

# User guide

Verizon 5G Home Wi-Fi Extender

VRE3000

**verizon**

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# 1

## Product Overview

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Verizon VRE3000

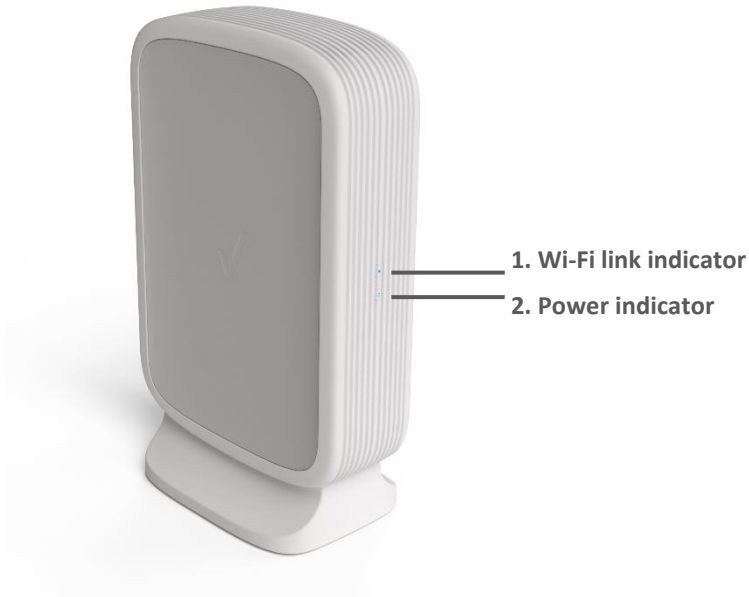
Components and Indicators

## Verizon VRE3000

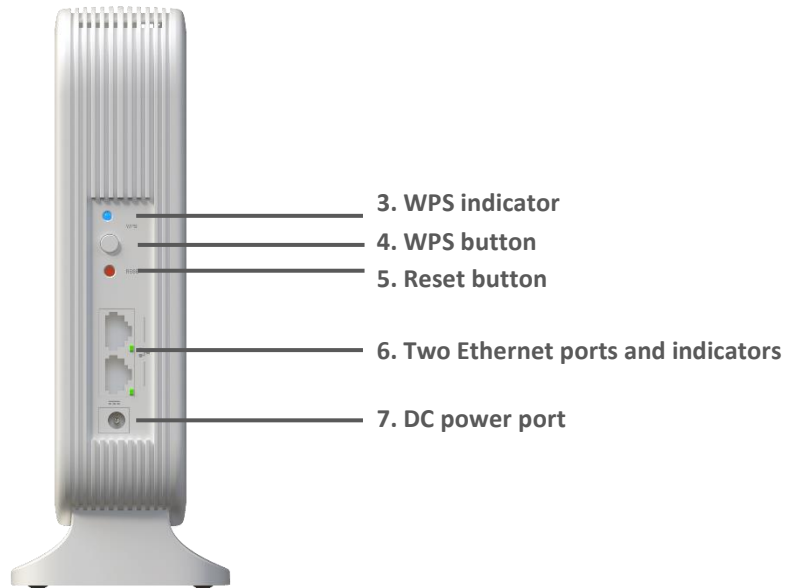
Your Verizon VRE3000 is a tri-band Wi-Fi extender which works like a bridge between a Wi-Fi router and Wi-Fi-capable devices (e.g., mobile phones, tablets, laptops, etc.) connected to your Wi-Fi network.

### Components and Indicators

#### Front View



#### Rear View



## 1 Product Overview

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- 1. Wi-Fi link indicator:** Indicates 5 GHz connection to network router.
- 2. Power indicator:** Shows if the Extender is on or off.
- 3. WPS indicator:** Shows when Wi-Fi Protected Setup (WPS) is active.
- 4. WPS button:** Use this button to connect your Wi-Fi Extender to your WPS-enabled Wi-Fi router to extend the network. After setup, you can also use the WPS button to connect WPS-enabled Wi-Fi devices to the extended network.
- 5. Reset button:** Press this button to reset the Wi-Fi Extender to factory default settings:  
Press and hold for at least 10 seconds until the Power indicator turns off. The Wi-Fi Extender will return to its default settings. It can take around 1 minute to turn back on.
- 6. Two Ethernet ports:** Use these 2 Gigabit Ethernet RJ-45 LAN ports to connect LAN devices.
- 7. DC power port:** Connect the power adapter that came in the package to the DC power connector.

### Note:

**The design is complete full set design. User should prohibit to remove anything from the product.**

### LED Indicator States

LED	STATE	DESCRIPTION
<b>Wi-Fi link indicator</b>	Blinking	Not connected to a Wi-Fi router/ Ready for setup/ Other error
	Solid Blue	5 GHz connection with the Wi-Fi router is connected.
<b>Power indicator</b>	Blinking	Rebooting/ Starting up/ Software update.
	Solid Blue	Power On
	Off	Power Off
<b>WPS indicator</b>	Blinking	Slow flash: WPS setup is available for 2 minutes then it times out. Fast flash: WPS setup failed.
	Solid Blue	Solid for 20 seconds, then turns off: Successful WPS setup.
	Off	WPS setup not in process. The light is off most of the time.
<b>Ethernet indicator</b>	Solid Green	An Ethernet device is connected to the Ethernet port.

Note: Devices and software are constantly evolving—the screen images and icons you see here are for reference only.

