

# Sonim Spot™ H500

## 5G Mobile Hotspot

### User Guide



# Welcome!

Welcome to your new Sonim H500 series, model Sonim Spot™ H500 5G Mobile Hotspot. This guide will help you set up and start using your device quickly and easily. You'll also learn everything there is to know about using the features of the device, safety and handling, and more. Follow the steps below to connect to your carrier's 5G network, configure settings, and connect your devices to enjoy fast and reliable internet access wherever you are.

## What's in the box

The Sonim Spot H500 5G package includes:

- Sonim Spot H500 5G Mobile Hotspot
- 6000mAh Li-ion Battery
- Charger
- USB-C Cable
- User Quick Start Guide
- SIM Card (pre-inserted, depending on carrier.)

**NOTE:** Some SIMs are not included and must be obtained separately from the carrier)

## System requirements

The H500 must have cellular data service to function and is compatible with all major operating systems and the latest versions of browsers.

- Compatible with Google Chrome®, Firefox®, Internet Explorer®, Safari™, and Mobile Safari™
- Devices must support Wi-Fi to use in Wi-Fi mode

# About your mobile hotspot

The powerful, secure hotspot device equipped with everything you need to work, play, create, and communicate no matter where life takes you.

## **5G**

The H500 Series supports powerful 5G performance, including C-band and other band combinations, for exceptional connectivity. It also ensures reliable access with 4G support, so you can stay connected no matter where your work takes you.

## **Wi-Fi 6**

The H500 Series offers dual-band Wi-Fi 6, enabling faster speeds and more reliable connections, even when multiple devices are connected. This ensures smooth streaming, quicker downloads, and efficient online collaboration.

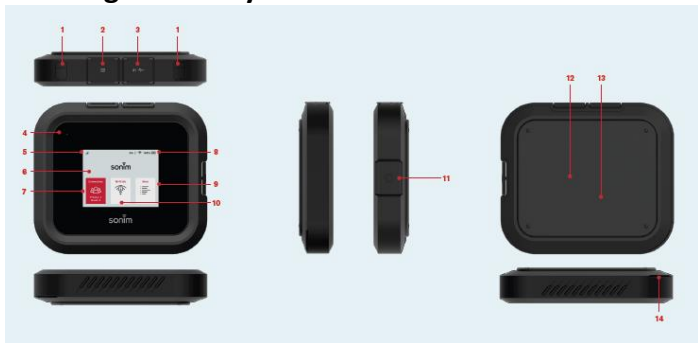
## **USB Type-C Charging Port and RJ45 Ethernet Port**

The H500 Series provides direct internet connections to other devices via Ethernet or USB-C cables. Use an Ethernet cable for a stable, wired connection, ideal for setting up temporary conference rooms or trade show booths where reliable connectivity is crucial. The USB Type-C port offers versatility, doubling as a universal charging port to give your external devices a power boost when needed. For example, during business travel, you can connect your laptop to the H500's Ethernet port for seamless internet access and simultaneously charge your smartphone through the USB Type-C port, ensuring continuous productivity on the go. (Ethernet cable not included.)

## **Security Support**
































WPA3 Wi-Fi security support, VPN passthrough, and remote connectivity to office networks provide the peace of mind that data connections are secure.

# Getting to know your device



1. Test ports
2. Ethernet port (RJ45)
3. USB Type-C
4. Status LED (indicates sign of life - flashes white periodically)
5. Signal strength
6. Display
7. Connections info
8. Battery indicator
9. Menu
10. Wi-Fi info
11. Power button
12. Battery under battery cover
13. SIM (SIM under battery)
14. Battery cover opening

## Status icons

Icon	Meaning
	Connected to 3G network
	Connected to 4G network
	Connected to LTE network
	Connected to 5G network
	Network signal strength
	No network signal
	Number of connected devices
	Internet connected
	No internet connection
	Wi-Fi indicator
	Wi-Fi information
	LAN connection
	Upload and download activity is taking place
	Battery is charging
	Device is in 'No Battery Mode'
	Battery 100%
	Battery 75%
	Battery 50%
	Battery 25%
	Low battery warning 10%
	Low battery; Charge immediately
	Locked SIM. Contact your service provider for the PIN to unlock. Unlock in the web UI.
	SIM error. Check that your SIM card is properly
	No SIM detected
	You have unread messages
	You have read messages
	Trash
	Device menu
	Status menu
	Help menu
	Settings
	Go back to Home screen
	Go back to previous page in the device UI
	GPS
	Data usage

# Getting started

## Remove the battery safety tab

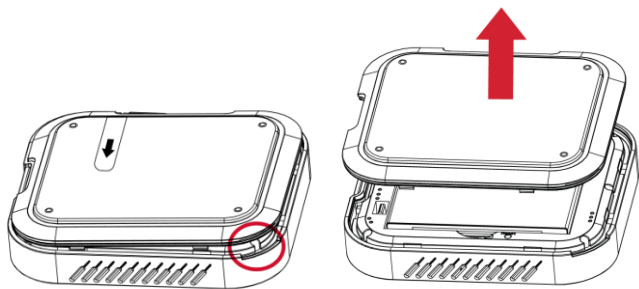
**Notice!** The device ships with a safety tab to protect the device from automatically turning on during shipment. Remove the tab prior to first use.

To remove the battery safety tab:

1. Open the battery door.
2. Remove the plastic safety tab.
3. Close the battery door.

Prior to first use, open the battery door and remove the plastic tab on the battery.

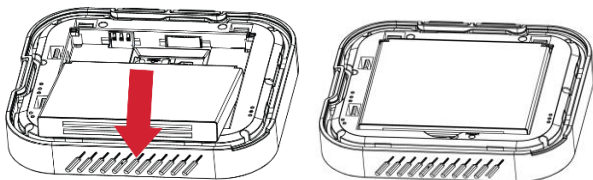
To open the battery compartment, gently insert a small coin into the slot located at the corner of the device as illustrated, and then gently pry it open. Remove the plastic safety tab and close the battery door.



# How to insert the battery

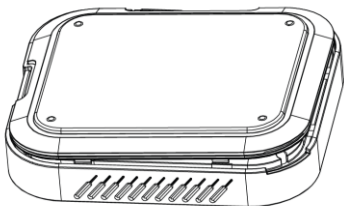
## Step 1

Insert the battery flush into the cavity so the three gold contacts on the top of the battery are aligned with the gold contact points in the battery compartments and gently slide it into place.



## Step 2

Close the battery cover ensuring that it is fully closed. You will hear a click when the battery cover is properly sealed. This is important to ensure the H500 remains water-resistant.



**Caution!** Recycle used batteries per local regulations. If you do not use the approved battery with your H500 mobile hotspot, there will be a risk of fire or explosions and perhaps burns. Do not attempt to open, crush, or burn the battery. Do not allow the battery to exceed 60°C.

**Warning** Only use the Sonim-approved battery and charger that was provided with your H500 mobile hotspot. The warranty does not cover damage caused by usage of non-approved batteries and/or chargers.

**NOTE:** Before removing or replacing the battery, ensure your H500 mobile hotspot is not connected to any device or power source. Take caution when removing the battery cover and battery. Use a small coin to open the battery cover, and never attempt to remove the battery with a knife, a key, a pen or any other tool. Using any tool can damage the battery and void your warranty.

Before using your mobile hotspot, read the Battery Safety Information.

## Charging your mobile hotspot

**NOTE:** It is important to fully charge your H500 mobile hotspot's battery before using it for the first time.

### To charge the battery:

1. Connect the USB end of the charger to the charging port of the mobile hotspot.
2. Plug the other end of the wall charger into the appropriate electrical outlet.



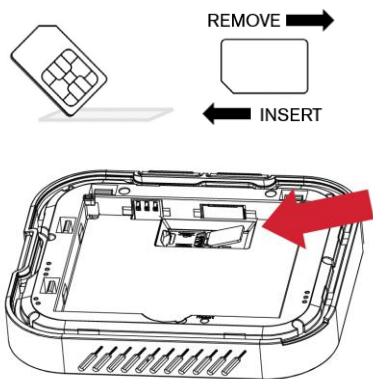
## Installing/replacing a SIM card

The Subscriber Identity Module (SIM) card is a small rectangular plastic card that stores your phone number and essential wireless service information.

Your mobile hotspot will not function without a properly activated SIM card.

Your H500 mobile hotspot may come with a pre-installed SIM card (depending on your carrier). To replace a SIM card:

1. Power OFF the mobile hotspot, remove the battery cover, and take out the battery.
2. To remove a SIM card, gently slide the SIM out of the SIM card tray.
3. Place the new SIM card with the gold contacts facing down.
4. Gently slide the SIM into the SIM card tray.



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

# Unlocking your SIM

## The PIN set up on your SIM:

To unlock the PIN set up, go to **Menu > Unlock SIM**.

## If you have a PIN lock on your SIM:

The "Unlock **SIM**" icon will display in the upper left corner of the screen. Click on the icon to enter the unlock screen, and then enter the PIN code to unlock.

**NOTE:** The SIM PIN can be obtained from your service provider.

# Turning the mobile hotspot ON/OFF

To turn the H500 mobile hotspot on or off:

- To turn ON: Press and hold the **Power** button for three to four seconds.
- To turn OFF: Press and hold the **Power** button for three seconds.
- To wake up the display: Press and release the **Power** button.

