage, and number of users connected. Swipe left/right/up or down to access available menu options.

❹ **USB-C Port —** Use to connect the QuickCharge charger and Internet over USB-C.




❺ **Master Reset Hole —** Use to reset M1000 back to original factory settings.

❻ **Battery Compartment —** The battery is pre-installed.

❼ **Battery Removal Divot —** Insert a fingernail here and lift to remove the battery.

# Status Indicators

| DISPLAY ICON | | DESCRIPTION |
|---|---|---|
| No icons | | The M1000 is powered off or not receiving power, or the screen is in power-saving mode. |
| Network Signal Strength |  | Network Signal Strength Indicator. More bars indicate more signal strength. |
| Activity Indicator |  | Data is being transferred between the mobile network and your M1000. |
| Roaming |  | Roaming indicator. |
| Messages |  | You have unread messages. |
| Wi-Fi Indicator |  | Your M1000 Wi-Fi network in turned ON. |
| Connected Devices |  | Shows the number of Wi-Fi devices connected to your M1000. |
| Battery Charge Indicator |  | The battery is fully charged. |
| Battery Charge Indicator |  | the battery is critically low and the M1000 will shut down unless the battery is connected to the charger. |
| Battery AC Charging Indicator |  | Displays when the M1000 is connected to the AC charger. |
| Battery USB Charging Indicator |  | Displays when the M1000 is connected via USB and is charging. |

**OTHER ICONS**

| | | |
|---|---|---|
| SIM |  | If this icon is displayed, there is no SIM card installed. |
| SIM |  | If this icon is displayed, your SIM is locked. Real-time data usage meter will not display. |
| SIM |  | If this icon is displayed, there is a SIM error. Check to be sure your SIM card is properly installed. |
| USB Tethered |  | If this icon is displayed, your device is connected to the M1000 via USB. |
| Ethernet Connected |  | If this icon is displayed, your device is connected to the M1000 via Ethernet. |
| Software Update |  | Scroll and select the icon to display the current SW version, and to download and install an update. |

# Power Management

## Charging Your M1000

**IMPORTANT** Before you use your M1000, be sure to charge the battery for at least three hours to ensure a full initial charge. When fully charged, the battery has up to 24 hours of life.

To charge the battery:

1. Connect the USB end of the QuickCharge charger into the charging port of the M1000.
2. Plug the other end of the USB cable into the wall charger and then the wall charger into the appropriate electrical outlet. When the battery is fully charged, the battery icon will turn solid black.

Before using your M1000, read the battery safety information in the "Safety Hazards" section of this guide.

**CAUTION!** Use only batteries and chargers with your M1000 that have been approved by Verizon Wireless for optimal performance and safe operation.

To check your M1000's battery level, from the Home screen, view the battery icon in the status bar.

## Replacing the Battery

To remove and replace the battery:

1. Insert your fingernail in the battery removal groove at the top edge of the battery cover, then lift and remove the battery cover. Set the cover aside.



2. Insert your finger into the battery removal divot and lift the battery out of the battery compartment.




3. Align the gold contacts on the new battery with the gold contacts on the M1000 and gently slide the battery into place.







4. Replace the cover by setting it on the M1000 where the notches align, then press on the cover until it clicks into place and is flat across the entire bottom surface.





S

# Battery Tips

**WARNING!** Always use only approved batteries and chargers with your M1000. The warranty does not cover damage caused by non-approved batteries and/or chargers.

- Do not use sharp objects or use excessive force to remove the battery or to access the battery well, this may damage the M1000 and the battery.
- The battery discharges more rapidly as additional devices access your M1000.
- Battery life depends on the network, signal strength, temperature, features, and accessories you use.
- New batteries or batteries stored for a long time may take more time to charge.
- When charging your battery, keep it near room temperature.
- When storing your battery, keep it uncharged in a cool, dark, dry place.
- Never expose batteries to temperatures below -20°C (4°F) or above 60°C (140°F).
- Never leave the M1000 in an unattended vehicle where it can get too hot or too cold.
- Some batteries perform best after several full charge/discharge cycles.
- It is normal for batteries to gradually wear down and require longer charging times. If you notice a change in your battery life, it is probably time to purchase a new battery.

**IMPORTANT** Whenever you remove or insert the battery, ensure your M1000 is not connected to any device or power source. Never use tools, knives, keys, pens or any type of object to force the door open or to remove the battery. Using any of these types of objects could result in puncturing the battery.

# Replacing the SIM Card

Your SIM (Subscriber Identity Module) card is a small rectangular plastic card that stores your phone number and important information about your wireless service. Your M1000 comes with the SIM card and battery already installed.

To remove the SIM card:

1. Insert your fingernail in the battery removal groove at the top edge of the battery cover, then lift and remove the cover. Set the cover aside.
2. Remove the battery from the battery well.
3. Carefully slide the SIM card backwards to remove from the SIM card slot.




**NOTE** Should your SIM card be lost or damaged, contact your network operator.

To install a new SIM card:

1. Lift to open the battery cover located on the back of the M1000.
2. If necessary, remove the SIM card from the outer card, being careful not to touch the gold-colored contacts.
3. Hold the card with the gold-colored contact points facing down.
4. Insert the SIM card into the slot. The SIM card MUST remain in the SIM card slot when in use.




**CAUTION!** Do not bend or scratch your SIM card. Avoid exposing your SIM card to static electricity, water, or dirt.

2

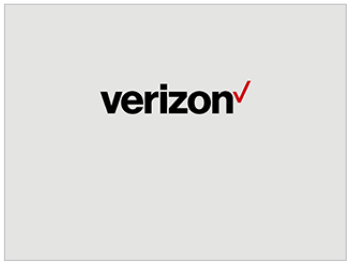
# Using Your M1000's Touchscreen

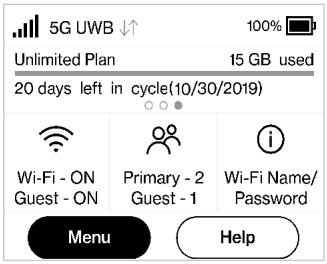
Turning Your M1000 On and Off
Using Your M1000's Touchscreen

# Turning Your M1000 On and Off

- To turn your M1000 on, press and hold the **Power** button for 3 seconds.




- To turn it off, press and hold the **Power** button for 3 seconds..
- To wake the M1000 display, press and release the **Power** button.

## Connecting to Your M1000

You can use the M1000 as a wireless mobile hotspot to connect your computer and up to a total of 15 Wi-Fi enabled devices to the mobile broadband network.

To connect to your M1000:

1. Turn on your Wi-Fi enabled device and your M1000. The M1000 will broadcast its own wireless network and name.

   **Tip!** The steps to connect to a Wi-Fi network vary depending on your device and software. See your device's User Guide for more information.

2. When prompted, enter your Wi-Fi Network password. The M1000 Home screen should now show an additional connected device. Your Wi-Fi enabled device is now connected to the Internet.
3. You can view or change M1000 settings by connecting to the M1000 Admin website at http://my.jetpack or http://192.168.1.1.

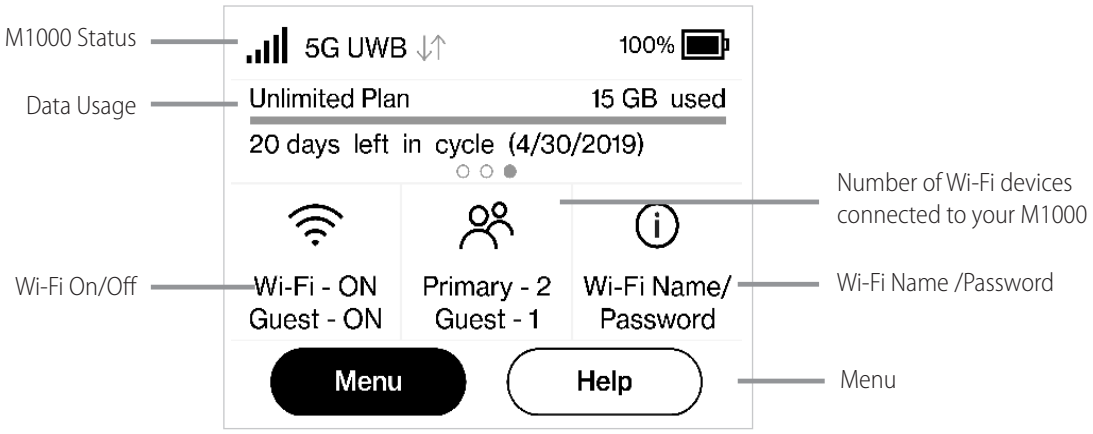
**IMPORTANT** Charge the battery completely before you connect your computer to your M1000. (See Power Management.)

# Using Your M1000's Touchscreen

From the M1000's touchscreen, you can check your M1000's status, view your current data usage, see Wi-Fi and Connected Devices details, and more.

## The Home Screen

The Home screen lets you see what your M1000 is doing at a glance.

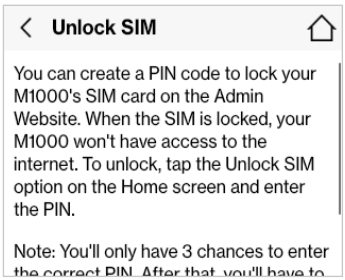



M1000 Home Screen

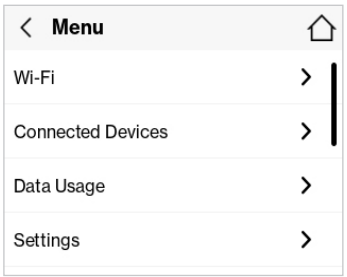
At the top of the screen, you'll see status indicators for network signal strength , data traffic activity , unread system messages , roaming , and battery .

The Data Usage section shows how much of your monthly data you've used and how much time is left until the next billing cycle.

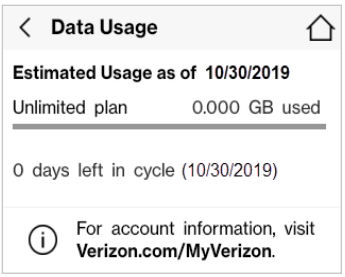
**NOTE** If SIM Lock is turned on, the Data Usage meter won't be shown. Scroll and tap the Data Usage icon to view your current data usage details.




Unlock SIM



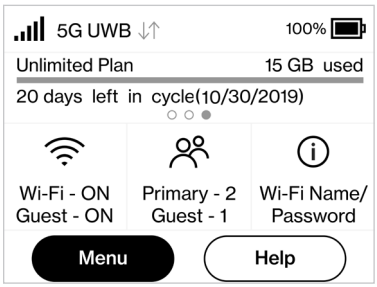

Retrieve Data Usage



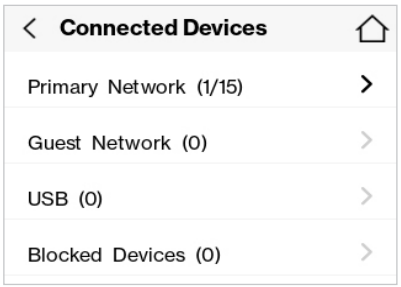

Data Usage Display

The middle of the screen shows you if  Wi-Fi is on or off, and how many devices are connected to your M1000's Wi-Fi network.

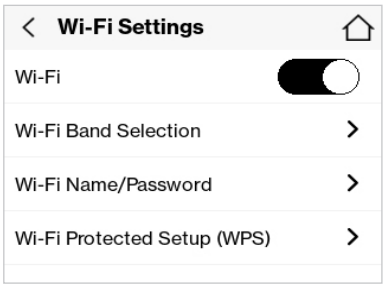
Your Wi-Fi Name and Password are next. For information on changing your Wi-Fi Name and Password, see (See Managing M1000 Settings.).




Tap Menu to Open Menu Options




Swipe Up/Down to Desired Option




Tap to View Desired Option

3

# Managing Your M1000 Using the Touchscreen

About this Chapter
Wi-Fi
Connected Devices
M1000 Settings
Software Update
About M1000
Help

# Managing Your M1000 Using the Touchscreen

## About this Chapter

You can manage, monitor, and customize your M1000 settings directly on the M1000's touchscreen, or by using the M1000 Admin website.

In this chapter, we will show you what features you can manage on your M1000's touchscreen.

For website instructions, including features that can only be managed on the website, see Chapter 4, **Managing Your M1000 Using the M1000 Admin Website.**

For general instructions on using your touchscreen, see Chapter 2, **Using your M1000's Touchscreen.**

## Wi-Fi

Wi-Fi allows you to turn Wi-Fi ON/OFF, and select your Primary and Guest Network settings.

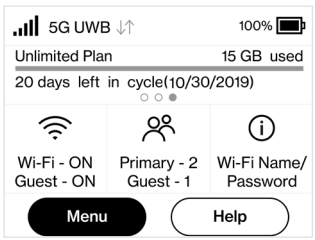
❶ From the Home screen, select **Menu > Wi-Fi**.

❷ Select **Wi-Fi** to display the Wi-Fi options.