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## Package Content

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## 2 Package Content

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The package includes two parts within one box:

- Verizon VRE3000 Wi-Fi Extender
- Power Adapter (12V/2A)



# 3

## Getting Started

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Setting Up the Wi-Fi Extender



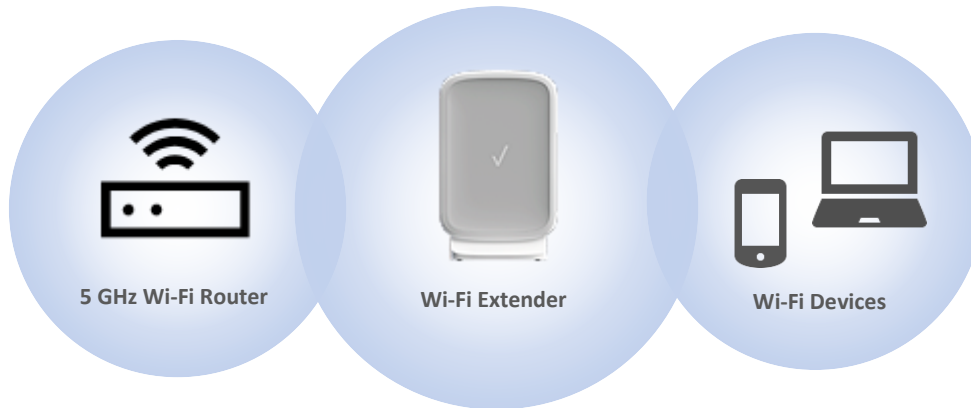
## Setting Up the Wi-Fi Extender

Your VRE3000 Wi-Fi Extender is designed to work with routers that have the 5 GHz Wi-Fi band (Band-1: 5150MHz ~ 5250MHz). Before you begin, make sure that your Wi-Fi router has this band. (Check your router's user guide, if you're not sure.)

### Step 1. Position your Wi-Fi Extender and Connected Device

Place your Wi-Fi Extender near your home Wi-Fi router. This will ensure that it's close enough to connect to the router's Wi-Fi network. (If you plan on connecting with WPS, place the Extender so that you can reach both devices easily.)

You'll also want the computer (or tablet) that you'll be using during setup nearby as well. It will need to connect to your Extender's Wi-Fi network during setup, or be close enough to be connected with an Ethernet cable.



Recommended placement



Devices too far apart

### Step 2. Plug in your Wi-Fi Extender

Now that your Extender is in position, connect the DC power adapter to the DC power port on the Extender. Then plug it into an electrical outlet. The power indicator on the Extender will blink while it starts up. When it's solid blue it's ready to proceed.

## 3 Getting Started

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Note: If you have used this Extender before and want to start fresh, press and hold the reset button for 10 seconds to restore the Extender to its factory default settings. During reset, the Extender will turn off and on again. Wait until the power indicator stops blinking and turns solid blue before moving to step 3.

### Step 3. Connect your Wi-Fi Extender to your router

There are 2 ways to connect your Extender to your router:

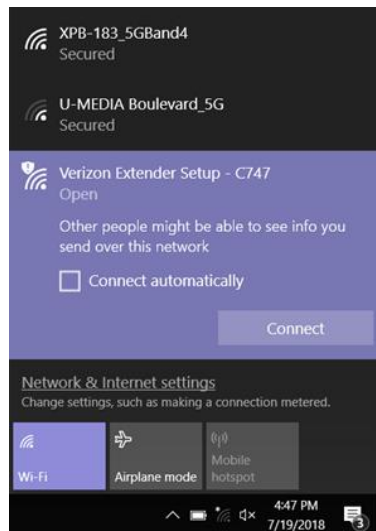
- Use a Wi-Fi-connected computer or tablet (Recommended)
- Use a computer connected to the Extender with an Ethernet cable

#### *Use a Wi-Fi-connected computer or tablet*

Note: Before you begin, you may want to make sure that your computer or tablet is set to connect automatically to your home router's Wi-Fi network. This will ensure a seamless transition when your Extender begins extending your home Wi-Fi network.

1. Go to your computer or tablet's list of available Wi-Fi networks and connect to your Extender's Wi-Fi network (SSID): **Verizon Extender Setup – XXXX**.

Note: The XXXX is last four characters of the Extender's MAC address. You can find your Extender's full **Default Network Name** on the sticker on the bottom of your Extender.



2. On your connected device, open a web browser and enter:
  - **<http://verizonre>** (Windows and Android)
  - **<http://verizonre.local>** (Mac OS X or iOS)
  - Or try **<http://192.168.0.250>**
3. The browser will show the Extender's Setup Wizard. Follow the onscreen steps to complete setup.

### *Use a computer connected to the Extender with an Ethernet cable*

You can also connect your computer to one of the Extender's two Ethernet ports with an Ethernet cable.

Once you've connected your computer, open a web browser and enter:

- **http://verizonre** (Windows and Android)
- **http://verizonre.local** (Mac OS X or iOS)
- Or try **http://192.168.0.250**.

The browser will show the Extender's Setup Wizard. Follow the onscreen steps to complete setup.

### **Step 4. Find the Best Location for Your Wi-Fi Extender with the Extender Placement Tool**

Now that your Extender is connected to your router's Wi-Fi network, you can move it to increase the range of your network. Your Extender's Admin website has a tool to help you find the best location.

1. If you haven't already, make sure the device you'll use to visit the Admin website is connected to your extended network.
2. If you've just completed the Setup Wizard, you can tap **Admin Website** on the **Setup complete!** screen and sign in.

If not, open a web browser and go to one of the addresses below. (You'll also find these URLs on the label on the bottom of your Extender.) Then sign in.

- **http://verizonre** (Windows and Android)
- **http://verizonre.local** (Mac OS X or iOS)


Note: If you have trouble connecting to the Admin website, try this:


1. Disconnect the device from the extended network.
2. Move the device closer to the Wi-Fi Extender.
3. Reconnect to the network.

(See Q2. *What can I do if I cannot access the Extender's Admin website?* in the Troubleshooting section for more information.)

For security, it's recommended that you change your Admin password at this point.


3. After you've signed in, you'll see the Admin website's Dashboard. The Extender placement card on the Dashboard will tell you if your Extender is too close, too far, or perfectly placed. Click the > on the card for more information.