# LED status indicator

The H500 has a white status LED to indicate that the device is turned on. The LED will turn on for one second and turn off for five seconds when the device is powered on. This provides the user an indication that the device is on without having to turn on the display. The LED will continue to blink while the user has devices connected to the H500. If there are no devices connected to the H500, the device will go into deep-sleep mode to conserve battery life. When the device is in deep-sleep mode, the LED will not blink. Once the user takes the unit out of deep-sleep mode by briefly pressing the power button, the LED will resume blinking.

## Setting up a Wi-Fi connection

1. Turn the H500 on by pressing the power button for three seconds.
2. Open the Wi-Fi application or controls on your laptop or Wi-Fi-enabled device that you want to connect to your H500.
3. Find your H500's Wi-Fi name (SSID). There are three Wi-Fi names (SSID) in your H500 (Primary Network (2.4GHz), Primary Network (5GHz), and Guest Network), enter the password to connect any of the three SSIDs for the Internet access. Note that the Guest Network may be turned off by default.

**NOTE:** The Wi-Fi names (SSIDs) and password appear on the screen (under Wi-Fi Info). It is recommended that you connect to the Primary Wi-Fi. Guest Wi-Fi should be first enabled using Menu → Wi-Fi → Guest Network.

# Using your mobile hotspot

The display of the H500 mobile hotspot allows you to gain access to the internet, check the status of your H500, view data usage, Wi-Fi SSID and password, connected device details, and much more.

## The Home Screen

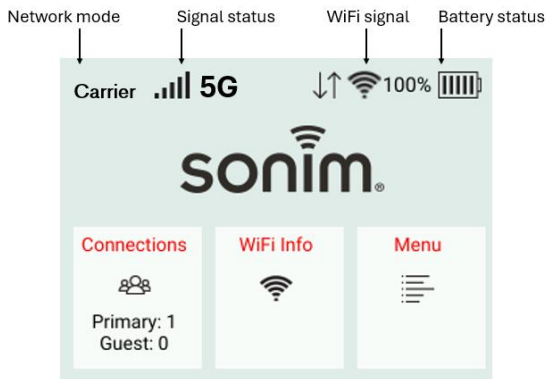
The H500 Home Screen provides a quick overview of its status.



The device screen is a 2.4 inch (61mm) TFT LCD with Capacitive Touch.

There are three selectable icons: Connections, Wi-Fi info and Menu. Once a selection is made, that section will appear red briefly before it changes screens.

The home screen provides connection status on the top bar:



## H500 USB Options

You can check and select the available USB options.

1. When the USB cable is plugged in, the **USB Options** screen appears.
2. Select the appropriate option from the list and click **OK** to return to the Home page.



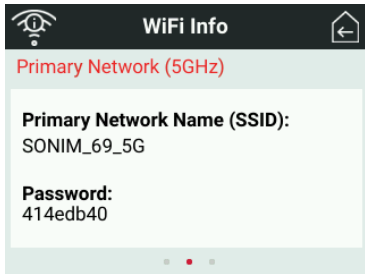
## Connections

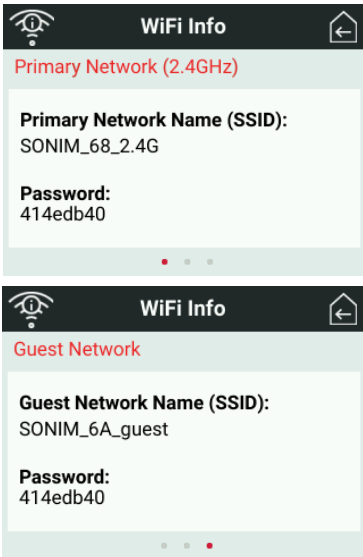
This displays the number of devices connected to each the primary and guest connections. Touch the Connections window and the names of the devices connected, and their respective IP and MAC addresses will appear. It is possible to block or unblock a device by selecting **Block** or **Unblock** at the top right of the screen.

## Wi-Fi info

Once selected, the Wi-Fi icon will provide details of the Primary and Guest Network Names (SSID) and Passwords to access the networks.



- Click on **Wi-Fi Info** on the home screen to enter the Wi-Fi information display page.
- Swipe the page to display the various options: Primary (2.4GHz)/Primary (5GHz)/Guest Wi-Fi.
- To change the Network Name (SSID) and/or Password, refer to the section Managing Your Mobile Hotspot using the Web User Interface

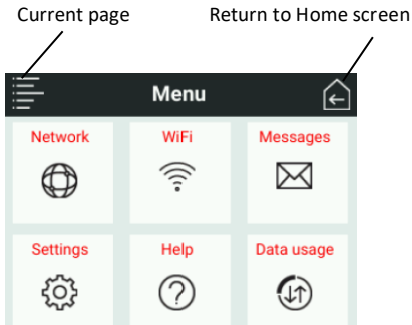




# Menu

The menu icon allows the user to access additional options including Network, Wi-Fi, Messages, Settings, Help and Data usage.

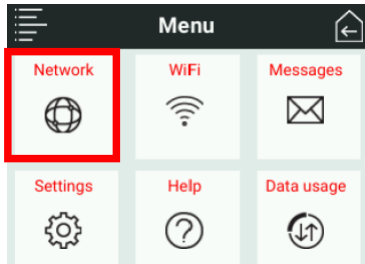
The top left icon acts as a guide to display where you are in the menu. The icons on the top right of the screen gives you the option of either going back one page  or returning to the home page .





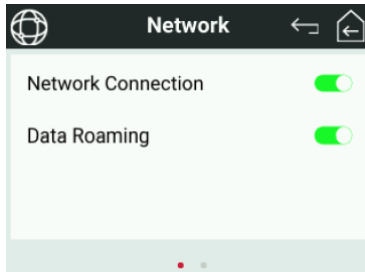
# Network

Network options can be accessed by pressing the Network icon.

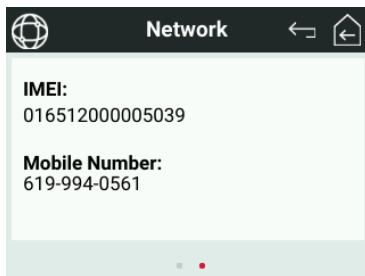


Using the toggle switches you can enable or disable a cellular Network Connection and Data Roaming.

Green means it is enabled, and gray means it is disabled.

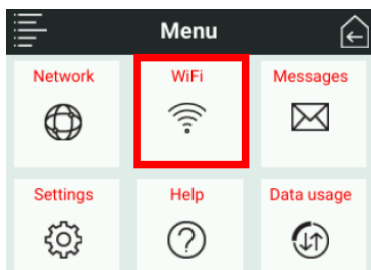


From the Network home page, you can swipe to the second page to see your IMEI number and your mobile number.

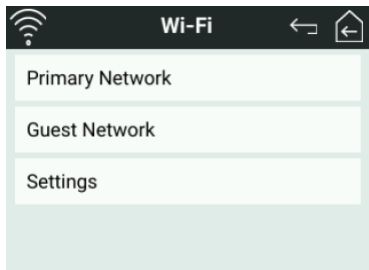


## Wi-Fi

Wi-Fi options can be accessed by pressing the Wi-Fi icon.

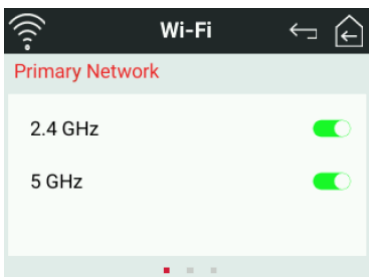


The Wi-Fi menu allows setup of the Primary and Guest Wi-Fi networks as well as updating Wi-Fi Settings.



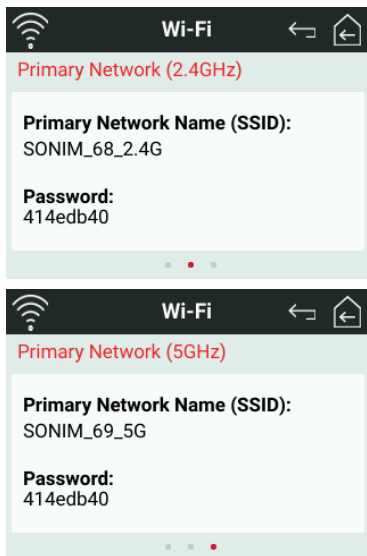
Selecting the Primary Network allows users to enable and disable the 2.4GHz and 5GHz Wi-Fi networks by sliding the toggle switches.

Green means it is enabled, and gray means it is disabled.



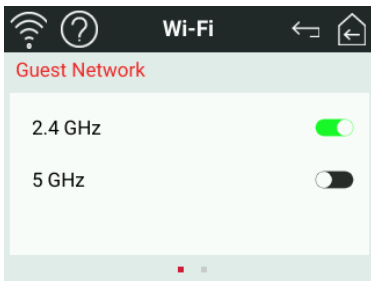
Swipe the screen, to display the Primary Network names (2.4GHz and 5GHz) (SSID) and passwords.