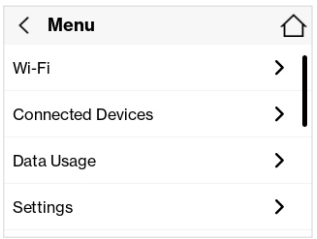
- Select **Wi-Fi Band Selection** to select your Primary and Guest Network settings.

**NOTE** Use the Guest Network to temporarily share Internet access with guests. It creates a separate Wi-Fi network with a different name and password, and provides the same configuration options as the Primary network. Users on the Guest network are isolated from users on your primary network. You can choose to use the Guest Network under either the **2.4 GHz** Band or **5 GHz** Band or don't select either band to turn it off.

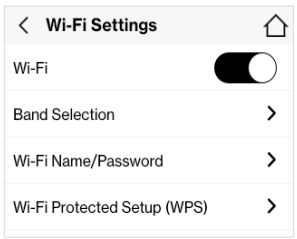
- Select **Wi-Fi Name/Password** to display your current Primary and Guest Network Wi-Fi Name and Password settings.
- Select **Wi-Fi Protected Setup (WPS)** to allow compatible Wi-Fi devices to easily connect to your M1000's Primary or Guest network.



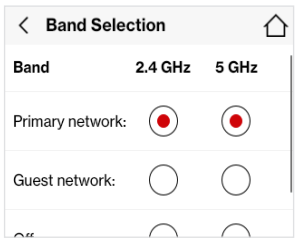
Tap Menu



Select Wi-Fi



Select Wi-Fi option



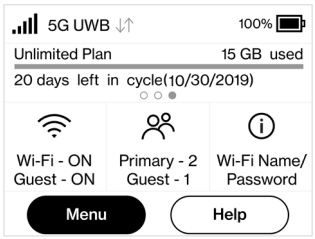
Display Wi-Fi Option Details

# Connected Devices

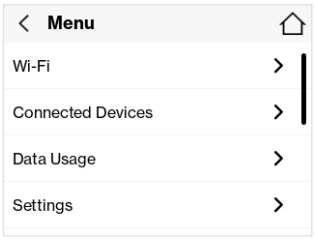
From the Home screen, tap the number of Wi-Fi enabled devices currently connected to your M1000 networks to see the **Connected Devices** screen.

From here you can tap **Primary Network, Guest Network** or **USB** to see the DNS and MAC details for each device connected to the M1000, and to block or unblock each device.

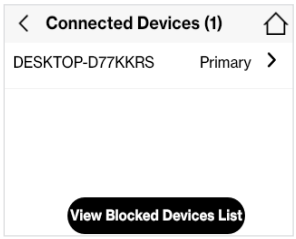
You can also tap to see a list of **Blocked Devices** and unblock devices from that screen.




Tap Menu




Select Connected Devices



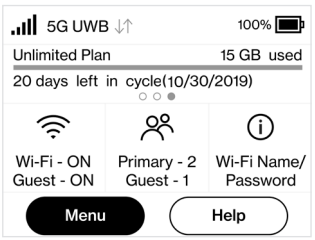

Select Network

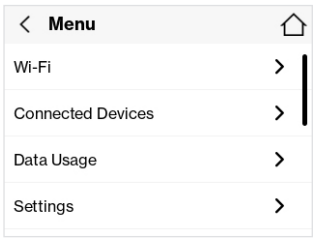


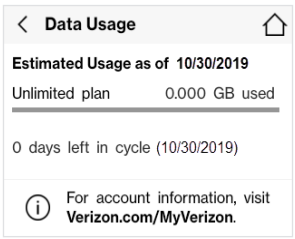

Display Device Details

# Data Usage

To see your estimated data usage from the Menu, from the Home screen tap **Menu > Data Usage.**



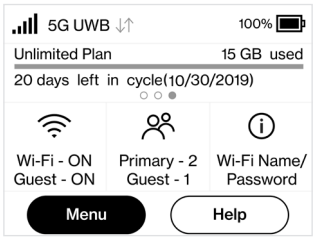




# Settings

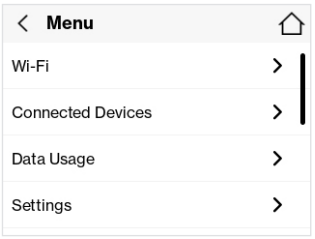
You can change various **M1000 Settings** or reset your M1000 to the original factory settings.

From the Home screen, tap **Menu > Settings**, then choose from one of the following to see the options for that setting:

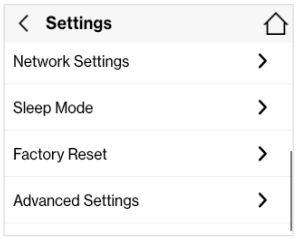
- **Airplane Mode** — Confirm to turn on. Internet will be unavailable and Wi-Fi off.
- **Stealth Mode** — Confirm to turn on. Audio alerts, LED, and touchscreen will turn off.
- **Enable Ethernet Port** — Confirm to turn on. Current sessions terminate and device restarts.
- **Audio Alerts**— Turn alerts ON or OFF from available list of alerts.
- **Screen Timeout** — Select from 30 seconds, 1 minute, 5 minutes or 10 minutes.
- **Network Settings** — Select from list of available networks.
- **Sleep Mode**— Select from 5/15/30/60 minutes or Never when no devices are connected.
- **Factory Reset** — Select Factory Reset to restore all settings to factory default settings.
- **Advanced Settings** — Displays Admin website address and password.



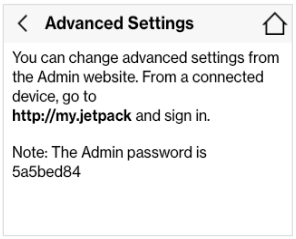

Tap Menu




Select Settings




Select Desired Setting




Display Setting Options

## Speedtest

The Speedtest application measures the speed of your cellular connection. The speed of your devices connected to the M1000 may vary.

To run Speedtest, press the **Start** button to execute Speedtest in the background and provide the server, latency, download and upload results of the test. The test will timeout in 20 seconds if no results are retrieved.

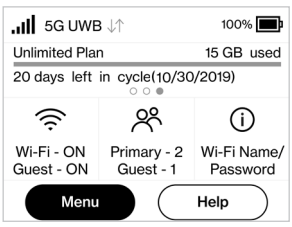
In case of a failure or timeout, an error message will be displayed.

## Software Update

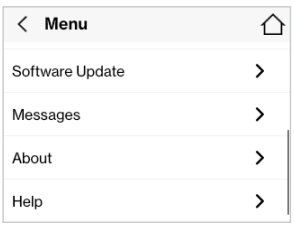
**Software Update** allows you to view the current software version and when the last check was made for updates, lists available updates, and provides an update history. You can also download and install a new update using your M1000 device.

To check for a Software update:

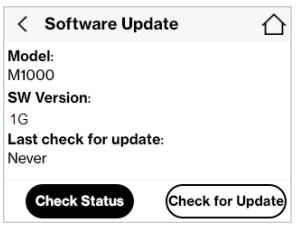
1. On the Home screen, tap **Menu** and select **Software Update** to display the current Software and Configuration versions. Tap **Check for Update** to check for the latest Software version available.
2. If an update is available, you can choose to download and install the update using your M1000.
3. Tap **OK** to return to the Software Update page.



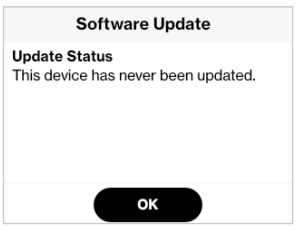

Tap Menu




Select Software Updaqte




Check Saftware Status

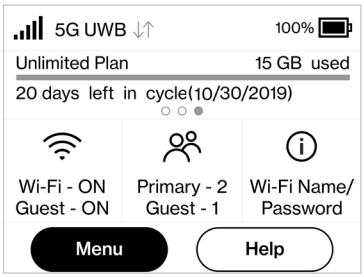



Update Status

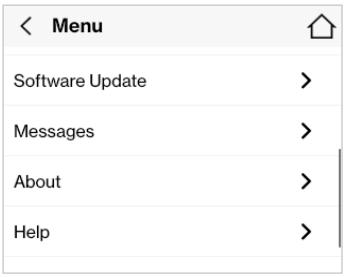
# About M1000

**About M1000** displays information about your M1000, including Internet and roaming status, model and version, wireless and IMEI number, and battery charge level.

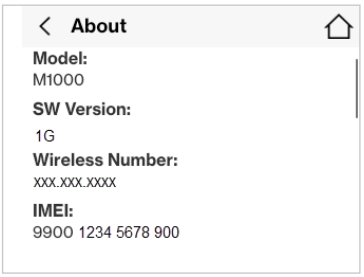
1. On the Home screen tap **Menu**, then select **About M1000** to display model number, software and configuration versions, and wireless number.
2. Swipe up or down to see the IMEI, battery level, internet status, technology, network, signal strength, SNR, and roaming status.
3. You can also check your messages, change your Admin password, restart your M1000, or sign out from the Sign In drop down menu.




About M1000 Option




Internet Connection Status




M1000 Details

# On the M1000 Admin Website

To connect to the M1000 Admin website and customize your M1000 settings:

1. Connect your computer or Wi-Fi enabled device to your M1000 to access the Internet.
2. Open your connected device's web browser and type http://my.jetpack/ or http://192.168.1.1 into the address bar. Press **Enter**. The M1000 Admin Website home page opens.

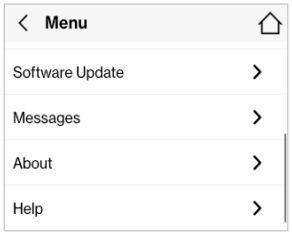
# Help

You can get help right from your M1000's touchscreen.

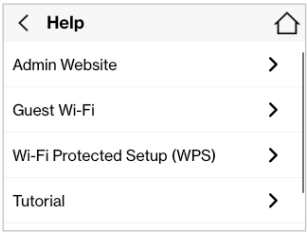
❶ On the Home screen, tap **Help** to open the Help screen options. Help options include **M1000 Admin Website**, **Guest Wi-Fi, Wi-Fi Protected Setup (WPS), Tutorial,** and **Unlock SIM**.

❷ Swipe up/down to highlight the desired Help option, then press to display option choices and information.

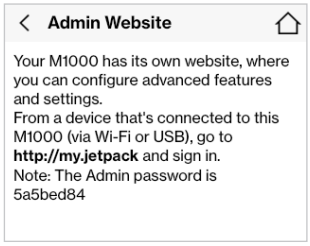
❸ Tap < to return to the Menu screen, or the Home icon ⌂ to return to the Home screen.



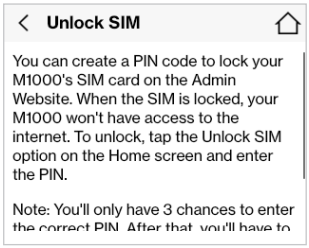

Help Option




Select Help Option




M1000 Admin Website Help




Unlock SIM

# 4

# Managing Your M1000 Admin Website

About this Chapter
The M1000 Admin Website Home Screen
M1000 Data Usage
Managing Wi-Fi
Managing Connected Devices
Managing M1000 Settings
About M1000
Getting Help

# Managing Your M1000 Using the Admin Website

## About this Chapter

In this chapter, we will show you how to manage your M1000 using the M1000 Admin website.

From the M1000 Admin website, you can customize settings including Wi-Fi settings, passwords, and more. You will also find links to the My Verizon website and other online tools to help you get the most out of your M1000.