Verizon 5G Home Wi-Fi Extender
Sign Out ▼



### Extender Placement


Use the information below to find the perfect location for your Wi-Fi Extender.



Router/AP

Signal Strength: -38 dBm

Too Close






Wi-Fi Extender

### Extended Network

2.4 GHz network name (SSID):  
VerizonConnect  
Password: ..... 👁

5 GHz network name (SSID):  
VerizonConnect-5g  
Password: ..... 👁

### Connected Devices: 3

Device	Global MAC	IP address	Signal	Band
iPad	A0:17:56:D5:37:F5	192.168.1.123		2.4 GHz
Notebook	A1:34:B2:D6:25:00	192.168.1.50		5 GHz
iPhone	F3:E7:98:EC:01:20	192.168.1.116		5 GHz


### Administration

Last system update: 09/01/2018 at 9:18 AM

System Update

### About

Model name: VRE3000  
Firmware version: 1.0.00, build 24




### Help

- [Setting up your Extender](#)
- [Placing your Extender for the best signal](#)
- [Setting your Extender's IP address](#)
- [Changing your Extender's network](#)
- [Updating your Extender's software](#)

[User Guide](#)  
[My Verizon](#)

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Verizon 5G Home Wi-Fi Extender
Sign Out ▼

- Home
- Extended Network
- Administration
- About
- Help

Network Settings
Available Networks
WPS
Extender Placement
Wireless MAC Authentication

Use the information below to find the perfect location for your Wi-Fi Extender.


Note: Placing your Wi-Fi Extender too close or too far from your router can limit or weaken your extended network's signal strength.



Router/AP

Signal Strength: -38 dBm

Too Close

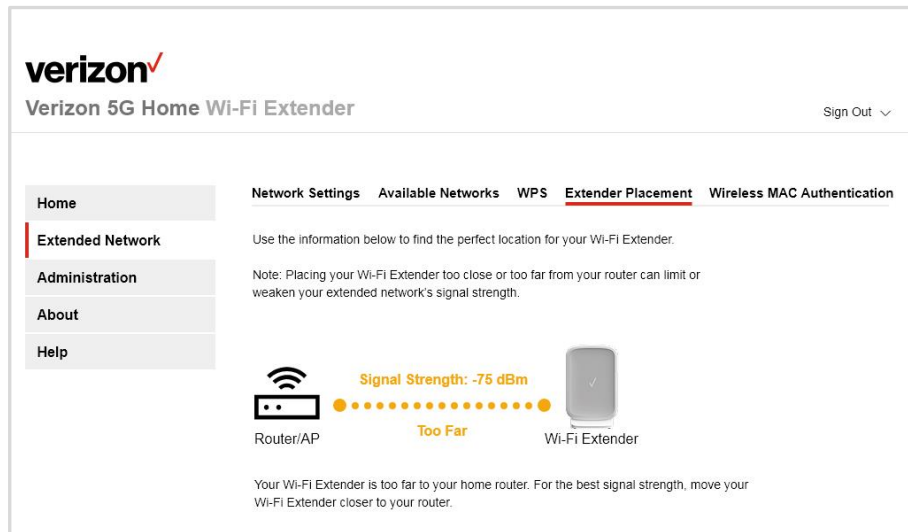


Wi-Fi Extender

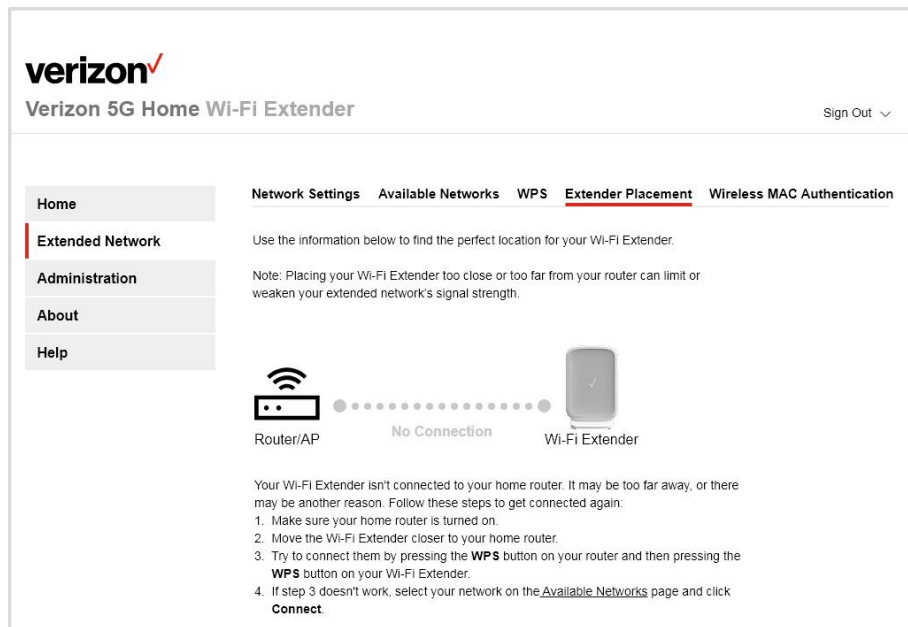
Your Wi-Fi Extender is too close to your home router. You can increase the range of your extended network by moving your Wi-Fi Extender farther from your home router.

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- If your Extender placement isn't perfect, unplug the Wi-Fi Extender and move it to a location about halfway between your Wi-Fi router and an area where you've had a poor Wi-Fi connection in the past. Check the Extender Placement screen again and follow the onscreen instructions to adjust your Extender's location as needed.



Note: If you've placed the Extender so far from your router that it can't connect, the Extender Placement tool will show "No Connection" and the Wi-Fi Link indicator on the Extender will blink. For more information, see the Troubleshooting section of this guide.



#### Step 5. Manage Your Wi-Fi Extender Settings

Now that your Extender is in the perfect location, you can also use the Admin website to get information about your Extender — like which Wi-Fi devices are connected to it — and to manage your Extender's settings.