**NOTE:** Passwords can only be changed from the Web UI.

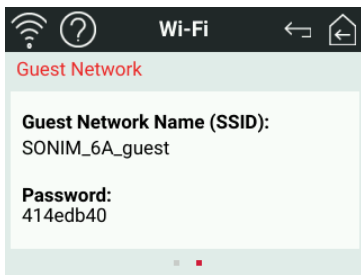


Selecting the Guest Network allows users to enable and disable the 2.4Ghz and 5GHz Wi-Fi networks by sliding the toggle switches. Note that the user can only enable either 2.4GHz or 5GHz Guest Network, but not both simultaneously.

Green means it is enabled, and gray means it is disabled.

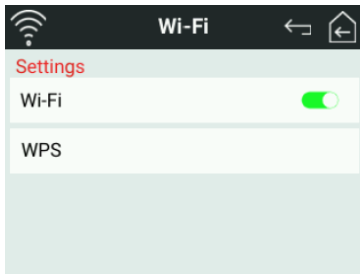


Swipe the screen, to display the Guest Network name(SSID) and passwords.

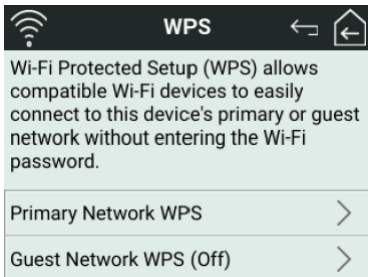


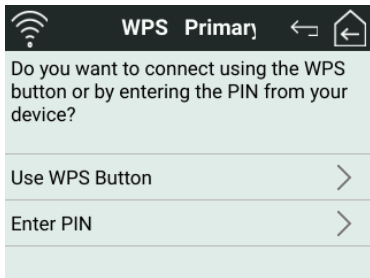
The Wi-Fi Settings tab:

- Wi-Fi connections to be enabled or disabled
- Enable WPS connections either with the button or enter a PIN.

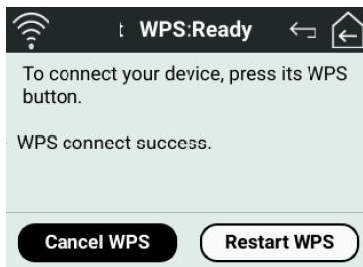
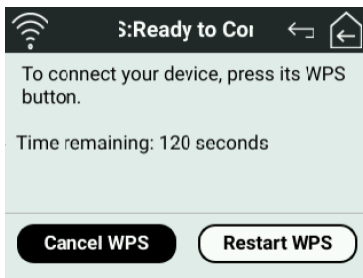


**WPS is Wi-Fi Protected Setup.** It is a wireless network security standard that makes connections between a router (H500) and wireless devices faster and easier.





With the WPS button method you can connect to a Wi-Fi enabled device. To activate this feature, you press the WPS button on the connecting device.



Use the WPS PIN method to connect to a Wi-Fi enabled device that has a WPS PIN associated with it.

WPS PIN Input

Enter your device's PIN to connect.

PIN:

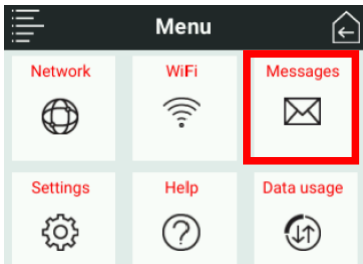
Enter

1	2	3	4	5	✕
6	7	8	9	0	



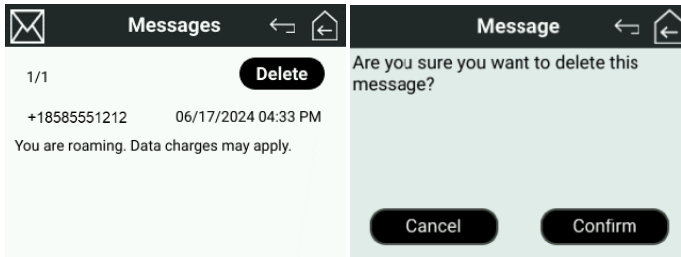
# Messages

Messages can be accessed by pressing the Messages icon.



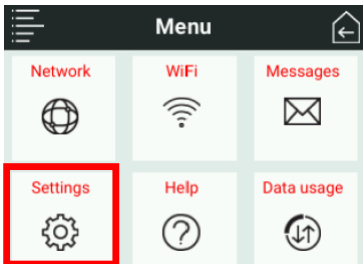
Messages can be viewed and deleted in this section. Here you will find messages about your device or messages from your service provider regarding software updates or carrier notifications.

**NOTE:** Messages cannot be sent from the hotspot. Messages can be deleted using the Delete button. Once it has been deleted it cannot be recovered.



# Settings

Settings can be accessed by pressing the Settings icon.



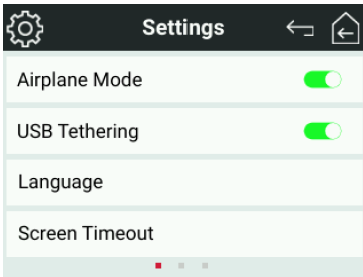
Pressing the Settings icon allows the following settings selections:

**Airplane Mode** can be enabled or disabled. **NOTE:** If Airplane Mode is active, you will not be able to use the H500 as a hotspot.

**USB Tethering** (a mobile connection shared with laptop /PC using a USB data cable) can be enabled or disabled

**Language** options are provided and can be selected

**Screen Timeout** can be modified (note long screen times can drain the battery)



**Sleep Mode** for the device can be set to different time intervals. **NOTE:** the longer the selected sleep mode time, the shorter the battery life.

**Reset and Reboot** allows the device to be reset and rebooted back to factory default settings

**Ethernet** allows an Ethernet connection with an Ethernet cable to be enabled or disabled

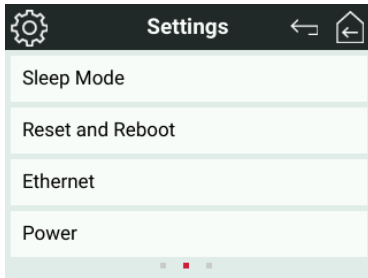
**Power** allows you to permit the H500 to operate without a battery (No Battery Mode) and/or as a Power Bank.

**No Battery Mode** allows you to operate the H500 without a battery when you connect it to constant power (wall outlet).

**NOTE:** If the device shuts down when in No Battery Mode due to a power outage, you must power the H500 back on.

**Power Bank Mode** allows you to use the USB-C port on the H500 as a power bank to power other devices.

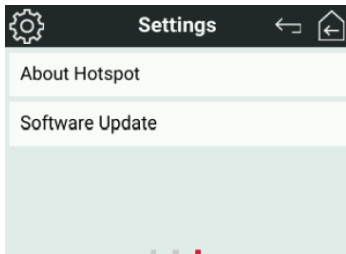
**NOTE:** Power bank mode will operate as a slow charger.



**About Hotspot** provides useful information about your device, such as:

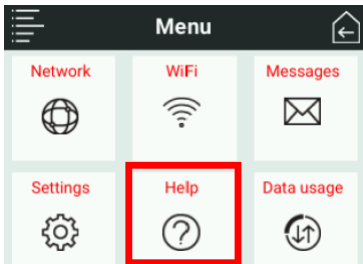
- **Model**
- **Software Version**
- **Hardware Version**
- **Battery Level (%)**
- **Internet Status**
- **Technology**
- **Network**
- **Signal Strength (RSRP)**
- **SNR (dB)**
- **Mobile Number**
- **IMEI**
- **ICCID**
- **Roaming status**
- **APN**
- **IP Address**

**Software Update** informs you when software updates are available for your H500



# Help

Help can be accessed by pressing the Help icon.



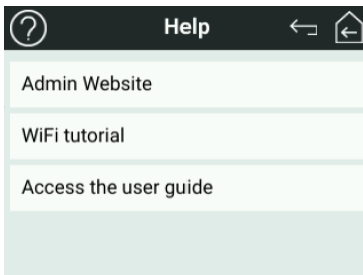
**Admin Website** provides details about how to access the Web User Interface which allows users to update advanced settings on the device. The admin password is located here.

**NOTE:** Default username is **admin**

**Wi-Fi tutorial** provides instructions to set up Wi-Fi connections

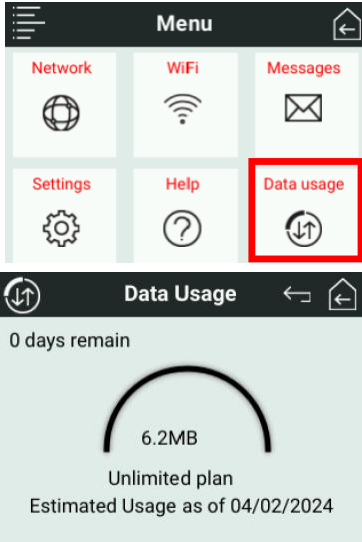
**Access the user guide** displays a QR code that links to the online user guide

**NOTE:** You cannot access the user guide directly from the H500. You will need to use the QR code to link to the URL for the online user guide.



# Data usage

Click to find information about the amount of data used during the current billing period.