**NOTE** For instructions on managing your M1000 using it's touchscreen, see Chapter 3, **Managing Your M1000 Using the Touchscreen.**

## Accessing the M1000 Admin Website

To connect to the M1000 Admin website:

1. Connect your Wi-Fi capable device to the M1000.s

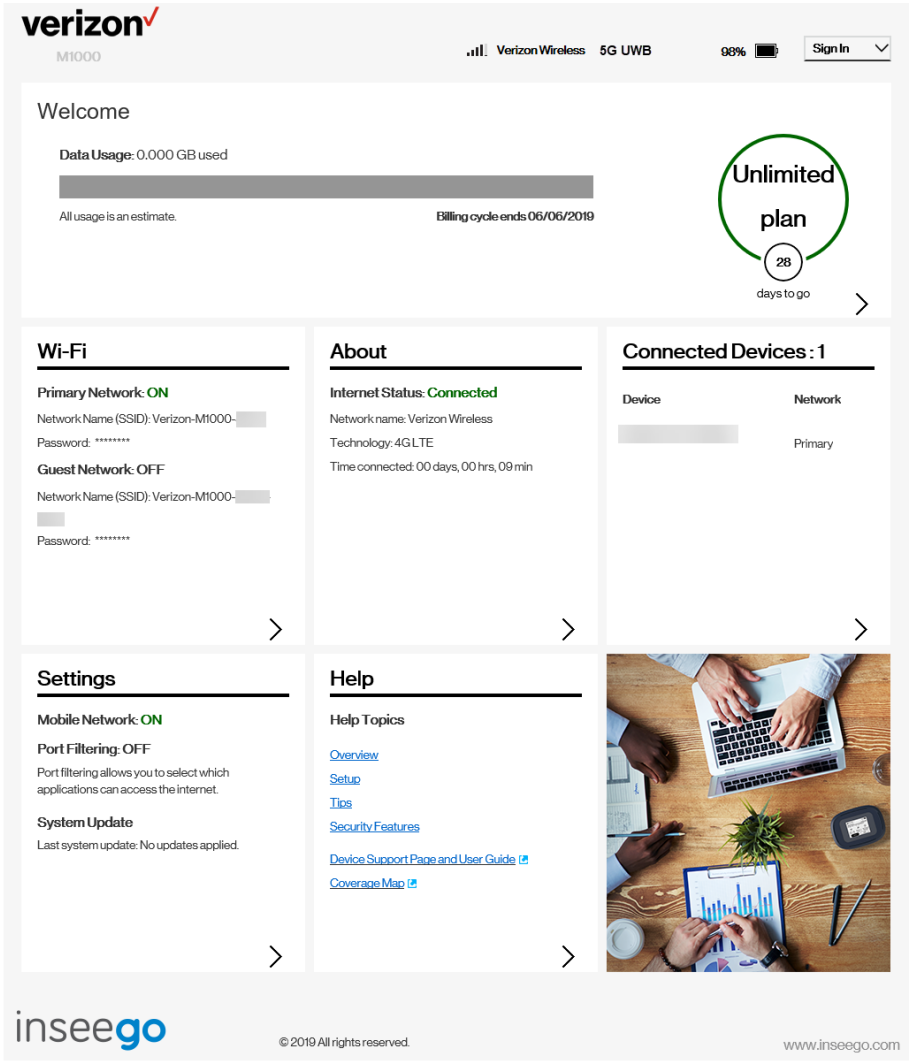
   **NOTE** You must be connected to your M1000's Wi-Fi network to access the Admin website.

2. Open a web browser on your connected device and enter http://my.jetpack/ or http://192.168.1.1.
3. Click **Sign In** in the upper right corner of the screen and sign in with your M1000 Admin password. When you first get your M1000, this will be the same as your Wi-Fi password.
4. You can also change your Admin password, restart your M1000, or sign out from the Sign In drop down menu.

# The M1000 Admin Website Home Screen

The M1000 Home page allows you to quickly access commonly used links and all available menu options for your M1000, and contains the following quick link menu options:

- **Data Usage**
- **Wi-Fi**
- **Connected Devices**
- **M1000 Settings**
- **About**
- **Help**



# Checking Data Usage

Current estimated data usage displays on the Home page, including data used, data remaining, days to go and billing cycle end date.

**NOTE** Roaming charges or roaming minutes may not be included in your estimate. Credits and adjustments to your account may not appear until your next billing statement, and may not be reflected in your current balance. Payments are applied to your account on the same day they are made.

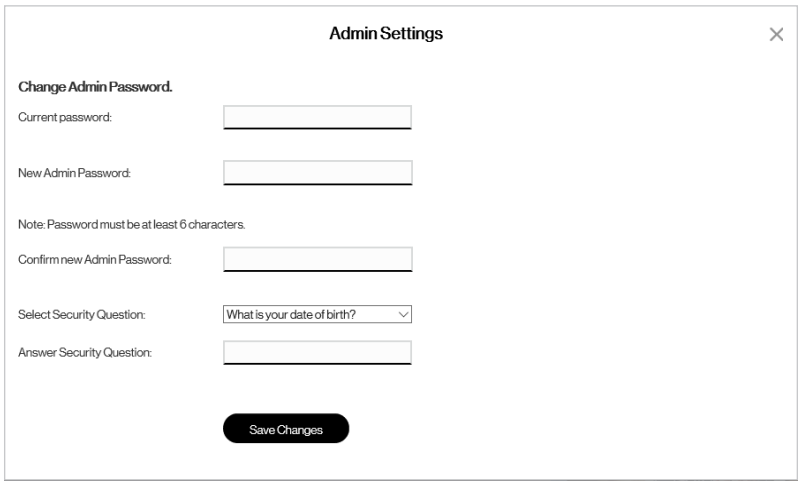
# Changing Your M1000 Admin Password

The Admin Password is used to sign in to Settings. To change your Admin Password:

❶ On the Admin website Home screen, select **Admin Settings** from the Sign In drop down menu. Enter your current Admin password in the **Enter current password** box, then click **Continue**.

❷ Enter your new password in the **Enter new password** box, then re-enter your new password in the **Confirm new password** box.

❸ Select a security question from the drop down menu and enter the answer in the **Answer Security Question** field. Click Save Changes.




**NOTE** The next time you sign in to M1000 Settings, you will need to use the new password.

# Managing Wi-Fi

The Wi-Fi page lets you manage your M1000's Wi-Fi settings. This page is divided into 3 tabs:

- **Settings**
- **Primary Network**
- **Guest Network**

**Settings**

From the Settings tab, you can turn your M1000's Wi-Fi ON/OFF, change Network and Wi-Fi ON/OFF, change Network and Wi-Fi Connections Settings, and customize Band Settings.

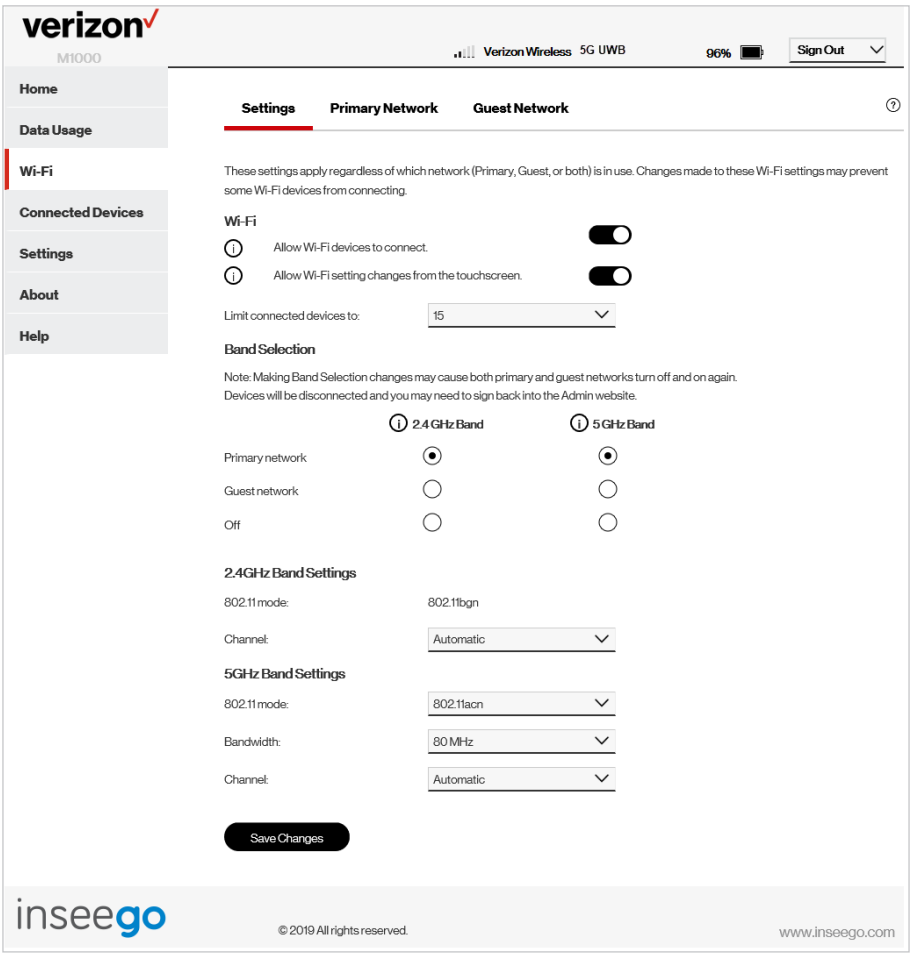
To turn **Wi-Fi** ON/OFF, use the switch and then click **Save Changes** at the bottom of the screen.

To select or turn off **Band Selections** for the Primary and Guest networks, mark the buttons for 2.4 GHz Band and 5 GHz Band. Choose **Off**, **Primary network**, or **Guest network.**

To change the maximum number of Wi-Fi devices that can connect to the M1000 (the default is set to 15), make your selection from the **Limit connected devices to** dropdown menu.

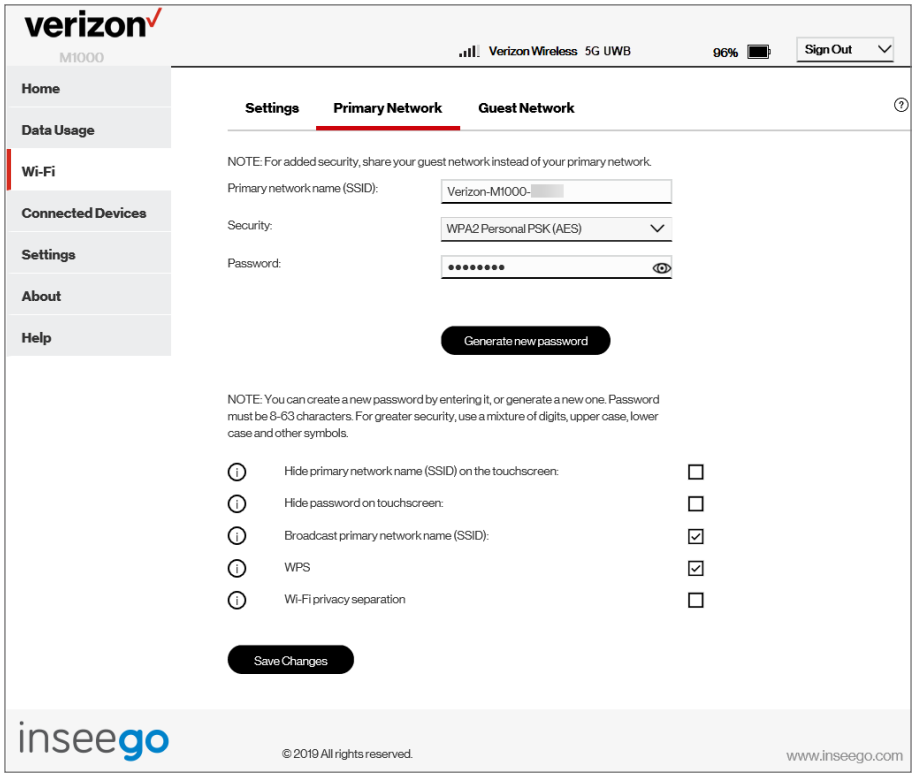
To customize the **Band Settings**:

1. Click on the **2.4 GHz Band Settings** or **5 GHz Band Settings** link to display the available Band Settings options.
2. Make your **Mode**, **Channel**, and **Bandwidth** selections from the dropdown menus and then click **Save Changes**.




## Primary Network

From the Primary Network tab, you can change your Wi-Fi Name (SSID) and Password (Key), select the type of security, and turn Options ON/OFF for your primary network.




To change the Primary Network **Wi-Fi Password (SSID)** enter the new Wi-Fi name into the field.

To change the type of Wi-Fi security for the Primary Network, choose an option from the **Security** dropdown menu.

To change the Primary Network **Wi-Fi Password (Key)**, enter the new password into the field or click Generate New Key. Then click **Save Changes.**

To turn **Options**, such as **Broadcast Wi-Fi Name (SSID)** and **WPS**, ON/OFF for the Primary Network:

❶ Click the **Options** link to display available options. Options currently turned ON will display with a checkmark in a red box.

❷ Click the checkboxes to turn options ON or OFF and then click **Save Changes**.

## Guest Network

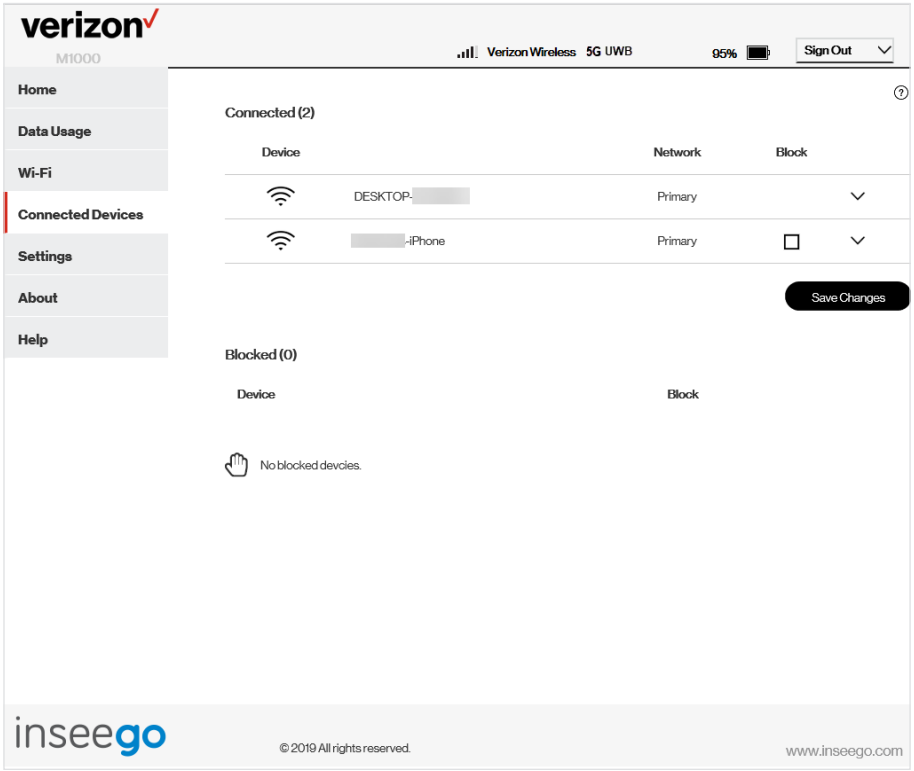
The same settings described above for the Primary Network are available for the Guest Network.