Go to Chapter 4 **Wi-Fi Extender Settings** to learn more.

# 4

## Wi-Fi Extender Settings

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Using the Admin Website

Frequently Used Wi-Fi Extender Settings

# Using the Admin Website

Use your Wi-Fi Extender’s Admin website to get information about Extender status and manage your Extender’s settings.

### Signing In to the Admin Website

To access the Admin website, your computer or tablet needs to be connected to the Extender either through the Wi-Fi network or the with an Ethernet cable.

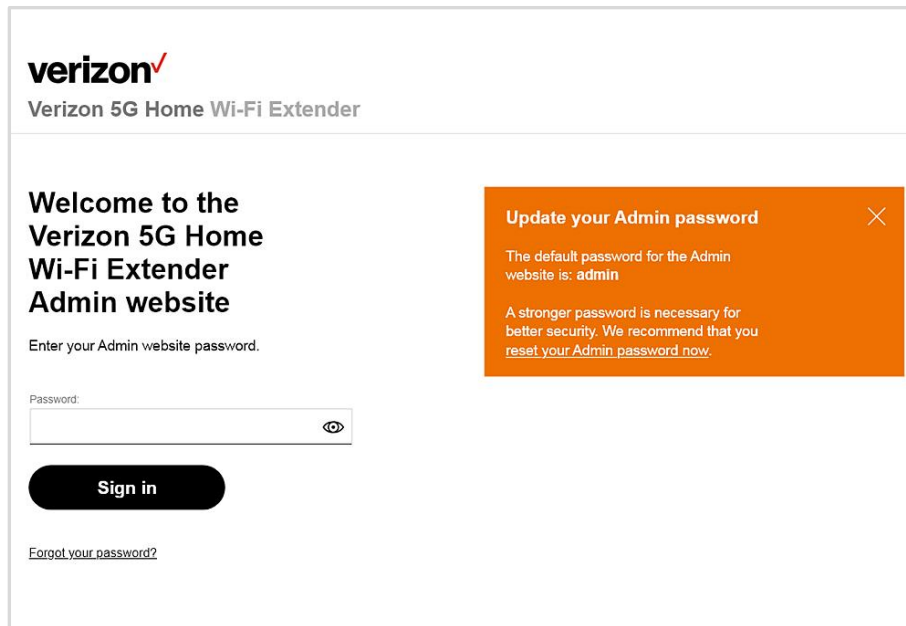
Open a web browser and go to one of the addresses below. Then sign in.

- <http://verizonre> (Windows and Android)
- <http://verizonre.local> (Mac OS X or iOS)

Note: If you have trouble connecting to the Admin website, try this:

1. Disconnect the device from the extended network.
2. Move the device closer to the Wi-Fi Extender.
3. Reconnect to the network.

(See Q2. *What can I do if I cannot access the Extender’s Admin website?* in the Troubleshooting section for more information.)



Note: If the password wasn’t changed after setup, the password is still the default password: “admin”.

### The Dashboard


From the Dashboard on the Admin website’s Home screen, you can see information on:

- Extender placement
- The extended network’s network names and passwords
- Connected devices
- System updates (in the Administration card)

## 4 Wi-Fi Extender Settings

- Model name and firmware version (in the About card)
- Links to Help topics, the User Guide, and My Verizon (in the Help card)

**verizon**  
Verizon 5G Home Wi-Fi Extender Sign Out ▾



### Extender Placement

Use the information below to find the perfect location for your Wi-Fi Extender.

Router/AP Signal Strength: -69 dBm Perfect Wi-Fi Extender

### Extended Network

2.4 GHz network name (SSID):  
VerizonConnect  
Password: .....

5 GHz network name (SSID):  
VerizonConnect-5g  
Password: .....

### Connected Devices: 3

Device	Global MAC	IP address	Signal	Band
iPad	A0:17:56:D5:37:F5	192.168.1.123		2.4 GHz
Notebook	A1:34:B2:D6:25:00	192.168.1.50		5 GHz
iPhone	F3:E7:98:EC:01:20	192.168.1.116		5 GHz


### Administration

Last system update: 08/01/2018 at 9:18 AM

[System Update](#)

### About

Model name: VRE3000  
Firmware version: 1.0.00, build 24



### Help

[Setting up your Extender](#)  
[Placing your Extender for the best signal](#)  
[Setting your Extender's IP address](#)  
[Changing your Extender's network](#)  
[Updating your Extender's software](#)

[User Guide](#)  
[My Verizon](#)

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## Navigation

From the Dashboard, tap the > in any card in to go to the screen for that topic. From other pages, tap the topic in the side bar.

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**Home** | **Network Settings** | Available Networks | WPS | Extender Placement | Wireless MAC Authentication

### Extended Network

#### Administration

#### About

#### Help

### Network

Connection type:  
Automatic Configuration - DHCP

Device name:  
Verizonwifilext



# Frequently Used Wi-Fi Extender Settings

## Extended Network Settings

The VRE3000 Wi-Fi Extender supports 2.4 GHz and 5 GHz Wi-Fi networks.

From the Dashboard, click the > in the **Extended Network** card.

The Extended Network screen is divided into 5 tabs:

1. Network Settings
2. Available Networks
3. WPS
4. Extender Placement
5. Wireless MAC Authentication

### Managing the Extender's IP Address

You can change the type of connection between the Wi-Fi Extender and the Wi-Fi Router (DHCP or Static IP).

1. Go to **Extended Network > Network Settings**.
2. Under **Network**, in the **Connection Type** field, select:
  - **Automatic Configuration –DHCP** to have your Wi-Fi Extender's IP address assigned by your Wi-Fi router
  - or
  - **Static IP** to use a fixed address to connect to the internet.
3. Click **Save**.

### Changing the Wi-Fi Extender's Name

You can change the name of your Wi-Fi Extender to make it easier to find in a list of devices. The default device name is VerizonExtXXXX, where XXXX is the last four characters of the default MAC address.