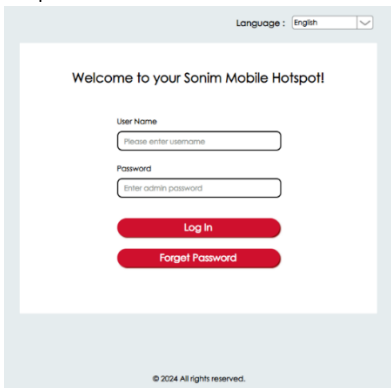
# Managing Your Mobile Hotspot Using the Web User Interface (Web UI)

You can edit the settings directly on the Mobile Hotspot's screen or through the web user interface, commonly referred to as Web UI device management.

## Web user interface device management

1. On your Wi-Fi device or laptop that is connected to your H500, type **http://192.168.1.1** or **http://sonim.mobilehotspot/** in the browser bar.  
**NOTE:** Your device or laptop **MUST** be connected to your H500 for you to access your Web User Interface.
2. Enter the **Username** and **Password**.
3. Click **Login**. You can modify the user credentials, if you desire. Select **Admin > Admin Settings**.  
**NOTE:** The default username is “admin” and the password is shown in the “Help” section on the main menu.

For website instructions, including features that can be managed on the website, refer to Help on the device main screen



The screenshot shows the login page of the Sonim Mobile Hotspot Web UI. At the top right, there is a language dropdown menu set to "English". The main heading reads "Welcome to your Sonim Mobile Hotspot!". Below this, there are two input fields: "User Name" with a placeholder "Please enter username" and "Password" with a placeholder "Enter admin password". Below the password field are two red buttons: "Log In" and "Forgot Password". At the bottom center, there is a small copyright notice: "© 2024 All rights reserved."

# Log out of Web UI

## To log out,

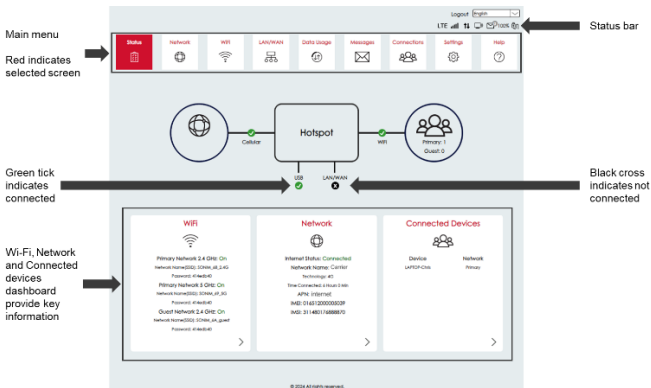
1. Click **Logout** in the upper right corner.
2. Click **OK** on the pop-screen to exit the application and return to the login interface.

## Web UI Home screen

The Web UI home screen main navigation tabs are: Status, Network, Wi-Fi, LAN/WAN, Data Usage, Messages, Connections, Settings and Help.

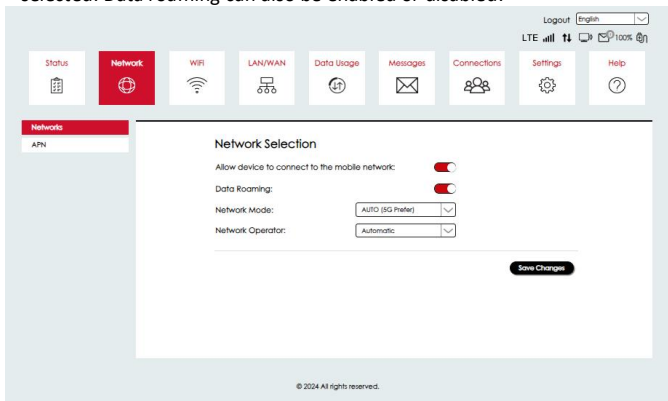
The screenshot displays the Web UI Home screen. At the top right, there is a 'Logout' button and a language dropdown set to 'English'. Below this are status indicators for LTE, signal strength, Wi-Fi, and 100% battery. A navigation bar contains nine tabs: Status (active), Network, WiFi, LAN/WAN, Data Usage, Messages, Connections, Settings, and Help. The main content area features a central 'Hotspot' status diagram. This diagram shows 'Cellular' and 'WIFI' connections to the 'Hotspot' box, both with green checkmarks. Below the 'Hotspot' box, 'USB' is marked with a green checkmark and 'LAN/WAN' with a red 'X'. To the right of the 'Hotspot' box, a circle indicates 'Primary: 1' and 'Guest: 0' users. Below the diagram are three content cards: 'WiFi' (listing Primary Network 2.4 GHz and 5 GHz, and Guest Network 2.4 GHz with SSIDs and passwords), 'Network' (showing Internet Status: Connected, Network Name: Carrier, Technology: 4G, Time Connected: 4 Hours 0 Min, APN: internet, IMEI: 016512000005039, and IMSI: 31148017688870), and 'Connected Devices' (listing Device: LAPTOP-Chris, Network: Primary). Each card has a right-pointing arrow. At the bottom center, it says '© 2024 All rights reserved.'



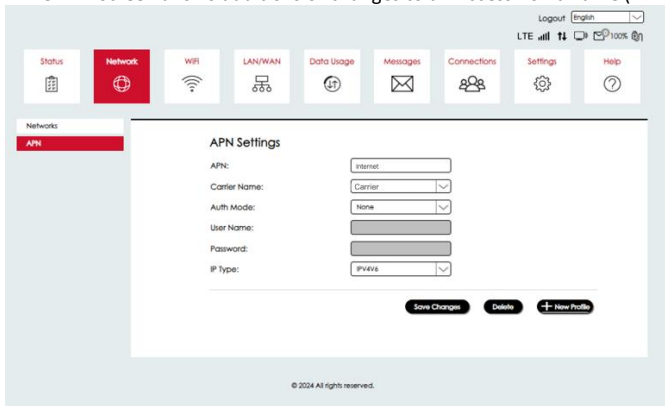


## Network

You can view the basic device network settings. Connections to the cellular network can be enabled or disabled with the toggle switches. Red means it is enabled, gray means it is disabled. Network mode and operator can be selected. Data roaming can also be enabled or disabled.



The APN screen allows additions or changes to an Access Point Name (APN).



## Wi-Fi

You can view the basic device Wi-Fi settings.

1. From the Device Home screen, click **Wi-Fi > Settings**.
2. Modify the settings and click **Save Changes**. You can perform any of the following:
  - Make changes to the Wi-Fi network settings.
  - Hide the password from being visible on the device.
  - Turn off the SSID broadcast.
  - Use separate settings for the 2.4GHz and 5GHz bands.
  - Enter the new Wi-Fi password in the settings box to change the password. This must be done for each band separately.
  - Click **Save Changes** to apply the changes.

Status



Network



WiFi



LAN/WAN



Data Usage



Messages



Connections



Settings



Help



Settings

Primary Network

Guest Network

## WiFi

These settings apply regardless of which network (Primary, Guest, or both) is in use. Changes to WiFi settings may prevent some WiFi devices from connecting properly.

Allow WiFi devices to connect



### 2.4 GHz Band Settings

802.11 mode:

802.11b/g/n/ax

Bandwidth:

40MHz

Channel:

Automatic

Save Changes

### 5 GHz Band Settings

802.11 mode:

802.11ac/n/ax

Bandwidth:

80MHz

Channel:

Automatic

Save Changes

Logout English

LTE 
 100%

Status

Network

WiFi

LAN/WAN

Data Usage

Messages

Connections

Settings

Help

Settings

- Primary Network
- Guest Network

## WiFi

Note: For added security, share your guest network instead of your primary network.

### 2.4 GHz Band Settings

Status:

Connected Devices:  ▼

Primary network name(SSID):

Security:  ▼

Password:  ▼

Hide password on touchscreen

Broadcast primary network name(SSID)

WPS

WiFi privacy separation

Save Changes

---

### 5 GHz Band Settings

Status:

Connected Devices:  ▼

Primary network name(SSID):

Security:  ▼

Password:  ▼

Hide password on touchscreen

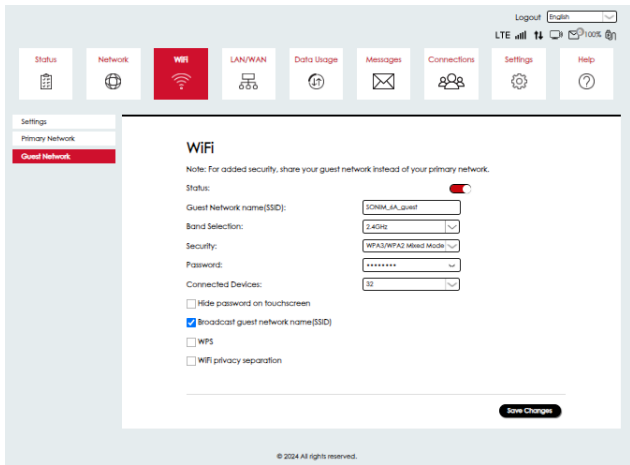
Broadcast primary network name(SSID)

WPS

WiFi privacy separation

Save Changes

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## LAN/WAN

You can reconfigure the IPv4 settings on the H500. Please exercise caution when changing LAN settings to avoid potential network issues.

## Dynamic Host Configuration Protocol

You can view the network management protocol that is used to assign an Internet Protocol (IP) address to any device and configure network devices to communicate across an IP network.

1. From the Home screen, click **LAN/WAN** > LAN.
2. Enable any DHCP-specific options that your device requires.
3. Click **Save Changes** to ensure the changes take effect.