# Managing Connected Devices

The **Connected Devices** page lets you view, edit, and block devices that are currently connected to your M1000 and also unblock devices.

For the **Primary Network** and **Guest Network**, you can see the IP Address, MAC Address, and Link Local of all devices connected to the Wi-Fi network. The Wi-Fi network name is displayed after the heading.

You can also see information on **Blocked Devices**, including the name and MAC address of any blocked devices.




The Primary Network and Guest Network sections list all devices connected to your M1000 via Wi-Fi including:

- **Change Max Wi-Fi Connections** — Allows you to set how many devices can simultaneously connect to the M1000's Wi-Fi network.
- **Wi-Fi** — The first column indicates the type of connected device. You can use the **Edit** option to set or change the type. If the type has not been set, no icon is displayed. Once you set the device type, an appropriate icon is displayed.
- **Band Selection** — This will show either the default hostname of the connected device or the name you choose using the **Edit** option.
- **2.4GHz Band Settings** — Allows you to change the name of any connected device.
- **5.0GHz Band Settings** — Displays an icon to indicate the connection type for each connected device.

### *Editing a Connected Device*

To edit a connected device:

❶ Click the drop down menu for the connected device to open a page where you can edit the device.

❷ Select the appropriate changes and click **Save.**

### *Changing the Maximum Number of Connected Devices*

To change the maximum number of connected devices:

Click **Change Max Connections** on the **Connected Devices** page to open the Wi-Fi Settings page. Select the number of devices from the **Maximum Wi-Fi connected devices** dropdown menu and click **Save Changes**.

### *Blocked Devices*

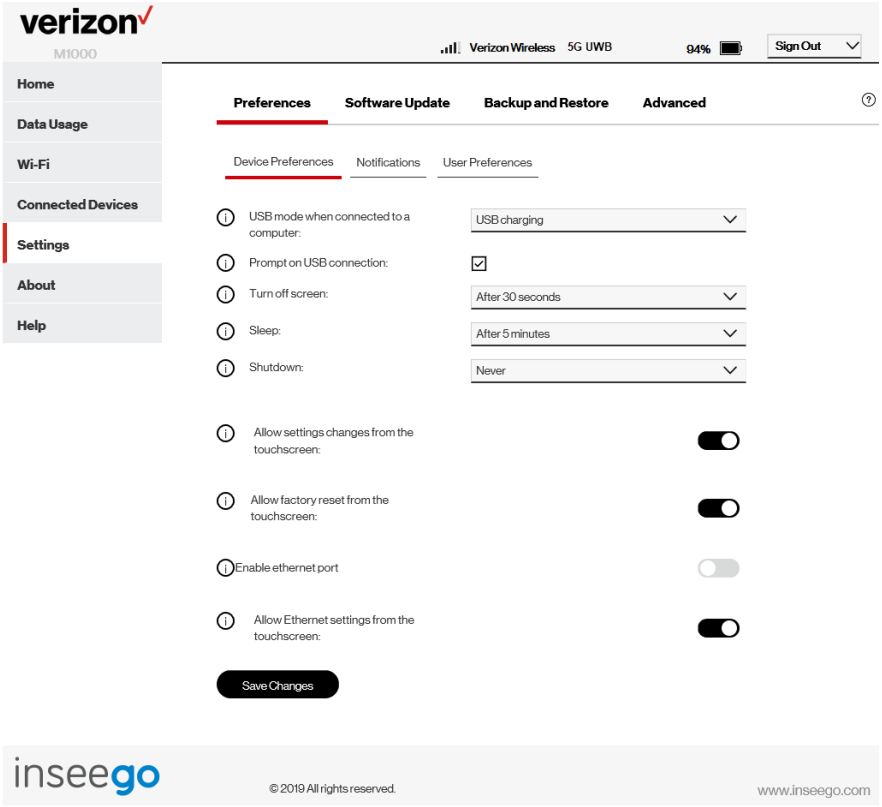
The Blocked Devices section lists any devices you have blocked. Note that since these devices are not currently connected, and are blocked from connecting, they do not have an IP address. Instead, they are identified by their name and MAC address.

Click **Unblock** to unblock a previously blocked device, freeing it to connect again. The unblocked device is deleted from the **Blocked Devices list**, and will reappear in the **Connected Devices** list when it connects.

# Managing M1000 Settings

The **M1000 Settings** page allows you to make administration password and preference changes; obtain software update information; and backup and restore files to your M1000. The M1000 Settings page is divided into 4 tabs:

- **Preferences**
- **Software Update**
- **Backup and Restore**
- **Advanced**




## *The Preferences Tab*

From the Preferences tab, you can manage your M1000's Preference settings. This tab is divided into 3 sections:

- **Device Preferences**
- **Notifications**
- **User Preferences**

## Device Preferences

From the Device Preferences settings, you can turn your M1000's Wi-Fi ON/OFF, change Network and Wi-Fi ON/OFF, change Network and Wi-Fi Connections Settings, and customize Band Settings.

- **Device Preferences** — Set the behaviour of the M1000.
- **Allow Settings Changes** — Allow settings to be changed from the M1000 display.
- **Allow Reset Button** — Allow settings to be changed from the M1000 display

## Notifications

From the Notifications settings, you can turn ON/OFF listed notifications, and turn ON/OFF for selected alerts.notifications.

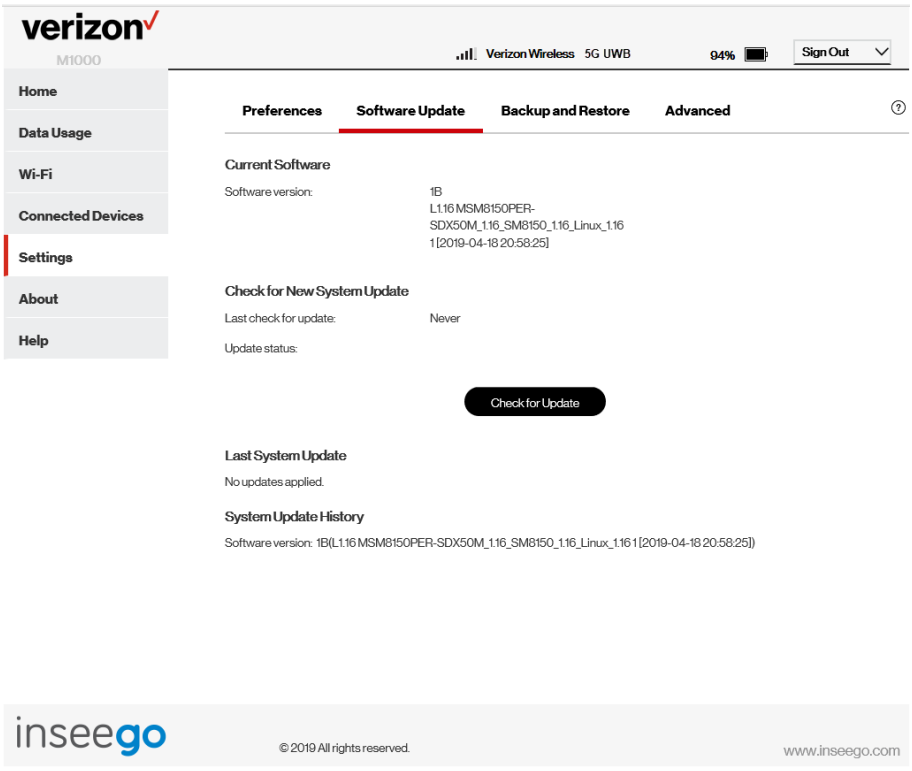
## User Preferences

From the User Preferences settings, you to customize the date, time, distance and number formats.

## *The Software Update Tab*

From Software Update settings, you can:

- **Current software version**— Display information for the current software version, date of last check for updates and the number of updates currently available.
- **Checked for New System Update** — Display the date of the last software update.
- **Last System Update** — Display most recent software update information.
- **System Update History** — Display the software version update history.



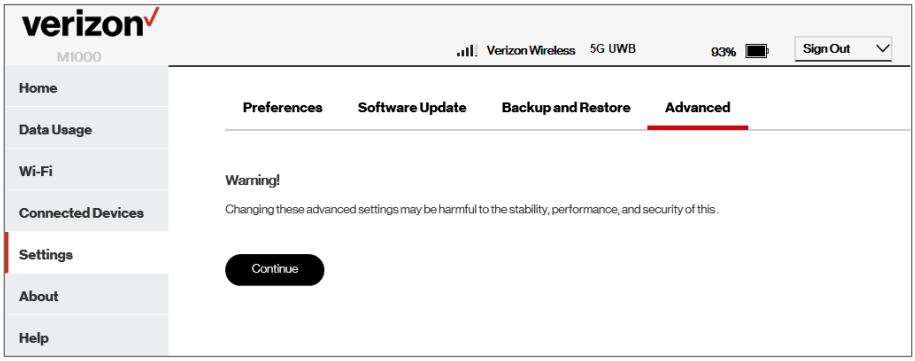
### *The Backup and Restore Tab*

From Backup and Restore settings you can:

- **Backup** — Save your M1000 settings to your computer. You must enter your Admin Password in the **Admin Password** field and click **Download** to save settings to your computer.
- **Restore Settings**— Upload a previously saved backup file from your computer to your M1000. Click **Browse** and select a file, then enter the Admin Password you were using when the backup file was saved in the **Admin Password** field and click **Restore Now**.
- **Restore to Factory Defaults** — Restore all settings on your M1000 to the factory default values. Click **Restore Factory Defaults** to restore all such settings. If prompted for a password, use the default Admin Password which is **admin**.
- **Restart M1000** — Restart your M1000.
- **Turn Off M1000** — Shutdown your M1000.

## *The Advanced Tab*

**IMPORTANT!** Changing the M1000's Advanced settings can adversely affect stability, performance and security of the M1000.




From Advanced settings you can:

- **Networks** — Turn off cellular data to prevent all internet traffic from using the M1000 mobile broadband connection.
- **Manual DNS** — Automatically select a Domain Name Server (DNS). From the Manual DNS settings, you can select up to two DNS (Domain Name Server) IP addresses.
- **SIM** — Find settings and information about the M1000's Subscriber Identity Module (SIM) card. The SIM card inside your M1000 can be locked with a PIN code for additional security. If locked, the PIN code must be entered before the M1000 can connect to the Internet.
- **Firewall** — Determine which Internet traffic is allowed.
- **MAC Filter** — Determine which Internet traffic is allowed.
- **LAN** — Manage your M1000's IPv4 and IPv6 network settings.
- **Port Filtering** — Block outgoing Internet connections and permit only allowed applications to access the Internet. You can also customize a list of allowed applications which permits only certain programs to connect to the Internet.
- **Port Forwarding** — Allow incoming traffic from the Internet to be forwarded to a particular computer or device on your Wi-Fi network. Normally, the built-in firewall blocks incoming traffic from the Internet. Use Port Forwarding to allow Internet users to access any server you are running on your computer, such as a Web, FTP, or E-mail server. For some online games, Port Forwarding must be used in order for the games to function correctly.