1. Go to **Extended Network > Network Settings**.
2. Under **Network**, enter the new **Device name**.
3. Click **Save**.

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Verizon 5G Home Wi-Fi Extender Sign Out ▾

**Home** | **Network Settings** | Available Networks | WPS | Extender Placement | Wireless MAC Authentication

**Extended Network**

**Administration**

**About**

**Help**

**Network**

Connection type:  
Automatic Configuration - DHCP ⓘ

Device name:  
VerizonExtC747 ⓘ

To make sure your devices can connect to both of your extended networks, make sure the settings below match the settings from your router.

Note: Older devices connect only to the 2.4 GHz band. Newer devices can connect to the 2.4 GHz or 5 GHz band.

**2.4 GHz Extended Network**

Network name (SSID):  
VerizonConnect ⓘ

Security mode:  
WPA2 Personal ⓘ

Password:  
..... ⓘ

Channel:  
CH 1 ⓘ

Channel width:  
20 MHz ⓘ

Broadcast network name (SSID):  
 On

**5 GHz Extended Network**

Network name (SSID):  
VerizonConnect-5g ⓘ

Security mode:  
WPA2 Personal ⓘ

Password:  
..... ⓘ

Channel:  
CH 149 ⓘ

Channel width:  
20/40/80 MHz ⓘ

Broadcast network name (SSID):  
 On

**Time**

Time zone:  
(GMT-08:00) Pacific Time (USA & Canada) ▾

Automatically adjust clock for daylight saving changes.

**Cancel** **Save**

### *Changing the Extended Network Names and Passwords*

1. Go to **Extended Network > Network Settings**.
2. Scroll down. Here you'll find information for both the 2.4 GHz and 5 GHz extended networks. From here you can change the **Network name (SSID)** and **Password** fields, as well as **Security mode**, **Channel** and **Channel width**, for each extended network.
3. Click **Save**.

Note: Wi-Fi devices will disconnect from the extended network when the network name and password are changed. To avoid interruptions in the connection when moving between the router's Wi-Fi network and the extended network, it's recommended that the network names and passwords of both networks match.

### *Turning Off the SSID Broadcast*

You can turn off **Broadcast network name (SSID)** so that the name of the extended network won't appear in the list of available networks of nearby Wi-Fi devices. To connect to your network, others will have to know the network name (SSID) and enter it manually into their Wi-Fi Settings along with the password.

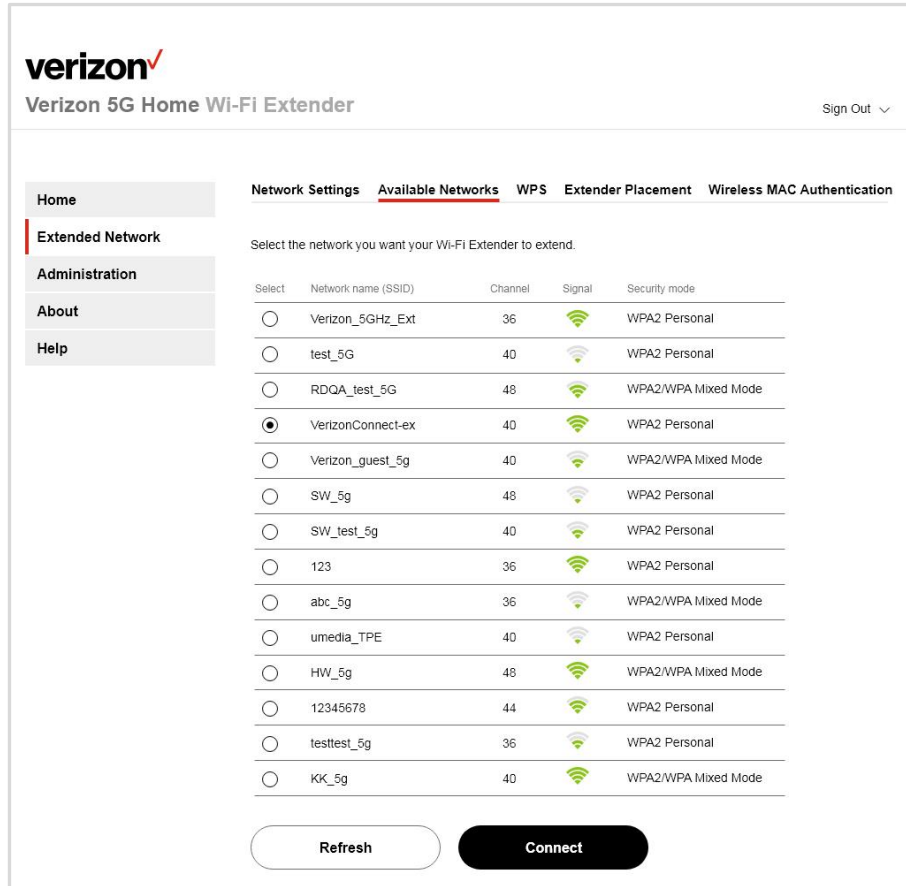
1. Go to **Extended Network > Network Settings**.
2. Scroll down. Here you'll find information for both the 2.4 GHz and 5 GHz extended networks. Each network has its own **Broadcast network name (SSID)** switch. Click each one to turn it **Off**.
3. Click **Save**.

Note: If the router is broadcasting the network name, it will still be detectable to other devices. Consult your router's user guide for information on turning off your router's Broadcast network name (SSID) setting.

### Selecting a Network to Extend

If your Extender becomes disconnected from your router's network, or if you want to change which network it's extending, you can choose one from the list of available networks.

1. Go to **Extended Network > Available Networks**. (You may need to wait while the Extender scans for available networks.)
2. Follow the onscreen instructions. You can connect with WPS or select a network from the list and connect using a password.