The screenshot shows the LAN/WAN settings page. The 'LAN/WAN' tab is selected. Under the 'LAN' sub-tab, the 'IPV4' section is visible. The configuration includes:

- DHCP server: Enable
- MAC Address: 00:24:A3:8F:AE:68
- IP address: 192.168.1.1
- DHCP IP range: 100 to 200
- DHCP IP range: 192.168.1.100 to 192.168.1.200
- DHCP lease time: 1440 Minutes

A 'Save Changes' button is located at the bottom right of the configuration area. The footer indicates '© 2024 All rights reserved.'

IP passthrough can be enabled.

**NOTE:** IP passthrough lets a device connected to the mobile hotspot use a public IP address directly, instead of sharing the hotspot's internal network. This can be useful for gaming, remote work, or any situation where you need a direct internet connection for better performance and fewer restrictions.

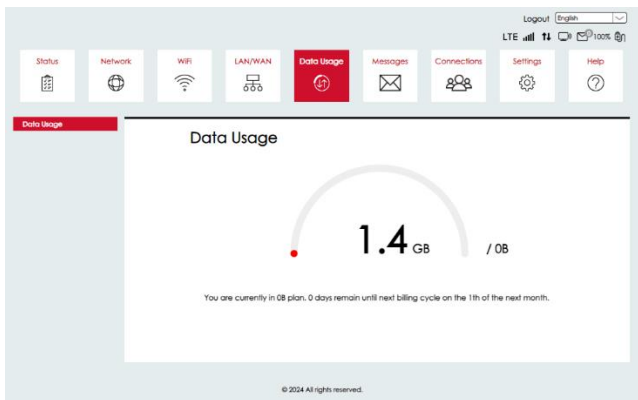
The screenshot shows the WAN Settings page. The 'WAN' sub-tab is selected. The 'IP Passthrough' toggle is currently turned off. Below the toggle, there is explanatory text:

- IP Passthrough is an expert function as you need to understand all the risks and implications of enabling it. The IP Passthrough function basically turned this device into a electrical interface only and pass all WAN traffic / packets as they come to the configured IP address.
- All other functionality on this device will no longer be available until you factory default the device to regain WebGUI access again.
- This function will deliver the WAN side traffic/packets directly to the Ethernet Port. Therefore, you need to enter the MAC address of the client device connected to the Ethernet Port.
- When you are ready to enable IP Passthrough, please first check that the Enable Ethernet Port toggle button is open and the Enable Ethernet offloading toggle button is closed.

A 'Save Changes' button is located at the bottom right of the configuration area. The footer indicates '© 2024 All rights reserved.'

# Data Usage

Select Data Usage to view how much data has been used during a specified time period.



# Messages

Review messages received and delete messages that are no longer needed. Any new or previously read messages that were not deleted will appear here for your review. You can delete messages from this interface by checking the box of the message and then select Delete. Once deleted, the message cannot be recovered.

Logout English

LTE 100%

Status Network WiFi LAN/WAN Data Usage **Messages** Connections Settings Help

InBox(1/1) Delete Refresh

<input type="checkbox"/>	Sender	Content	Date
<input type="checkbox"/>	+16198903269	You are roaming. Data charges may apply.	2024-06-17 16:33:00

« 1 » 1/1 Page:  Go

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# Connections

This screen shows the connected devices and their status. Click on the arrow on the right margin to show their IPV4 and MAC addresses. Check the box to BLOCK the device from accessing your H500. Here you can also see a list of blocked devices. To unblock a device, check the Unblock box.

The screenshot displays the 'Connections' interface. At the top, there is a navigation bar with icons for Status, Network, WiFi, LAN/WAN, Data Usage, Messages, Connections (highlighted in red), Settings, and Help. The 'Connections' section is active, showing a 'Connected Devices' table with one entry: a laptop named 'LAPTOP-Chrs' on the 'Primary' network, with a 'Block' checkbox that is currently unchecked. Below this is a 'Blocked Devices' section, which is currently empty, showing 'No blocked devices.' Both tables have 'Save Changes' buttons. The footer of the screen contains the text '© 2024 All rights reserved.'

Index	Type	Device	Network	Block	Status
1		LAPTOP-Chrs	Primary	<input type="checkbox"/>	▼

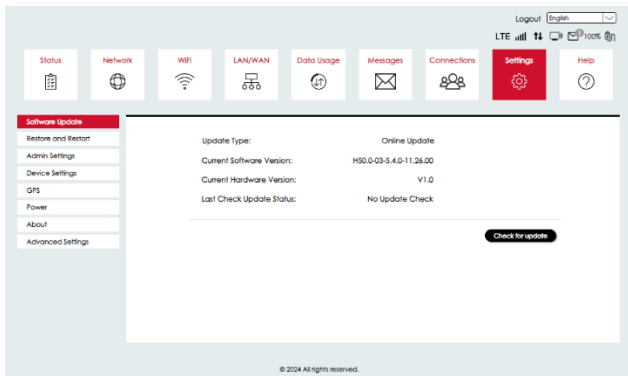
Index	Device	Unblock
No blocked devices.		

# Settings

Settings provides access to several useful tasks:

## Software Update

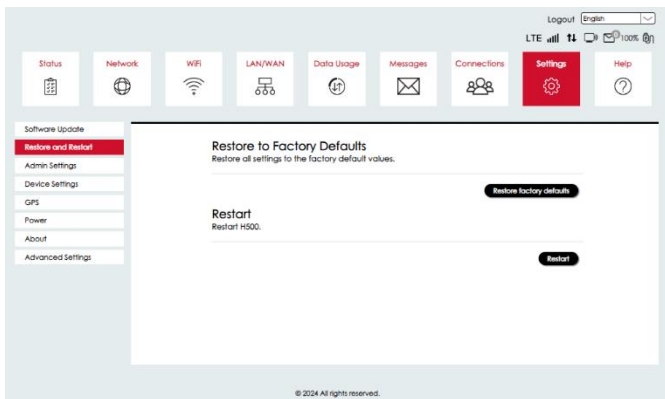
You can see your current version of software and hardware as well as check for updates.



# Restore and Restart

You can remotely reboot your device or reset it to factory default settings.

1. From the Home screen, click **Settings > Restore and Restart**.
2. Click **Restart** to restart the device or click **Reset Factory Defaults** to restore the original factory settings to the device.



# Admin Settings

You can modify/change all the Sonim Spot H500 Mobile Hotspot settings.

1. From the Home screen, click **Settings > Admin Settings**.
2. Modify your Username and/or Password for the web user interface, if desired.
3. Click **Apply** to ensure the changes take effect.

The screenshot displays the Admin Settings interface. At the top, there is a navigation bar with icons for Status, Network, WiFi, LAN/WAN, Data Usage, Messages, Connections, Settings (highlighted in red), and Help. Below this is a sidebar menu with options: Software Update, Restore and Restart, Admin Settings (highlighted in red), Device Settings, GPS, Power, About, and Advanced Settings. The main content area is divided into two sections: 'Username' and 'Password'. Each section contains three input fields: 'Current', 'New', and 'Confirm'. The 'Current Password' and 'Confirm Password' fields in both sections have a 'text' label. An 'Apply' button is located at the bottom right of each section. At the bottom of the page, there is a copyright notice: '© 2024 All rights reserved.'

Logout English

LTE 100%

Status Network WiFi LAN/WAN Data Usage Messages Connections **Settings** Help

Software Update  
Restore and Restart  
**Admin Settings**  
Device Settings  
GPS  
Power  
About  
Advanced Settings

**Username**

Current Username:

New Username:

Current Password:  text

**Apply**

**Password**

Current Password:  text

New Password:  text

Confirm Password:  text

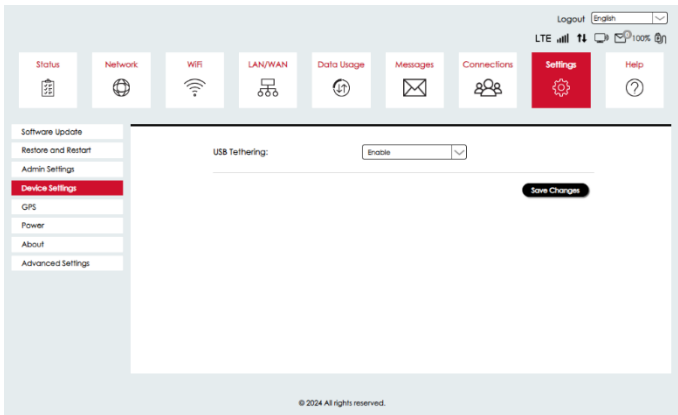
**Apply**

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# Device Settings

USB tethering can be enabled /disabled from this page.

1. From the Home screen, click **Settings > Device Settings**
2. Enable/disable the ability of the Mobile Hotspot to support tethered devices.
3. Click **Save Changes** to ensure the changes take effect.



# GPS

GPS can be enabled or disabled.

GPS over Wi-Fi in the H500 web UI allows the device to provide a GPS (NMEA\*) stream to a Windows computer. This can be used when running an app that is capable of utilizing a NMEA GPS stream (such as an enterprise application). To utilize GPS over Wi-Fi, a driver must be installed on the computer.

\*NMEA: National Marine Electronics Association.