## Networks

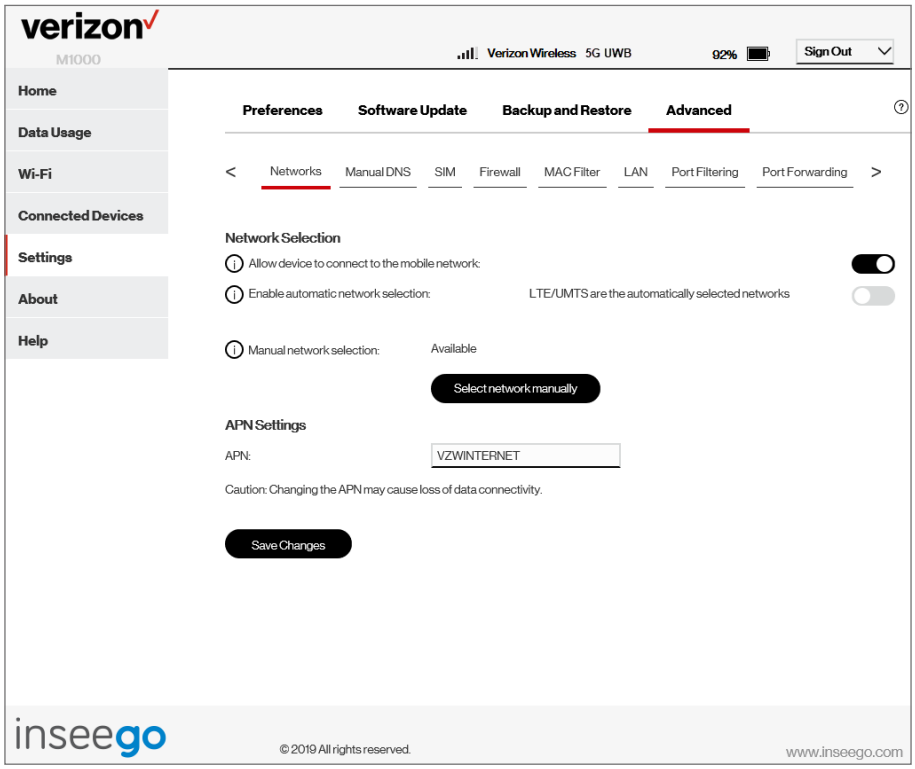
From Networks settings, you can manage:

- **Mobile Network** — Allows you to turn off cellular data to prevent all internet traffic from using the M1000 mobile broadband connection.
- **Preferred network technology** — Allows you to select the network technologies which will be used.
- **APN Settings** — Displays the network carrier APN.

To turn off cellular data and prevent all internet traffic from using the M1000 mobile broadband connection:

- Slide the Mobile Network ON/OFF button to **OFF**, then click **Confirm**.

**NOTE** All internet connections will be immediately terminated when you click **Confirm.**

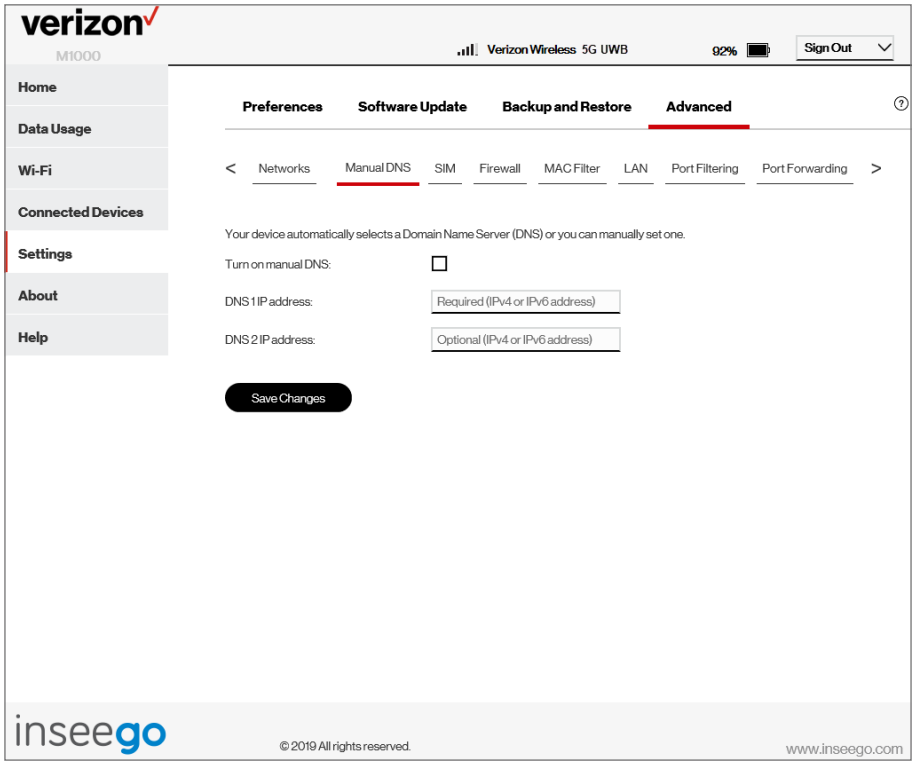



## Manual DNS

The M1000 automatically selects a Domain Name Server (DNS). From the Manual DNS settings, you can select up to two DNS (Domain Name Server) IP addresses.

To manually select a Domain Name Server:

1. Click the box next to **Enable manual DNS**.
2. Enter the IP address for the first DNS in the **DNS 1 IP address** field, then enter the IP address for the second DNS in the **DNS2 IP** address field. Click **Save Changes**.

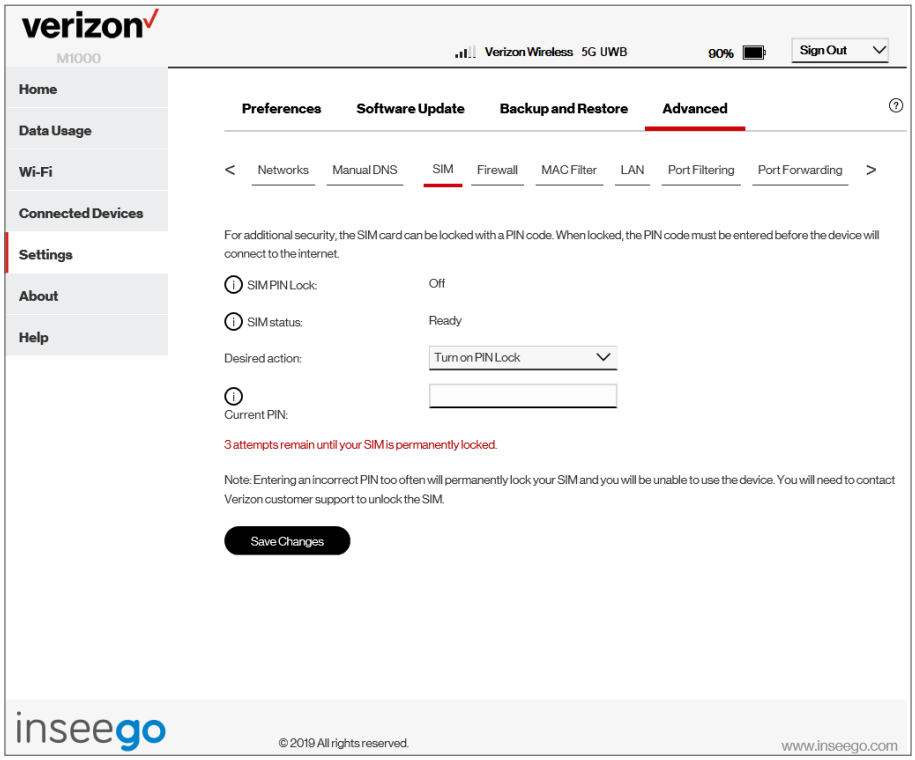



## SIM

In the SIM settings, you'll find settings and information about the M1000's Subscriber Identity Module (SIM) card. The SIM card inside your M1000 can be locked with a PIN code for additional security. If locked, the PIN code must be entered before the M1000 can connect to the Internet. SIM settings include:

- **SIM PIN Lock feature** — If ON, the PIN lock has been turned on, and the SIM PIN must be entered in order to connect to the mobile network. If OFF, the PIN lock feature is not turned on, and the SIM PIN is not required.
- **SIM status** — Indicates the current status of the SIM card. Possible values include:
  - **Ready** — This is the normal state. The SIM PIN is not used.
  - **PIN Locked** — The SIM PIN must be entered before you can use the mobile network.
  - **PUK Locked** — The PUK for the SIM must be entered in order to continue. The PUK can be obtained from your service provider.
  - **Unlocked** — The SIM PIN is needed, but has already been entered.
  - **No SIM** — No SIM was detected. If you do have a SIM, check that it is inserted correctly.
  - **SIM Error** — A SIM was detected, but it did not respond as expected, and cannot be used.
- **Desired action** — Allows you to turn the PIN lock feature ON/OFF.
- **Enter current PIN** — Type the desired PIN in the **Enter current PIN** field. The default PIN is 1111.

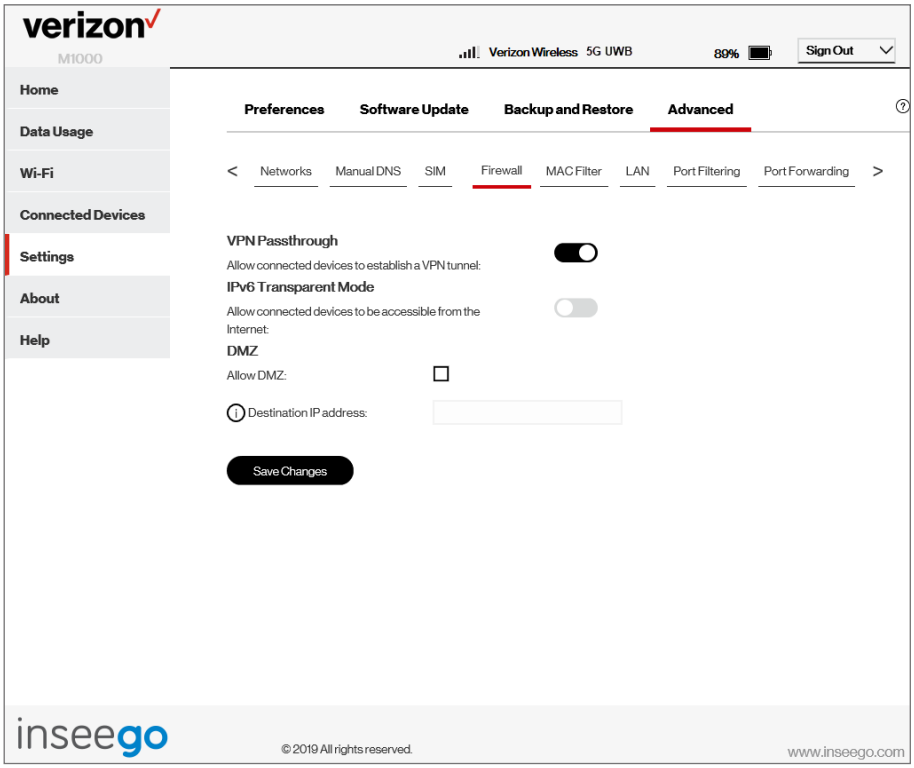
**IMPORTANT!** Entering an incorrect PIN will lock the SIM. **The default PIN is 1111**.




## Firewall

The M1000 firewall determines which Internet traffic is allowed. Firewall settings include:

- **VPN Passthrough** — Turns ON/OFF the VPN feature and allows or disallows connected devices to establish a VPN tunnel.
  - If **ON**, this feature allows VPN clients to connect through the M1000 to remote VPN Servers. Normally, this option should be turned on.
  - If **OFF**, VPN clients are not allowed to connect.
- **IPv6 Transparent Mode** — Allows connected devices to be accessible from the Internet.
- **DMZ (IPv4)** — Allows the connected device specified as the DMZ IP address to receive all traffic which would otherwise be blocked by the firewall.
  - **DMZ (checkbox)** — Use the checkbox to turn ON/OFF the DMZ feature.
  - **DMZ IP Address** — Enter the IP address of the connected device you wish to become the DMZ device.

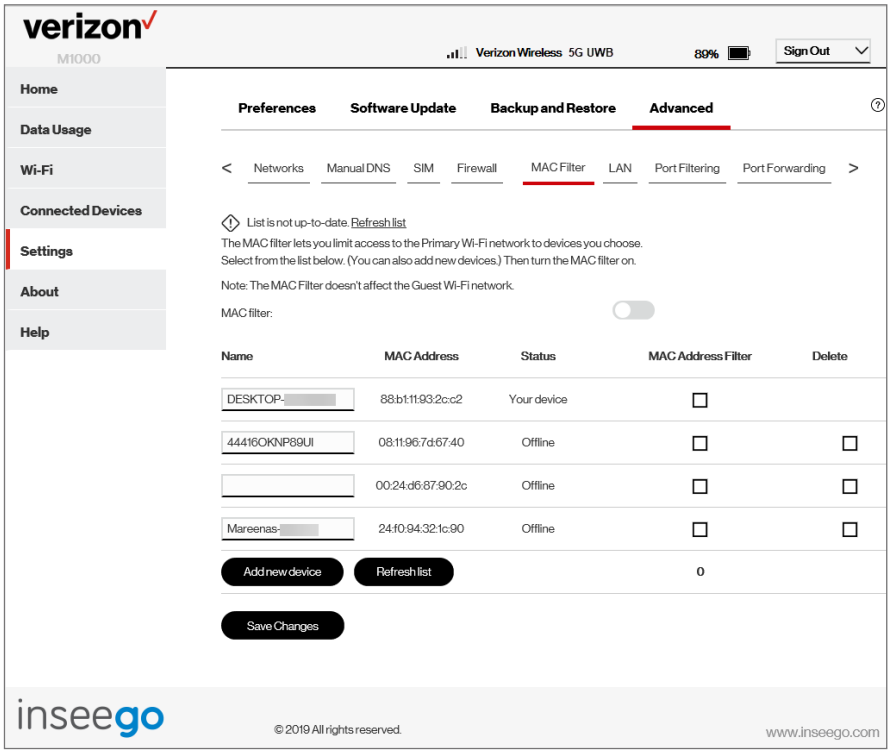



## MAC Filter

The MAC Filter allows you to specify which devices can access the M1000 Wi-Fi network.