### Connecting Devices to the Extended Network with WPS

Wi-Fi Protected Setup (WPS) allows compatible Wi-Fi devices to easily connect to your extended Wi-Fi network without entering the password.

1. From the **Extended Network** screen, tap the **WPS** tab.
2. Turn on **Wi-Fi Protected Setup (WPS)**.
3. Follow the onscreen instructions to **Connect with WPS button** or **Connect with PIN**.

Note: If your device asks for a PIN number, you'll find that on this screen as well.

The screenshot shows the Verizon 5G Home Wi-Fi Extender settings page. The top navigation bar includes the Verizon logo, the product name "Verizon 5G Home Wi-Fi Extender", and a "Sign Out" link. A left sidebar contains menu items: Home, Extended Network (selected), Administration, About, and Help. The main content area has tabs for Network Settings, Available Networks, WPS (selected), Extender Placement, and Wireless MAC Authentication. The WPS section is titled "Wi-Fi Protected Setup (WPS) allows compatible Wi-Fi devices to easily connect to your extended Wi-Fi network without entering the password." It features a toggle switch for "Wi-Fi Protected Setup (WPS)" which is currently turned "On". Below this, there is explanatory text and two connection methods: "Connect with WPS button" and "Connect with PIN". The "Connect with PIN" section includes a text input field for the "WPS PIN:" and an "Enter" button. At the bottom, a note states: "If the device you're connecting asks for the router's PIN number, enter this number: 12345678".

### Finding the Best Location for your Wi-Fi Extender

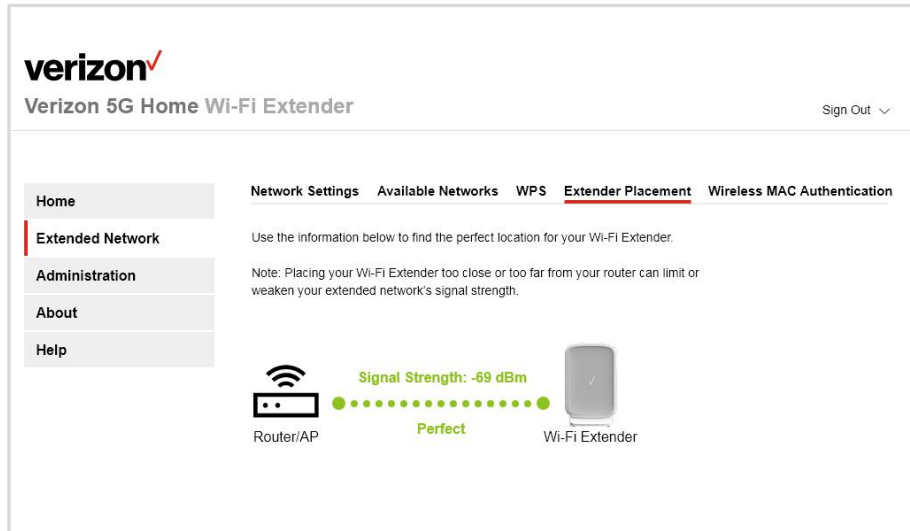
To get the best coverage for your extended network, you need to place your Wi-Fi Extender far enough from your router to extend coverage, but close enough to have a strong signal. The Extender Placement tool in the Admin website can help you do that.

1. From the **Extended Network** screen, tap the **Extender Placement** tab.
2. The tool will tell you if your Extender is too close, too far, or perfectly placed.

The screenshot shows the Verizon 5G Home Wi-Fi Extender settings page with the "Extender Placement" tab selected. The main content area provides instructions: "Use the information below to find the perfect location for your Wi-Fi Extender." A note states: "Note: Placing your Wi-Fi Extender too close or too far from your router can limit or weaken your extended network's signal strength." Below the text is a diagram showing a "Router/AP" on the left and a "Wi-Fi Extender" on the right. A horizontal line of dots connects them, with a yellow dot in the middle. Above the dots, it says "Signal Strength: -75 dBm". Below the dots, it says "Too Far". Below the diagram, a note reads: "Your Wi-Fi Extender is too far to your home router. For the best signal strength, move your Wi-Fi Extender closer to your router."

## 4 Wi-Fi Extender Settings

- If your Extender placement isn't perfect, follow the onscreen instructions about how to improve its location. Repeat as needed until it's perfect.



The screenshot shows the Verizon 5G Home Wi-Fi Extender settings page. The 'Extender Placement' tab is selected. The page displays a signal strength of -69 dBm, which is labeled as 'Perfect'. A diagram shows a Router/AP connected to a Wi-Fi Extender with a solid line of green dots representing a strong signal.

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Verizon 5G Home Wi-Fi Extender Sign Out

**Home**  
**Extended Network**  
**Administration**  
**About**  
**Help**

**Network Settings** **Available Networks** **WPS** **Extender Placement** **Wireless MAC Authentication**

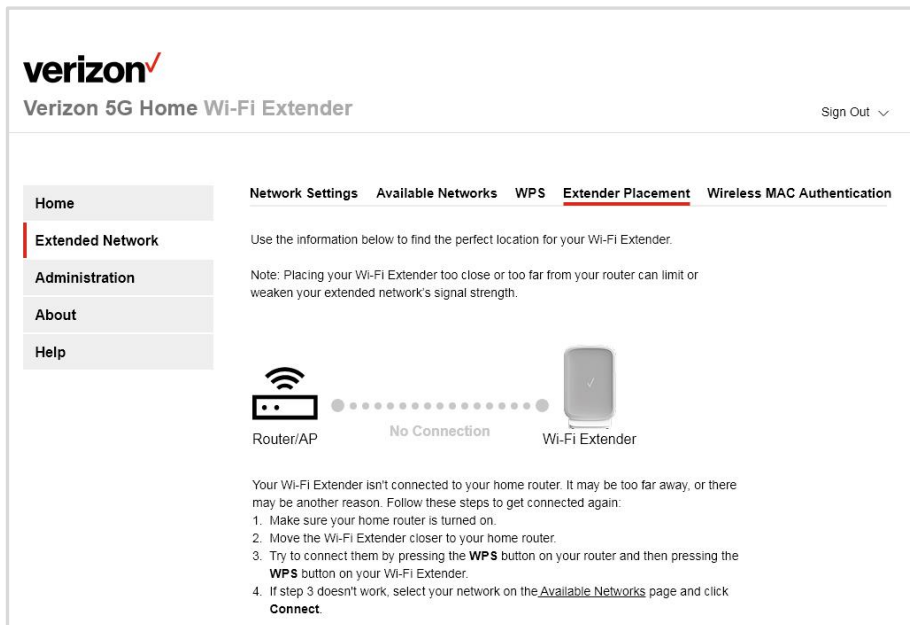
Use the information below to find the perfect location for your Wi-Fi Extender.