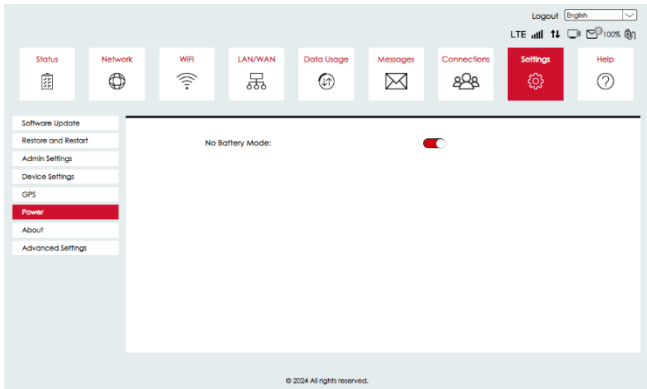
The screenshot displays the H500 web UI's settings interface. At the top, there is a navigation bar with icons for Status, Network, WiFi, LAN/WAN, Data Usage, Messages, Connections, Settings (highlighted in red), and Help. The top right corner shows 'Logout', 'English', and system status icons for LTE, signal strength, and 100% battery. A left-hand sidebar menu lists various settings categories, with 'GPS' currently selected and highlighted in red. The main content area is titled 'GPS Settings' and contains the following information:

- GPS Settings**  
The GPS receiver can determine your current location. This location can be provided to connected devices.
- Enable GPS:**
- Turn on GPS over WiFi:**
- Port Number:**
- Save Changes** (button)
- GPS Information**
  - Latitude: 40.794596
  - Longitude: -119.404411
  - Altitude: 20.338036
  - Accuracy: 6000.000000
- GPS Driver**  
GPS data is provided by the Sorim Spot H500 in the form of a National Marine Electronics Association (NMEA) text stream. This GPS stream can be used by many location-oriented computer applications. You need to install a driver on your computer.
- Download Driver** (button)

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# Power

You can turn No Battery Mode on and off. This feature will allow the user to use the H500 when no battery is inserted into the device. This is useful if you expect to use the device for an extended period while plugged in. This will help extend the life of your battery.



# About

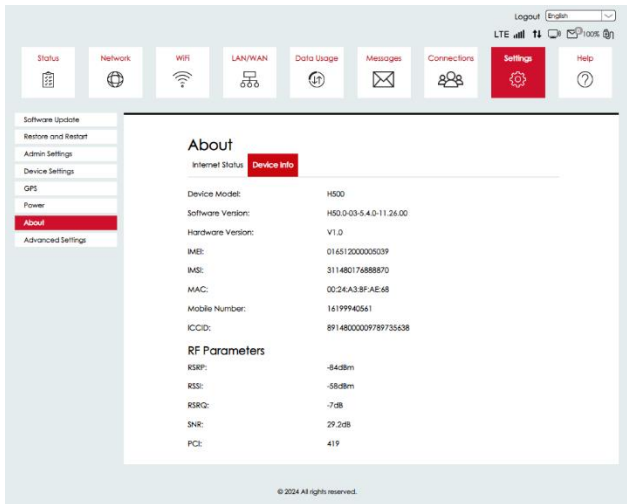
In the About screen, you can view the Internet Status, Network and Device information tabs and relevant information about your H500.

The screenshot displays the 'About' screen of the H500 device. At the top, there is a navigation bar with icons for Status, Network, WiFi, LAN/WAN, Data Usage, Messages, Connections, Settings (highlighted in red), and Help. Below this is a sidebar menu with options: Software Update, Restore and Restart, Admin Settings, Device Settings, GPS, Power, About (highlighted in red), and Advanced Settings. The main content area is titled 'About' and features two tabs: 'Internet Status' (selected) and 'Device Info'. The 'Internet Status' tab displays the following information:

Internet Mode:	Mobile Data
Network Status:	Connected
Network Operator:	Carrier
Connection Uptime:	8 Hours 37 Mins
IP Address:	100.75.113.163
Subnet Mask:	255.255.255.248
Default Gateway:	100.75.113.164
Primary DNS Server:	198.224.171.135
Secondary DNS Server:	198.224.169.135
IPv6 Address:	2600:1012:b1c6:79d3:3d42:e542:4a58:d9c9
IPv6 Primary DNS Server:	2001:4888:65:f00:62e:d::
IPv6 Secondary DNS Server:	2001:4888:64:f00:620:d::

At the bottom of the screen, there is a copyright notice: © 2024 All rights reserved.





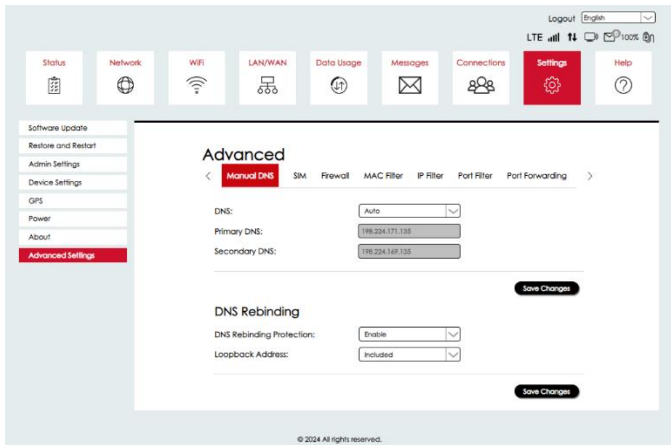
## Advanced Settings

**Warning!** Making changes to Advanced Settings can cause the device to stop operating properly. Only make changes to these settings if you understand the impact to the device.

# Manual DNS

You can specify control settings on the Open DNS website to block specific categories of websites and view the ones that have been accessed from your specific network.

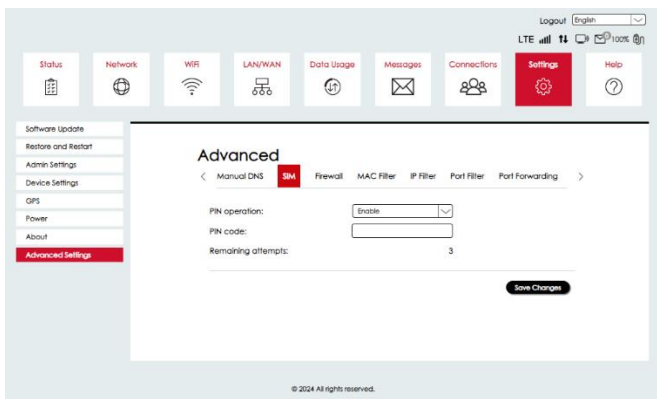
1. From the Home screen, click **Settings**> **Advanced Settings** > **Manual DNS**.
2. Modify the DNS address as required and apply to filter.
3. Click **Save Changes** to ensure the changes take effect.



# Subscriber Identity Module (SIM)

You can enable SIM Personal Identification Number (PIN) security to allow your device to connect to the Internet.

1. From the Home screen, click Settings> Advanced Settings > SIM.
2. Enter your device's default PIN to enable SIM PIN security.  
**NOTE:** Contact your service provider for the default PIN. Only your service provider has this information.
3. Click **Save Changes** to ensure the changes take effect.

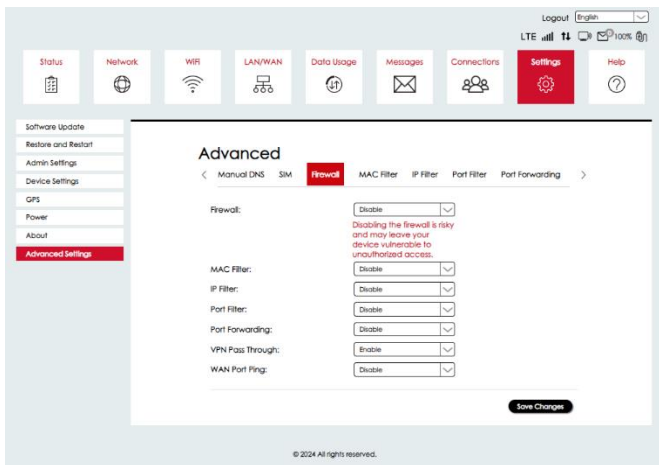


# Firewall

The Firewall tab allows you to enhance the security of your network connections by managing and configuring protective measures against unauthorized access and cybersecurity threats.

1. From the Home screen, click **Settings**> **Advanced Settings** > **Firewall**.
2. Enable/disable the key firewall settings.
3. Click **Save Changes** to ensure the changes take effect.

**NOTE:** Firewall settings should be changed with caution as it may leave the device vulnerable to unauthorized access.

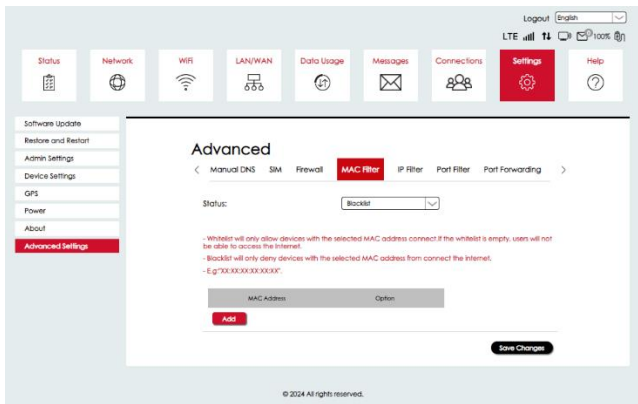


# MAC Filter

## MAC Filter

You can define a list of devices and only allow those devices on your Wi-Fi network using MAC address filtering.