**ON/OFF** — Turns the MAC Filter ON/OFF. Before turning on, make sure that the **Allowed Devices** list is not empty. When turning on, any Connected Device which is not in the Allowed Devices list will immediately be disconnected.

- **Refresh** — Use to refresh the screen and delete any unsaved changes.
- **Add Device** — Use to add a new device to the devices list.
- **Save Changes** — Use to activate and save new settings.




To add a device to the device list:

1. Click **Add Device** and enter the device name in the **Name** field.
2. Select the device type from the **Type** dropdown menu and the MAC Address in the **MAC Address field**.
3. Select the **Blocked** and/or **MAC Address Filter** check box as required, then click **Save Changes**.

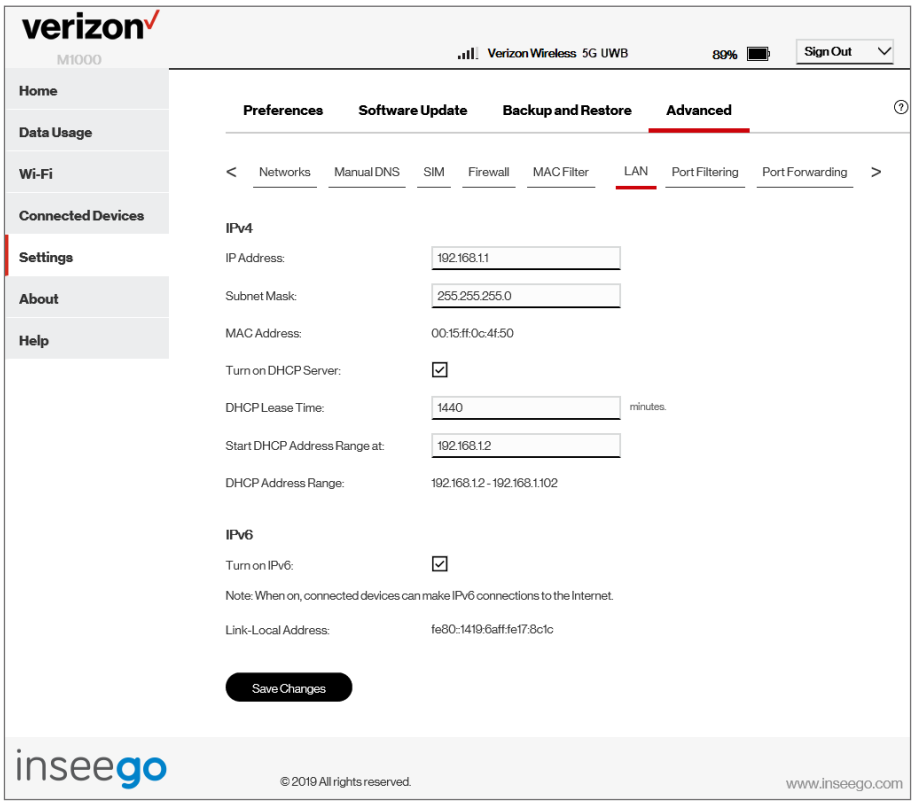
## LAN

From LAN settings, you can manage your M1000's network. These settings include:

- **IPv4**
  - **IP address** — The IP address for the M1000.
  - **Subnet mask** — The subnet mask network setting for the M1000. The default value 255.255.255.0 is standard for small (class "C") networks. If you change the LAN IP Address, make sure you use the correct Subnet Mask for the IP address range containing the LAN IP address.
  - **MAC address** — The Media Access Controller (MAC) or physical address for the M1000.
  - **Turn On DHCP server** — The **Turn On DHCP Server** checkbox turns the DHCP Server feature on or off. Normally this should be left turned on.
  - **Start DHCP address range at** — The start range of IP addresses reserved for use by the M1000's DHCP server table.

- **DHCP address range** — The current range of IP addresses reserved for use by M1000's DHCP server table. If a device with a static IP address wants to connect to M1000's network, the static IP should be outside of the DHCP address range. Most devices do not have a static IP.
- **DHCP lease time** — Use to determine how often connected devices must renew the IP address assigned to them by the DHCP server. Normally this is left at the default value, but if you have special requirements you can change the value.

- **IPv6**
  - **Enable IPv6** — The **Enable IPv6** checkbox turns ON/OFF the IPv6 feature.
  - **Link-Local address** — Displays the local address when IPv6 is turned on.



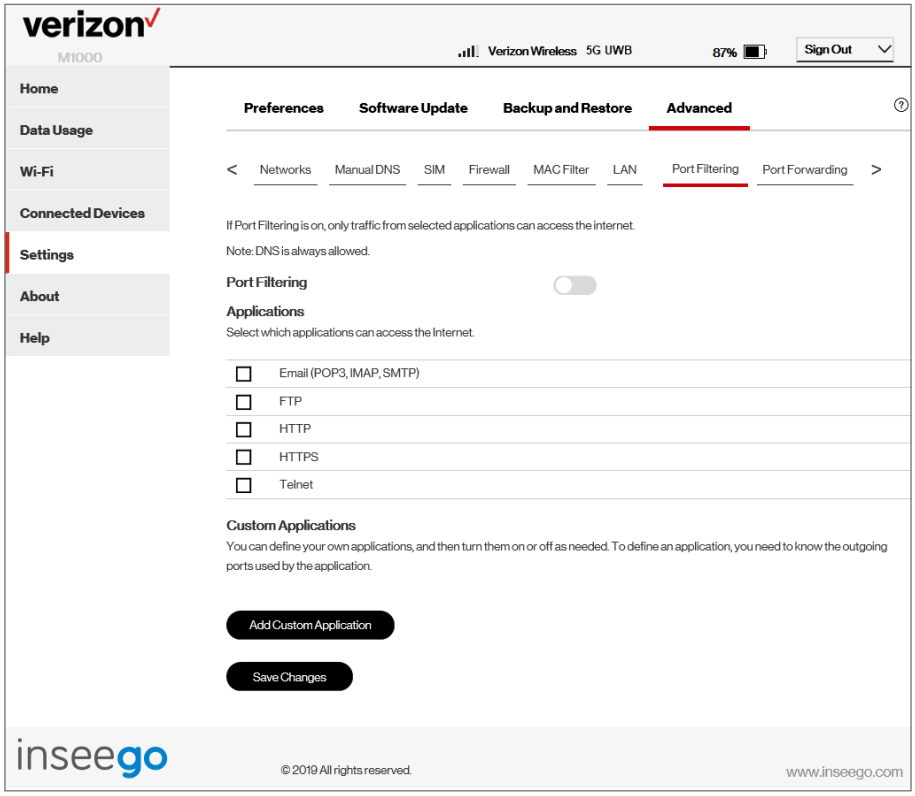
## Port Filtering

Port Filtering allows you to block outgoing Internet connections and permit only allowed applications to access the Internet. You can also customize a list of allowed applications which permits only certain programs to connect to the Internet.

Slide the **ON/OFF** button to **ON** to turn on Port Filtering. When the feature is **turned on** you must select a port filtering application in the **Applications** list to allow that application to connect to the Internet.

Port Filtering settings include:

- **Applications** — Turn on each port filtering application that needs to be able to access the Internet by checking the box next to one or more applications. When port filtering is turned on, all other applications are blocked.
- **Custom Applications** — You can define your own applications, and then turn them ON/OFF as needed. To define an application, you need to know the outgoing ports used by the application.
    - **Add Custom Application** — Use to define your own applications, and then turn them on or off as needed.




To select the applications you want to allow:

1. Mark the checkbox to the left of the application. Click **Add Custom Application** to add a new custom application to the list of allowed applications. You can define and turn on custom Port Filtering applications. You need to know details of the traffic used and generated by the applications you wish to define.

**NOTE** The **Add Custom Application** option is only available when port filtering is turned **ON**. You can add up to ten custom applications.

The Custom Port Filtering page uses check boxes to turn on port filtering for custom applications. Similar to the Applications list, you must turn on custom applications so they can connect to the Internet.

❷ Enter the beginning of the range of port numbers used by outgoing traffic for the custom application being added in the **Start Port** field, and the end of the range of port numbers in the **End Port** field. If the port is a single port instead of a range, type the same value for both the **Start Port** and the **End Port**.

❸ Select the protocol (TCP, UDP, or both) used by each port range from the **Protocol** dropdown menu.

❹ Select the **Delete** checkbox next to any custom application you wish to delete and click **Save Changes**.

## Port Forwarding

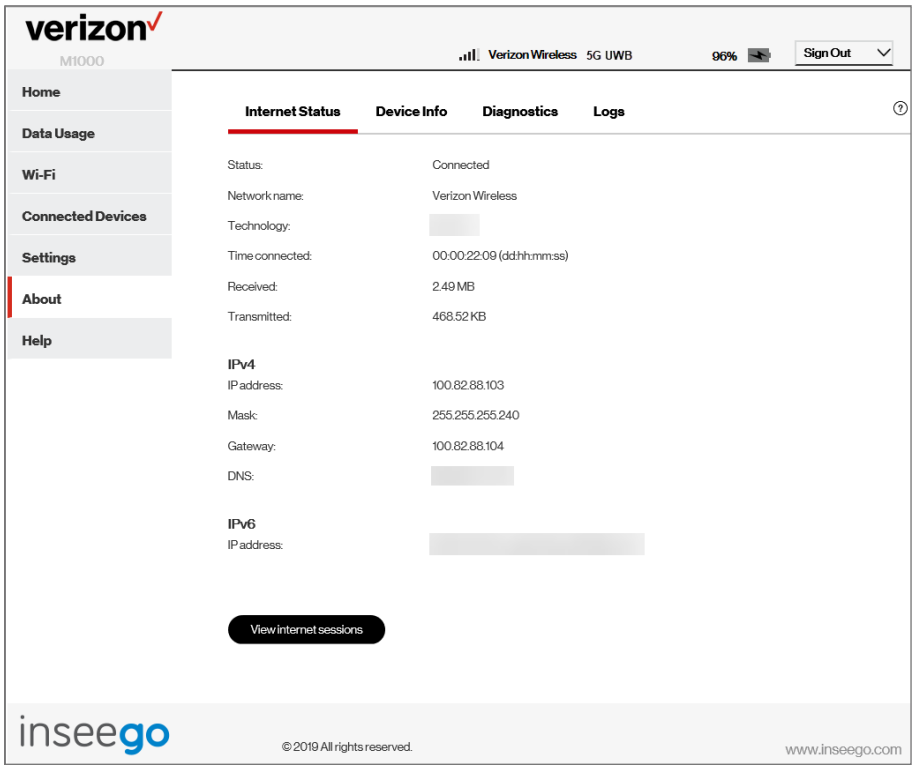
Port Forwarding allows incoming traffic from the Internet to be forwarded to a particular computer or device on your Wi-Fi network. Normally, the built-in firewall blocks incoming traffic from the Internet. Use Port Forwarding to allow Internet users to access any server you are running on your computer, such as a Web, FTP, or E-mail server. For some online games, Port Forwarding must be used in order for the games to function correctly. Port Forwarding settings include:

- **ON/OFF** — Slide the ON/OFF button to ON to activate Port Forwarding.
    - **Default Applications** — The IP address for the selected application. Choose from DNS, FTP, HTTP, POP3, SMTP, SNMP Telnet and TFTP.
- **Custom Applications**
    - **Add Custom Application** — Allows you to define your own applications.

# About M1000

Click **About** on the Menu panel to see detailed information about your M1000. This information is divided into 4 tabs:

- **Internet Status**
- **M1000 Info**
- **Diagnostics**
- **Logs**




## *Internet Status*

From the Internet Status tab, you can find:

### Internet Status

- **Status** — The status of the Internet connection, usually **Connected** or **Disconnected**.
- **Network name** — The name of the network to which this M1000 is currently connected.
- **Technology** — The type of technology used to connect to the Internet.
- **Time connected** — How long the M1000 has been connected to the network.
- **Transmitted** — The amount of data sent to the network.
- **Received** — The amount of data received from the network.

**IPv4**

- **IP Address** — The IP address for the M1000.
- **Mask** — The subnet mask network setting for the M1000. The default value 255.255.255.0 is standard for small (class "C") networks. If you change the LAN IP Address, ensure you use the correct Subnet Mask for the IP address range containing the LAN IP address.
- **Gateway** — The address of the server used to access the Internet.
- **DNS** — The address of the Domain Name Server (DNS).

**IPv6**

- **IP address** — The IP address for the M1000.