Note: Placing your Wi-Fi Extender too close or too far from your router can limit or weaken your extended network's signal strength.

Signal Strength: -69 dBm  
Perfect

Router/AP Wi-Fi Extender

Note: If you've placed the Extender so far from your router that it can't connect, the Extender Placement tool will show "No Connection" and the Wi-Fi Link indicator on the Extender will blink. For more information, see the Troubleshooting section in this guide.



The screenshot shows the Verizon 5G Home Wi-Fi Extender settings page. The 'Extender Placement' tab is selected. The page displays a 'No Connection' status. A diagram shows a Router/AP and a Wi-Fi Extender with a dashed line of grey dots between them, indicating no connection.

**verizon**  
Verizon 5G Home Wi-Fi Extender Sign Out

**Home**  
**Extended Network**  
**Administration**  
**About**  
**Help**

**Network Settings** **Available Networks** **WPS** **Extender Placement** **Wireless MAC Authentication**

Use the information below to find the perfect location for your Wi-Fi Extender.

Note: Placing your Wi-Fi Extender too close or too far from your router can limit or weaken your extended network's signal strength.

No Connection

Router/AP Wi-Fi Extender

Your Wi-Fi Extender isn't connected to your home router. It may be too far away, or there may be another reason. Follow these steps to get connected again:

1. Make sure your home router is turned on.
2. Move the Wi-Fi Extender closer to your home router.
3. Try to connect them by pressing the **WPS** button on your router and then pressing the **WPS** button on your Wi-Fi Extender.
4. If step 3 doesn't work, select your network on the [Available Networks](#) page and click **Connect**.

### Controlling Access with Wireless MAC Authentication

Wireless MAC authentication can be used to block or allow wireless users by the MAC addresses of their computers or devices.

1. Go to **Extended Network > Wireless MAC Authentication**.
2. Turn on **Wireless Mac authentication**.
3. Under Access mode, select **Allow** to let only selected devices connect, or select **Deny** to prevent selected devices from connecting.
4. Add or remove devices from the Access Control List.
5. Click **Save**.

The screenshot shows the Verizon 5G Home Wi-Fi Extender settings interface. The page title is "Verizon 5G Home Wi-Fi Extender" with a "Sign Out" link. The navigation menu includes Home, Extended Network (selected), Administration, About, and Help. The main content area is titled "Wireless MAC Authentication" and contains the following sections:

- Network Settings**: A description: "Use Wireless MAC authentication to filter wireless users by the MAC addresses of their computers or devices."
- Wireless MAC authentication**: A toggle switch set to "On".
- Access mode**: A dropdown menu set to "Allow".
- Add a Device**: A section with a "Device name" dropdown set to "Host name" and a "MAC address" field containing "F3:E7:98:EC:01:20".
- Access Control List**: A table listing devices with their names and MAC addresses, and edit/delete icons.

Device name	MAC address		
Notebook	A1:34:B2:D6:25:00		
iPhone	F3:E7:98:EC:01:20		

At the bottom of the page are "Cancel" and "Save" buttons.

### Administration Settings

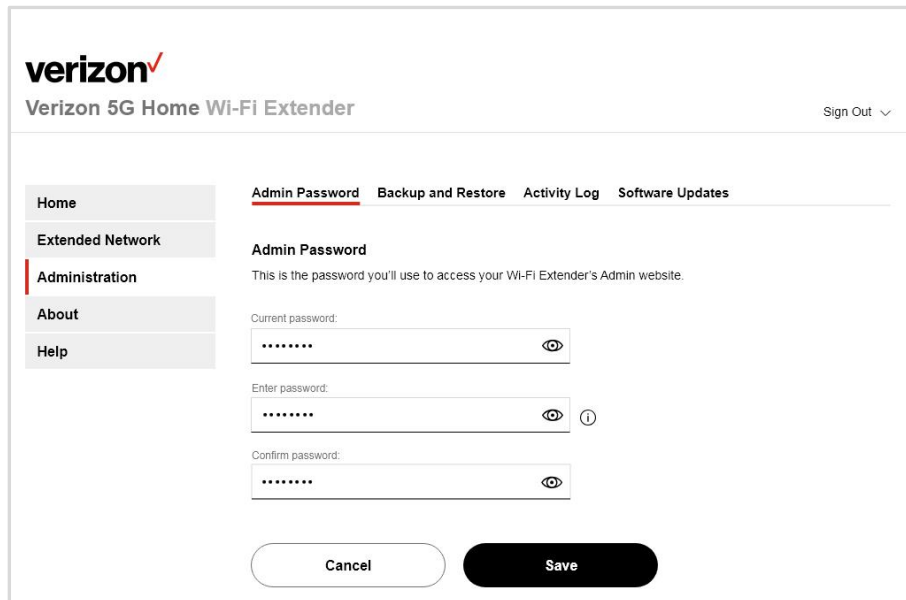
From the Dashboard, click the > in the **Administration** card or click **Administration** in the side bar. The Administration screen is divided into 4 tabs:

1. Admin Password
2. Backup and Restore
3. Activity Log
4. Software Updates

#### *Changing the Admin Password*

For better security, we recommend you change the Admin password from the default password. Note: The factory default sign in password is “admin”.