1. From the Home screen, click **Settings > Advanced Settings > MAC Filter**.
2. Enable/disable the ability to add devices to your Whitelist or Blacklist settings.
3. Click **Save Changes** to ensure the changes take effect.

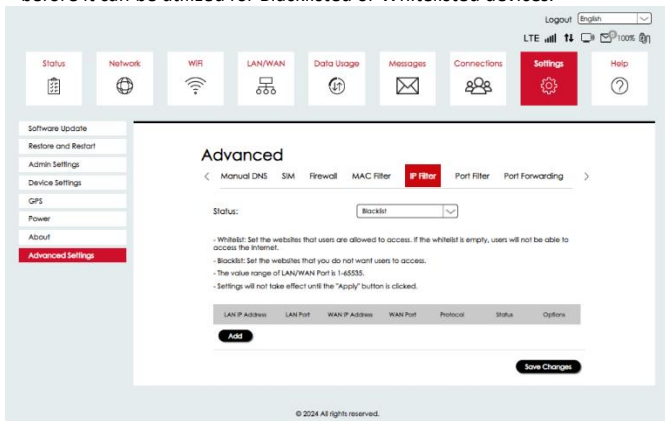


# IP Filter

You can manage what IP traffic is allowed in and out of your network based on the rules you define.

1. From the Home screen, click **Settings > Advanced Settings > IP Filter**.
2. Enable/disable the IP address network packets that need to be filtered.
3. Click **Save Changes** to ensure the changes take effect.

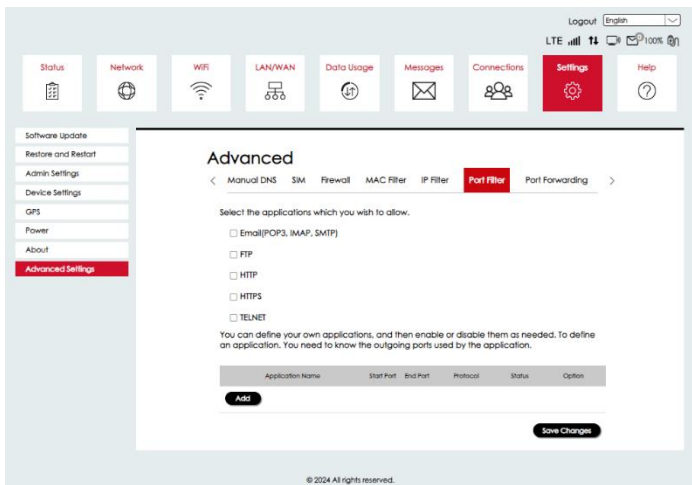
**NOTE:** The IP address filtering must be configured in the Firewall before it can be utilized for Blacklisted or Whitelisted devices.



# Port Filter

You can select which programs (for example, HTTP, FTP, and Email servers) can use the Mobile Hotspot to connect to the Internet.

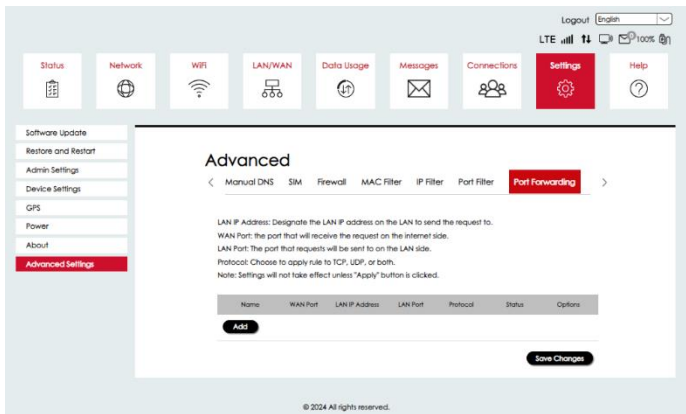
1. From the Home screen, click **Settings** > **Advanced Settings** > **Port Filter**.
2. Define the type of ports required.
3. Click **Save Changes** to ensure the changes take effect.



# Port Forwarding

You can set up (for example, Web servers, FTP servers, e-mail servers) specialized Internet applications on your networks.

1. From the Home screen, click **Settings** > **Advanced Settings** > **Port Forwarding**.
2. Manage/customize your IP address to send and receive to the LAN side and the internet side.
3. Click **Save Changes** to ensure the changes take effect.

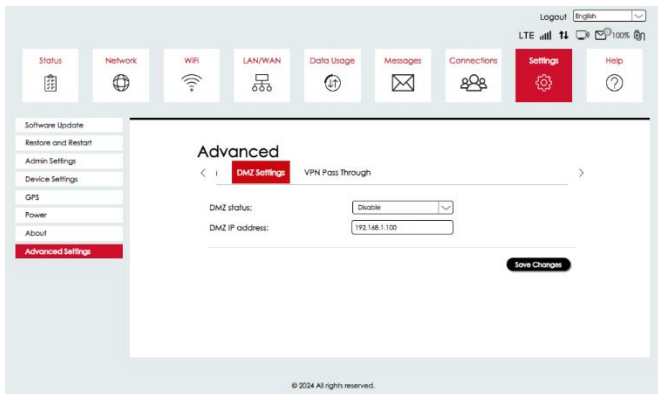




# Data Management Zone (DMZ) Settings

You can allow an external network to connect to and communicate with inside LAN devices through this WAN interface.

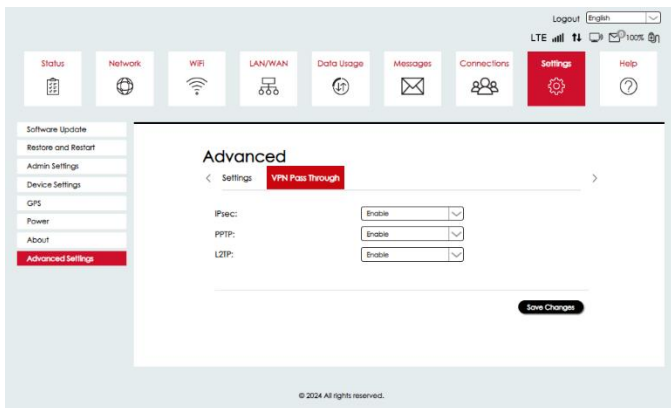
1. From the Home screen, click **Settings** > **Advanced Settings** > **DMZ Settings**.
2. Click enable to add the desired IP address to manage the DMZ settings.
3. Click **Save Changes** to ensure the changes take effect.



# VPN passthrough

Your device supports VPN passthrough. VPN passthrough allows VPN traffic to pass through the device's firewall, ensuring secure internet connections for remote work or accessing private networks while maintaining data privacy.

1. From the Home screen, click **Settings > Advanced Settings > VPN passthrough**.
2. Click enable to add the desired IP address to manage the DMZ settings.
3. Click **Save Changes** to ensure the changes take effect.



# Product specifications

## General

<b>Name</b>	Sonim Spot H500 5G Mobile Hotspot
<b>Model</b>	H500B
<b>Approvals</b>	FCC (US) IC (Canada)
<b>Weight</b>	306g, 10.6oz
<b>SIM</b>	4FF removable
<b>Dimension</b>	115x100x22.7mm, 4.53"x3.94"x0.89"
<b>Connectivity</b>	3G/4G/5G
<b>Wireless Network (Wi-Fi mode)</b>	Wi-Fi 6 (802.11 a/b/g/n/ac/ax)* *dual concurrent
<b>Location services</b>	GPS L1 & L5 / NMEA 2000 / GPS over Wi-Fi
<b>Ethernet</b>	1 x RJ 45 (1 Gbps)
<b>USB interface</b>	USB C 3.1
<b>Display</b>	2.4 Inch
<b>Battery Size</b>	6000 mAh Li-ion
<b>Time for Full charge</b>	3 hours (when not in use)
<b>Usage without battery installed</b>	Yes, when connected to wall power.
<b>Chipset</b>	Qualcomm® SDX62-0
<b>Memory</b>	RAM= 1GB, FLASH=1GB

# Wireless Communication

**Warning!** Data can occasionally be lost or delayed due to wireless transmission and reception properties.

The data loss 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, caused by several factors, including signal reflection, the ionosphere, and interference from other radio channels. SONIM® 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 Mobile Hotspot device or failure of the Sonim Spot H500 5G Mobile Hotspot device to send or receive such data.

# Safety Hazards

Do not operate the Mobile Hotspot 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 or suspect 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 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 generally be advised to turn off our 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 and the device can transmit signals that could interfere with this equipment.

## **ON AN AIRCRAFT, EITHER ON THE GROUND OR AIR- BORNE**

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 before boarding the aircraft 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. The countries operating such communications devices while controlling a vehicle are 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. Restart your Mobile Hotspot devices if the software is not operational after an ESD occurrence.

## FCC SAR Warning

This device with **FCC ID: WYPH500B** meets the government's requirements for exposure to radio waves.