## *M1000 Info*

The M1000 Info tab contains detailed information about your M1000 icluding:

- **Manufacturer**
- **Model**
- **My M1000 version**
- **Configuration version**
- **Software Components:**
  - **MiFi OS version** — The M1000 operating system (OS), including its components, version.
  - **Modem FW version** — The current modem firmware version.
  - **Wi-Fi FW version** — The current Wi-Fi firmware version.
  - **Web UI version** — The web user interface version.
  - **Display UI version** — The current user interface version.
  - **PRI version** — The configuration version currently applied to the M1000.

## *Diagnostics*

The Diagnostics tab shows information about the M1000 firmware and other system-level information. You can also view the system log. This tab is used mostly for troubleshooting and is not required for normal operation. The Diagnostics page contains the following information:

- **Modem**
- **4G LTE Network**
- **Field Test**

### Modem

**Modem** information includes:

- **Phone number (MDN)** — The Phone Number or Mobile Directory Number (MDN) is used by the mobile data network to identify this particular data service.
- **MEID** — The Mobile Equipment Identifier (MEID) is used by the mobile data network to identify this particular modem.
- **IMEI** — The International Mobile Equipment Identity (IMEI) number for the M1000.
- **IMEISV** — The International Mobile Equipment Identity (IMEI) combined with an approval number for the M1000.
- **FW version** — The modem firmware version.
- **SIM status** — Status of the SIM card. If the SIM card is missing, or this field indicates some form of SIM error, the M1000 will not be able to connect to the mobile network.
- **ICCID** — The ID number assigned to the SIM Card.
- **MIN (MSID)** — The Mobile Identification Number (MIN) or Mobile Station ID (MSID) is the number associated with the home service provider and the wireless phone number.
- **ESN** — The Electronic Serial Number, which is either blank or a pseudo-ESN which is not guaranteed to be unique for devices that use an MEID.
- **Home SID** — System identifier for the home network.
- **ERI version** — The Enhanced Roaming Indicator version that is currently installed.
- **PRL version** — The version of the Preferred Roaming List (PRL), which tells the modem which non-home carrier towers should provide roaming coverage.

### 4G LTE Network

The 4G LTE Network section has the following options:

- **Status** — Status of the network (Disabled, Not available, or Available).
- **Network operator** — The vendor that currently provides wireless access.
- **Signal strength** — Indicates the signal strength for LTE.
- **SNR** — A measure of signal quality; the higher the number the better the signal.

### Field Test

Click **Field Test** to see a list of low-level network parameters which can be helpful for technical support staff when they troubleshoot network connectivity issues.

## *Logs*

From the Logs tab, you can turn logs ON/OFF, and to delete system logs.

**NOTE** Logs record various operations and are used for troubleshooting and are not needed for normal M1000 operation.

**Turn on Logs**
To turn on system logs on or off, click the **Turn on logs** checkbox and then click **Save Changes**:

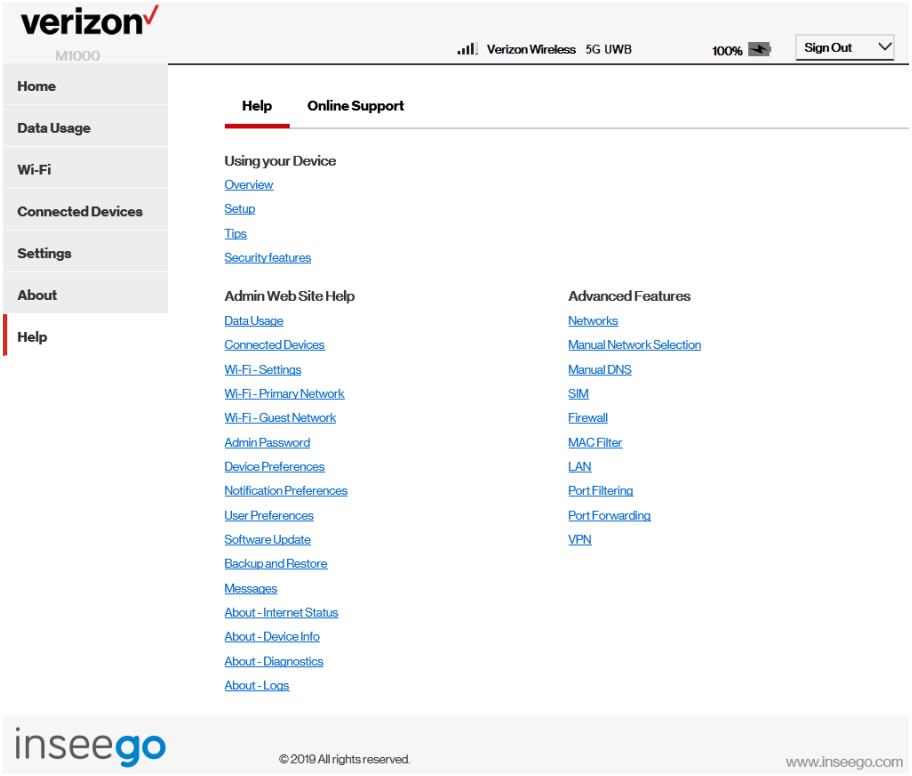
**Delete System Log**
To delete a system log:

1. Select the checkbox next to **Turn on logs**.
2. Select the appropriate time period for the deletion of system logs from the dropdown menu next to **Delete system log**. The choices are after 1 - 4 days. If the system log is full, then the oldest data is discarded, regardless of this setting. Click **Save Changes**.

# Getting Help

The **Help** page provides links to detailed information about using your M1000 and the M1000 Admin Website, as well as links to access M1000 Advanced Features. The Help section provides links to **Using Your M1000**, **M1000 Administrator Web Site Help**, and **Advanced Features**, and contains the following menu options:

- **Using Your M1000**
  - **Overview**
  - **Setup**
  - **Tips**
  - **Security Features for M1000 administrators**
- **M1000 Administrator Web Site Help**
- **Advanced Features**



# 5

# Troubleshooting

Overview
Common Problems and Solutions
Technical Support

# Overview

When properly installed, the M1000 is a highly reliable product. Most problems are caused by one of these issues:

- System resources required by the M1000 are being used by other devices.
- Network coverage is unavailable due to coverage area, an account problem, or a network problem.

The following tips can help solve many common problems encountered while using the M1000.

### First Steps

- Make sure you are using the M1000 in the correct geographic region.
- Ensure that your wireless coverage extends to your current location.
- Ensure you have an active data plan.

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**IMPORTANT** Before contacting support, be sure to restart both your computer and your M1000, and ensure that your SIM card is inserted correctly.

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# Common Problems and Solutions

The following are some common problems and solutions.

### My M1000 just powered off without my pressing the power button. Why?

This may occur under any of the following circumstances.

- Pressing the Master Reset button
- M1000 automatically restarting after configuration changes
- Switching profiles
- Restoring the configuration settings
- Battery depletion

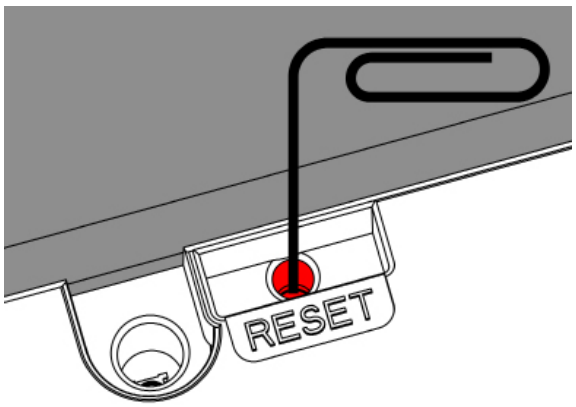
To restore battery power, follow these steps.

1. Manually press and hold the power button to turn it back on.
2. If the battery is depleted, charge the M1000 with the wall charger.

### How do I reset the M1000 back to factory settings?

The master reset button is in a small hole located on the bottom of the M1000, underneath the battery cover. This button returns the M1000 to factory settings, including re-setting the Wi-Fi Name (SSID) and Wi-Fi Password. To reset the M1000, follow these steps.

1. Place one end of an unfolded paper clip into the master reset button hole as shown below. (For reference only).
2. Press the reset button with the unfolded paper clip until the display shows "MiFi Powering Off" (about five to six seconds), then your M1000 will restart.




**WARNING!** Resetting your M1000 overwrites ALL existing settings. If the Wi-Fi settings change, you will lose this connection, and need to reconnect using the new settings.

## How do I reset the Access Point and Router settings back to factory settings?

To reset the access point and router settings, follow these steps.

1. Connect to the M1000 Admin Website (http://my.jetpack or http://192.168.1.1) and go to **M1000 Settings > M1000 > Backup and Restore**.
2. The Backup and Restore page has a **Restore to Factory Defaults** button. This button resets all Access Point and Router settings to their factory default values. All existing settings are lost.

## No service is available.

- Reorient your device. If you are inside a building or near a structure that may be blocking the signal, change the position or location of the device. For example, try moving your device close to a window.
- You are outside your coverage area, or there may be a problem with your account. Check with your network operator.

## The M1000 has no power or the device screen does not display when the power button is pressed.

- Make sure the battery is properly seated in the device.
- Make sure the battery is fully charged. Plug in the AC charger for at least 3 hours.

## I forgot my Wi-Fi Password.

- Tap **Wi-Fi Name/Password** to display your Wi-Fi Name (SSID) and Wi-Fi Password.

## I forgot my M1000 Admin website Password.

- Your M1000 Admin website Password is the same as your WI-Fi Password.

## I cannot connect to my M1000.

- Make sure the Network Signal Strength indicator displays at least one bar and that the type of network is displayed on the M1000's Home screen.
- Make sure your Windows Wi-Fi adapter/Mac AirPort is turned on. (Refer to your computer's Help if you need assistance.)

1. Open your wireless network connection list:

   Windows: Right-click icon and select **View Available Networks**.

   Mac: Pull down list from AirPort icon.

2. Windows: Click **Connect**.

   Mac: Select the network name.

   When your device is connected to the network, the Connected Devices icon in the status bar will show a connected device.

## I see the network name but cannot connect to my M1000.

- Go to **Wi-Fi Name/Password** to check that you are using the correct Wi-Fi password.

## How do I disconnect from the network?

From the M1000 device:

- To disconnect from the Wi-Fi network, select **Settings > Wi-Fi > Turn Off**.

From the M1000 Admin website:

- Click **Sign Out**.

## How can I find out how many users are connected to my M1000?

From the M1000 touchscreen:

- Check the **Connected Devices** icon in the status panel on the Home page of your M1000. The number of connected devices is displayed to the right of the icon.

From the M1000 Admin website:

- Check the **Connected Devices** icon in the status panel on the My M1000 Home page. The number of connected devices is displayed to the right of the icon. To get detailed information on connected and block devices, click **Connected Devices** on the navigation panel.

## How can I get detailed information about the devices that are connected to my M1000?

From the M1000 touchscreen:

❶ Select **Connected Devices > Wi-Fi Devices** to display the type, name, and IP address of each device connected to the M1000 Network.

❷ Select Connected **Devices > USB Tethering** to display the type, name, and IP address of any device connected to the M1000 via the Universal Charging port.

❸ From the M1000 Admin Website, click **Connected Devices** on the Menu panel to see more detailed information for connected devices.

## How do I check the firmware version installed on my M1000?

- Select **Software Update** to display the current version installed. To check for new update, select **Software Update > Next > Yes**.

## How do I check the battery level of my M1000?

- Check the battery icon on the status panel on the Home page of the M1000 device.

## How do I turn off my M1000?

- Press and hold the Power button until the display shows **MiFi Powering Off**.

## How can I tell that my M1000 is still on after the device screen goes off?

- When the display is off (sleep mode) and the M1000 is turned on, tap the Power button and the screen will display.



**IMPORTANT** Before contacting support, be sure to re-start both your computer and the M1000.

## Technical Support

Contact your service provider for assistance. When calling, you may be asked for the wireless number of your M1000. To find your M1000's wireless number, go to **About M1000 > M1000 Info** on your M1000, or go to **About** on the M1000 Admin website.

6

# Product Specifications and Regulatory Information

Product Specifications
Regulatory Statements
Wireless Communications
Limited Warranty and Liability
Safety Hazards
Proper Battery Use and Disposal

# Product Specifications

## General

| | |
|---|---|
| Name: | 5G MiFi® M1000 |
| Model: | M1000 |
| Approvals: | FCC (US), ISED (Canada) |
| Weight: | 242.5 g |
| Dimensions: | 123.24 mm x 88.28 mm x 30.42 mm |
| Wireless Network | 5G NR, 4G LTE, UMTS |
| Wireless Network – Wi-Fi Mode | Real simultaneous Dual Band<br>802.11 b/g/n/ac<br>2.4 GHz/5.0 GHz |
| Display | 2.4 in color touchscreen LCD<br>Power indicator LED |
| Default SSID | Verizon-M1000-wxyz |
| Battery<br>• Size<br>• Time required for full charge<br>• Usage | <br>4400 mAh Li-Ion<br>3 hours (when not in use)<br>Up to 24 hours |
| Chip Set: | QUALCOMM® SDx50 |
| Interface Type: | Type C USB Port for charging and tethering,<br>RJ45 Ethernet Port |
| Memory: | RAM = 6GB<br>FLASH = 32GB Flash |

## Technology/Bands

| | |
|---|---|
| Technology: | 5G NR, 4G LTE, UMTS |
| Band Designation: | CAT 20 LTE w/CA |
| Bands: | 5G NR Bands: n261/n260<br>4G LTE Bands: B2/B4/B5/B13/B48/B66<br>UMTS Bands: B1/B2/B4/B5/B8 |

# Environmental

| | |
|---|---|
| Operating Temperature: | -10° C to 55° C (14°F to 131° F) |
| Storage Temperature: | -30° C to 70° C (-22° F to 158° F) |
| Battery Charging | 0° C to 40° C (32° F to 104° F) |
| Relative Humidity | The device shall be fully operational up to a maximum of 93% relative humidity (non-condensing). |
| Drop: | The device accessories (battery and charger) shall withstand drop from 1.5m onto hard surface (stone, concrete, metal) without mechanical, electrical, or functional damage, except for slight scratches or mars.<br><br>The housing will withstand drop from 1.25m onto hard surface stone, concrete, metal) without mechanical, electrical, or functional damage, except for slight scratches or mars. |
| Electrostatic Discharge | The device shall be able to withstand the following ESD: 8kV contact / 15kV air discharge. |
| Vibration Stability: | The device shall be able to withstand the following vibration profile: 10-2000Hz, 1.5G acceleration, 3 axes. |

# Regulatory Statements

## *Federal Communications Commission Notice (FCC – United States)*

**FCC ID: PKRISGM1000**

Electronic devices, including computers and wireless modems, generate RF energy incidental to their intended function and are therefore subject to FCC rules and regulations.

This equipment has been tested to, and found to be within the acceptable 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 when the equipment is operated in a residential environment.

This equipment generates radio frequency energy and is designed for use in accordance with the manufacturer's user manual. However, there is no guarantee that interference will not occur in any particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are 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 the 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/television technician for help.

This device complies with Part 15 of the Federal Communications Commission (FCC) Rules. Operation is subject to the following two conditions.

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

**WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE M1000 IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT INSEEGO CORP TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.**

**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.

**MODIFICATIONS:** The FCC requires that you be notified that any changes or modifications made to this device that are not expressly approved by Inseego Corp. may void your authority to operate the 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 INSEEGO CORP.

## *Innovation, Science and Economic Development Notice (ISED – Canada)*

**IC: 3229A-M1000**

**ISED RSS-Gen Notice**

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;

2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## *ISED Canada ICES-003 Compliance*

CAN ICES-3 (B)/NMB-3(B)

## *FCC and ISED RF Exposure Guidance Statement*

In order to comply with FCC/ISED RF Exposure requirements, this device must be installed to provide at least 10 cm separation from the human body at all times.

Afin de se conformer aux exigences d'exposition RF FCC / ISED, cet appareil doit être installé pour fournir au moins 10 cm de séparation du corps humain en tout temps

# Wireless Communications

**IMPORTANT** Due to the transmission and reception properties of wireless communications, data occasionally can be lost or delayed.

This can be due to the variation in radio signal strength that results from changes in the characteristics of the radio transmission path. Although data loss is rare, the environment where you operate the modem might adversely affect communications.

Variations in radio signal strength are referred to as fading. Fading is caused by several different factors including signal reflection, the ionosphere, and interference from other radio channels.

INSEEGO CORP or its partners will not be held responsible for damages of any kind resulting from the delays or errors in data transmitted or received with the M1000 device, or failure of the M1000 device to transmit or receive such data.

# Limited Warranty and Liability

Inseego Corp. warrants for the 12-month period immediately following receipt of the Product by Purchaser that the Product will be free from defects in material and workmanship under normal use. THESE WARRANTIES ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The exclusive remedy for a claim under this warranty shall be limited to the repair or replacement, at INSEEGO CORP' option, of defective or non-conforming materials, parts or components. The foregoing warranties do not extend to (I) non conformities, defects or errors in the Products due to accident, abuse, misuse or negligent use of the Products or use in other than a normal and customary manner, environmental conditions not conforming to INSEEGO CORP' specification, of failure to follow prescribed installation, operating and maintenance procedures, (II) defects, errors or nonconformities in the Product due to modifications, alterations, additions or changes not made in accordance with INSEEGO CORP' specifications or authorized by INSEEGO CORP, (III) normal wear and tear, (IV) damage caused by force of nature or act of any third person, (V) shipping damage, (VI) service or repair of Product by the purchaser without prior written consent from INSEEGO CORP, (VII) products designated by INSEEGO CORP as beta site test samples, experimental, developmental, reproduction, sample, incomplete or out of specification Products, or (VIII) returned products if the original identification marks have been removed or altered.

# Safety Hazards

Do not operate the M1000 in an environment that might be susceptible to radio interference resulting in danger, specifically:

### *Areas where prohibited by the law*

Follow any special rules and regulations and obey all signs and notices. Always turn off the host device when instructed to do so, or when you suspect that it might cause interference or danger.

### *Where explosive atmospheres might be present*

Do not operate your device in any area where a potentially explosive atmosphere might exist. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Be aware and comply with all signs and instructions.

Users are advised not to operate the device while at a refueling point or service station. Users are reminded to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. Potential locations can include gas stations, below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

### *Near medical and life support equipment*

Do not operate your device in any area where medical equipment, life support equipment, or near any equipment that might be susceptible to any form of radio interference. In such areas, the host communications device must be turned off. The device can transmit signals that could interfere with this equipment.

### *On an aircraft, either on the ground or airborne*

In addition to FAA requirements, many airline regulations state that you must suspend wireless operations before boarding an airplane. Please ensure that the modem is turned off prior to boarding aircraft in order to comply with these regulations. The modem can transmit signals that could interfere with various onboard systems and controls.

### *While operating a vehicle*

The driver or operator of any vehicle should not operate a wireless data device while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some countries, operating such communications devices while in control of a vehicle is an offense.

## *Electrostatic discharge (ESD)*

Electrical and electronic devices are sensitive to electrostatic discharge (ESD). Macintosh native connection software might attempt to reinitialize the device should a substantial electrostatic discharge reset the device. If the software is not operational after an ESD occurrence, then restart your computer.

# Proper Battery Use and Disposal

**IMPORTANT** In event of a battery leak:

- Do not allow the liquid to come in contact with the skin or the eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.
- Seek medical advice immediately if a battery has been swallowed.
- Communicate the appropriate steps to be taken if a hazard occurs. Due to the transmission and reception properties of wireless communications, data occasionally can be lost or delayed.

Please review the following guidelines for safe and responsible battery use.

- Do not disassemble or open, crush, bend or deform, puncture, or shred.
- Do not modify or remanufacture, attempt to insert a foreign object into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.
- Only use the battery for the system for which it was specified.
- Only use the battery with a charging system that has been qualified with the system per this standard. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.
- Do not short circuit a battery or allow a metallic or conductive object to contact the battery terminals.
- Replace the battery only with another battery that has been qualified with the system per this standard. Use of an unqualified battery may present a risk of fire, explosion, leakage, or other hazard.
- Promptly dispose of used batteries in accordance with local regulations.
- Battery usage by children should be supervised.
- Avoid dropping the M1000 or battery. If the M1000 or 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 other hazard.

# 7

# Glossary

# Glossary

- **3G** — Third Generation. 3G refers to the third generation of mobile telephony technology. 3G telecommunication networks support services that provide an information transfer rate of at least 200 kbit/s. However, many services advertised as 3G provide higher speed than the minimum technical requirements for a 3G service. 3G finds application in wireless voice telephony, mobile Internet access, fixed wireless Internet access, video calls and mobile TV.
- **4G LTE** — Fourth Generation Long Term Evolution. LTE is a standard for wireless data communications technology and an evolution of the UMTS standards. The goal of LTE is to increase the capacity and speed of wireless data networks using new DSP (digital signal processing) techniques and modulations that were developed around the turn of the millenium. A further goal is the redesign and simplification of the network architecture to an IP-based system with significantly reduced transfer latency compared to the 3G architecture. The LTE wireless interface is incompatible with 2G and 3G networks, so that it must be operated on a separate wireless spectrum.
- **5G NR** — Fifth Generation Long Term Evolution. The latest generation of cellular mobile communications. It succeeds the 4G (LTE-A, WiMax), 3G (UMTS, LTE) and 2G (GSM) systems. 5G performance targets high data rate, reduced latency, energy saving, cost reduction, higher system capacity, and massive device connectivity
- **802.11 (b, g, n, ac)** — A set of WLAN communication standards in the 2.4, 3.6 and 5 GHz frequency bands.
- **bps** — Bits per second. The rate of data flow.
- **Broadband** — High-capacity high-speed transmission channel with a wider bandwidth than conventional modem lines. Broadband channels can carry video, voice, and data simultaneously.
- **DHCP** — Dynamic Host Configuration Protocol. Software found in servers and routers that automatically assigns temporary IP addresses to clients logging into an IP network.
- **DHCP Server** — A server or service with a server that assigns IP addresses.
- **DNS** — Domain Name System. A system for converting host names and domain names into IP addresses on the Internet or on local networks that use the TCP/IP protocol.
- **Firmware** — A computer program embedded in an electronic device. Firmware usually contains operating code for the device.
- **GB** — Gigabyte. A multiple of the unit byte for digital information storage. Usage depends on context. When referring to disk capacities it usually means $10^9$ bytes. It also applies to data transmission quantities over telecommunication circuits.
- **Hotspot** — A Wi-Fi (802.11) access point or the area covered by an access point. Used for connecting to the Internet.
- **HTTP** — Hypertext Transfer Protocol. An application-level protocol for accessing the World Wide Web over the Internet.
- **IEEE —** Institute of Electrical and Electronics Engineers. An international technical/professional society that promotes standardization in technical disciplines.

- **IMEI** — International Mobile Equipment Identity. Used in LTE networks to identify the device. It is usually printed on the device and can often be retrieved using a USSD code.
- **IP** — Internet Protocol. The mechanism by which packets are routed between computers on a network.
- **IP Type** — The type of service provided over a network.
- **IP address** — Internet Protocol address. The address of a device attached to an IP network (TCP/IP network).
- **ISP** — Internet Service Provider. Also referred to as the service carrier, an ISP provides Internet connection service. (***See*** Network Operator)
- **Kbps** — Kilobits per second. The rate of data flow.
- **LAN** — Local Area Network. A type of network that lets a group of computers, all in close proximity (such as inside an office building), communicate with one another. It does not use common carrier circuits though it can have gateways or bridges to other public or private networks.
- **MAC Address** — Media Access Control. A number that uniquely identifies each network hardware device. MAC addresses are 12-digit hexadecimal numbers. This is also known as the physical or hardware address.
- **Mbps** — Megabits per second. The rate of data flow.
- **MSID** — Mobile Station IDentifier. A number for a mobile phone that identifies that phone to the network. These numbers are carrier specific.
- **Network Operator** — The vendor who provides your wireless access. Known by different names in different regions, some examples are: wireless provider, network provider, and service provider.
- **Network Technology** — The technology on which a particular network provider's system is built; such as EVDO.
- **Port** — A virtual data connection used by programs to exchange data. It is the endpoint in a logical connection. The port is specified by the port number.
- **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 on a TCP/IP host. Certain port numbers are standard for common applications.
- **PRL** — Preferred Roaming List. A list that your wireless phone or device uses to determine which networks to connect with when you are roaming. (Network operator specific).
- **Protocol** — A standard that enables 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 for all traffic passing through it.
- **Router** — A device that directs traffic from one network to another.
- **SIM** — Subscriber Identification Module. Found in LTE network technology, the SIM is a card containing identification information for the subscriber and their account. The SIM card can be moved to different devices.

- **SSID** — Service Set IDentifier. The name assigned to a Wi-Fi network.
- **TCP/IP** — Transmission Control Protocol/Internet Protocol. The set of communications protocols used for the Internet and other similar networks.
- **USB** — Universal Serial Bus. A connection type for computing device peripherals such as a printer, mobile modem, etc. USB connectors may be used for data transfer or charging.
- **USB Port Types** — The USB ports on computers and hubs have a rectangular Type A socket, and peripheral devices have a cable with a Type A plug. Peripherals that do not have an attached cable have a square Type B socket on the device and a separate cable with a Type A and Type B plug. Ports and connectors are available in different sizes (for example, standard, mini, and micro).
- **VPN** — Virtual Private Network. A secure private network that runs over the public Internet. Commonly used to connect to an office network from elsewhere.
- **WWAN** — Wireless Wide Area Network. A public network that extends beyond architectural, geographical, or political boundaries (unlike a LAN, which is usually a private network located within a room, building, or other limited area).
- **Wi-Fi** — Wireless Fidelity. Any system that uses the 802.11 standard developed and released in 1997 by the IEEE.
- **Wi-Fi Client** — A wireless device that connects to the Internet via Wi-Fi.
- **WPA/WPA2** — Wi-Fi Protected Access. A security protocol for wireless 802.11 networks from the Wi-Fi Alliance.