This mobile hotspot is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commissioner of the U.S. Government:

The exposure standard for wireless mobile hotspots employs a unit of measurement known as the Specific Absorption Rate or SAR. The SAR limit set by the FCC is 1.6W/ kg. Tests for SAR are conducted using standard operating positions (10mm) accepted by the FCC, with the mobile hotspot transmitting at its highest certified power level in all tested frequency bands.

The SAR guideline includes a considerable safety margin designed to assure the safety of all persons regardless of age and health.

The FCC has granted an Equipment Authorization for this model mobile hotspot with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model mobile hotspot is on file with the FCC and can be found under the Display Grant section of <https://www.fcc.gov/oet/fccid> after searching on Grantee Code: WYP and Product Code: H500B.

## FCC Statement

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This product may not cause harmful interference.
2. This product must accept any interference received, including interference that may cause undesired operation.

### **NOTE:**

1. This product has been tested and found to comply with the limits for a Class B digital device under part 15 of the FCC Rules. These limits are designed to protect reasonably against harmful interference in a residential installation. This product generates uses and can radiate radio frequency energy and, if not installed and used by the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Suppose this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF. In that case, 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 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/TV technician for help.

Sonim or the manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to the product. Such changes could void the user's authority to operate the equipment.



Data transmission is always initiated by software, passed down through the MAC, digital and analog baseband, and finally to the RF chip. The MAC initiates several special packets, the only way the digital baseband portion will turn on the RF transmitter, which then turns off the end of the packet. Therefore, the transmitter will be on only while one of the packets mentioned above is transmitted. In other words, this device automatically discontinues transmission in case of either absence of information to transmit or operational failure.

## **ADDITIONAL BATTERY INFORMATION**

The current battery level, and whether it is charging or not charging, is displayed in the upper right-hand corner of the screen

Follow these tips to extend your mobile hotspot's battery life.

Set screen brightness to Low and set a shorter Sleep timeout (15 seconds). The display settings are located in Settings > Display.

## **BATTERY USAGE**

Your Sonim Spot H500 mobile hotspot comes with a removable battery. For any battery related questions, please contact the Sonim Customer Experience Center at 1-833-697-6646 (1-833-MY-SONIM) or email us at support@sonimtech.com.

Use only a Sonim mobile hotspot certified battery for the H500. (BAT-05000-15) is designed for this mobile hotspot. The use of other batteries may cause permanent damage to your device, thus voiding the warranty. It is recommended to protect the battery from extreme temperature environments and moisture. Please keep the battery out of the reach of children.

## **CHARGING THE BATTERY**

We recommend that you give your mobile hotspot a full charge before you use your mobile hotspot for the first time. The ambient temperature during charging shall be in the range 0°C to 45°C (32°F to 113°F). Only the power

supplies with outputs meeting the SELV requirements can be used for charging. The maximum allowable input voltage for the mobile hotspot is 5V. There is a risk of fire or explosion while charging if the battery has been replaced by an incorrect type.

If the battery is completely out of charge, it can take several minutes for the charging icon to appear when the charger is connected.

## **PROPERLY CHARGING THE DEVICE**

1. INSERT CHARGER - Insert the charger plug into a power outlet. 2. CONNECT TO THE MOBILE HOTSPOT - The charging port is located on the back center of the mobile hotspot. Open the port cover and insert the charging connector to the charging port.

### **3. CHARGING ANIMATION/ICON**

If the battery is being charged when the mobile hotspot is switched off, a battery charging animation with current battery level is displayed.

If the battery is being charged while the mobile hotspot is switched on, the battery icon on the status bar shows the animation indicating that the battery is being charged.

After the battery is fully charged the charging animation stops and you can disconnect the charger from the mobile hotspot. A message is displayed as Battery is full. Please unplug the charger.

## **ADDITIONAL BATTERY INFORMATION**

### **TIPS TO EXTEND THE BATTERY LIFE**

You can optimize battery power by utilizing two options within the Settings menu. First, the Screen Timeout and second, the Sleep Mode.

#### **Managing Screen Timeout**

To maximize your battery life, it is recommended to set your Screen Timeout to 30 seconds (which is the factory default). You have options to set the Screen Timeout to 30 seconds, or 1, 5 or 10 minutes. The longer the Screen Timeout is set, the shorter your battery life will typically be.

#### **Managing Sleep Mode.**

To further maximize your battery life, please go to Settings → Sleep Mode and you will have the option to put your mobile hotspot to sleep if no devices are connected after 5 minutes, 15 minutes, 30 minutes, 60 minutes or never. If you select “Never sleep” your device will stay awake until the battery depletes even if the mobile hotspot is not connected to any devices.

At any point, pressing the Power button will awaken the mobile hotspot so you can connect devices for usage.

If you are traveling and do not have access to mobile data or Wi-Fi network, switch to Airplane mode. To access Airplane Mode, go to SETTINGS AIRPLANE MODE. The default mode is OFF (slider will be on the left-hand side and black in color.) To turn Airplane Mode ON, touch the slider and the button will be slid to the right and change to green color. To turn Airplane Mode OFF, simply touch the slider and it will turn black and the button will move to the left-hand side.

## **AVOID HIGH TEMPERATURES**

Leaving the device in hot or cold places, such as in a closed car in summer or winter conditions, reduces the capacity and lifetime of the battery. For the best results, try to use the device between -20°C and +55°C (-4°F and 131°F). A device with a hot or cold battery may not work temporarily, even when the battery is fully charged. Battery performance is particularly limited in temperatures well below freezing.

## **STORING YOUR MOBILE HOTSPOT OR BATTERY**

If you plan to store your mobile hotspot or your battery for an extended time, please follow the recommendations below to ensure long battery life and minimize battery self-discharge:

Charge your battery to a level between 40% to 80%

Store mobile hotspot and battery separately to minimize battery trickle drain

Insulate the battery terminals to avoid discoloration and potential short circuits with other battery terminals

Store the battery in dry and cool conditions in a vibration-free environment

If you use a climate-controlled storage location, set the temperature to 50° to 64° F (10° - 18°Celsius) and keep the relative humidity between 40% - 50%

Recharge the battery once every 6 months, using the original Sonim wall charger and charging cable

## **PERSONAL MEDICAL DEVICES**

Mobile hotspots may affect the operation of cardiac pacemakers and other implanted equipment. Please avoid placing the mobile hotspot over the pacemaker, for example, laying it on your chest. If a minimum distance of 15 cm (6 inches) is kept between the mobile hotspot and the pacemaker, the risk of interference is limited. If you suspect that interference is taking place, immediately turn off your mobile hotspot and contact your cardiologist for more information. For other medical devices, consult your physician and the manufacturer of the device. Comply with instructions to switch off the mobile hotspot or deactivate the RF transmitter when required, especially when posted in hospitals and airplanes. Equipment used in these places may be sensitive to radio waves emitted from the device and adversely affect their operation. Also, observe restrictions at gas stations or other areas with flammable atmosphere or when close to electro-explosive devices.

## **CHILD SAFETY**

Do not allow children to play with your mobile hotspot or its accessories. Keep

it out of their reach. They could hurt themselves or others, or could accidentally damage the mobile hotspot. Your mobile hotspot may contain small parts, which could be detached and create a choking hazard.

## Basic troubleshooting & FAQ

### **I forgot my Wi-Fi password**

On the touchscreen, tap Wi-Fi Info in order to check the SSID and password of your mobile hotspot.

On the Admin web UI, go to <http://sonim.mobilehotspot>. Login and go to Status page and your SSID and passwords will be listed on the left-hand side under Wi-Fi.

### **How can I change the Wi-Fi name and password?**

Log into the Admin web UI, <http://sonim.mobilehotspot>.

### **My device won't connect to the internet. What is wrong?**

All Sonim mobile hotspots require an activated SIM card to establish a connection to the internet. Contact your mobile service provider to confirm that your SIM card is active. If your SIM card is active, you may want to ask your service provider if there are any network outages that may be affecting your access.

### **Can I make my Sonim hotspot go faster?**

Sonim mobile hotspots are configured by default to provide the fastest connection possible based on the network and signal conditions. If you are in a “strong signal” area (i.e. 4-5 bars) and you are noticing slower speeds, contact your service provider to see if you are being throttled due to high data use.

### **Will my Sonim Spot H500 mobile hotspot roam on other carriers?**

Yes, your mobile hotspot is capable of roaming globally, but it is optimized to perform best when roaming within the same region (North America vs. Europe vs Australia/New Zealand). Global roaming is dependent on your carrier’s capabilities.

### **Is my mobile hotspot locked to work only on the mobile carrier from which I purchased it?**

Some mobile operators require that devices they sell be locked to operate only on their network. If your mobile hotspot is network locked, it will show an “Invalid SIM” message when using a SIM from another mobile operator. In this case, you will need to contact the original carrier and get the unlock code from them. Sonim is not able to provide unlock codes.

### **Can I use my device in another country?**

Sonim mobile hotspots will work in other countries IF your rate plan with your mobile operator allows international roaming. Please contact your mobile operator to confirm your account is properly set up to allow international roaming.

### **Where can I find my passwords for my mobile hotspot?**

Your SSID and passwords can be found on the main menu and clicking on Wi-Fi Info. Scroll through the three screens to find the SSID and password for each network name.

For more FAQ’s, please go to the Sonim website at [www.sonimtech.com/support](http://www.sonimtech.com/support).