1. Go to **Administration > Admin Password**
2. Enter the **Current password**.
3. Enter and confirm the new password.
4. Click **Save**.



The screenshot shows the Verizon 5G Home Wi-Fi Extender Administration interface. At the top left is the Verizon logo and the text "Verizon 5G Home Wi-Fi Extender". On the right is a "Sign Out" link with a dropdown arrow. Below this is a navigation bar with four tabs: "Admin Password" (which is underlined and selected), "Backup and Restore", "Activity Log", and "Software Updates". On the left side, there is a sidebar menu with options: "Home", "Extended Network", "Administration" (which is highlighted with a red bar), "About", and "Help". The main content area is titled "Admin Password" and contains the text: "This is the password you'll use to access your Wi-Fi Extender's Admin website." Below this text are three password input fields: "Current password:", "Enter password:", and "Confirm password:". Each field has a password mask (dots) and a toggle icon (an eye) to show or hide the password. The "Enter password:" field also has a small information icon (i) to its right. At the bottom of the form are two buttons: "Cancel" and "Save".

#### *Backing up your Extender's Settings and Restoring Them*

You can create a backup file of your Extender's settings and save it to your computer. Later, if you have to reset your Extender's settings, you can restore them from the saved file.

1. Go to **Administration > Backup and Restore**.
2. Click **Back up** and follow the instructions to save a backup file to your computer.

From this same page you can also click:

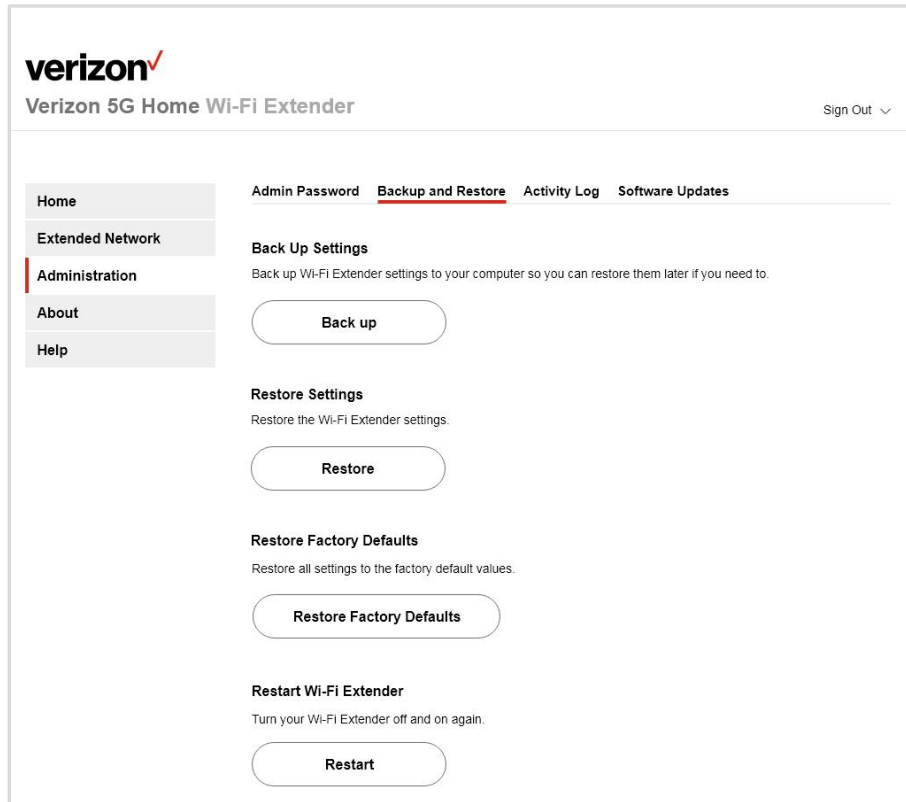
- **Restore Settings** to restore the Wi-Fi Extender backup settings from the file on your computer.
- **Restore Factory Defaults** to restore all settings to the default values. This will erase all settings on your Wi-Fi Extender. Devices connected to your extended network may become disconnected.

## 4 Wi-Fi Extender Settings

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Note: You can also Restore Factory Settings by pressing the **Reset** button on the Extender and holding for 10 seconds.

- **Restart** to turn the Extender off and on again.



### *Using Activity Logs*

You can keep and download a record of Extender activity.

Go to **Administration > Activity Log**

- To keep a record of Extender activity, turn on **Logging**.
- To download the log, click **Export**.



The screenshot shows the Verizon 5G Home Wi-Fi Extender web interface. The top navigation bar includes the Verizon logo, the product name "Verizon 5G Home Wi-Fi Extender", and a "Sign Out" link. A sidebar on the left contains menu items: Home, Extended Network, Administration (highlighted), About, and Help. The main content area has tabs for "Admin Password", "Backup and Restore", "Activity Log" (selected), and "Software Updates". Under the "Activity Log" tab, there is a toggle switch for "Logging" set to "On". Below the toggle is a log viewer showing system messages such as "syslogd started: BusyBox v1.12.1", "Firmware Version: 1.0.00\_build\_024", and "WiFi: (5G)Client tc:e9:96:ec:01:60 had associated successfully". At the bottom of the log viewer are three buttons: "Refresh", "Clear logs", and "Export logs".

### Getting Software Updates for Your Extender

Periodically, you'll want to check for available updates for your Extender.

1. Go to **Administration > Software Updates**
2. Follow the onscreen instructions to download the update to your computer and update the Extender.

Note: Software updates can take a few minutes. Don't unplug your Wi-Fi Extender or press the Reset button until the upgrade process is complete.

The screenshot shows the Verizon 5G Home Wi-Fi Extender web interface with the "Software Updates" tab selected. The sidebar and top navigation are the same as in the previous screenshot. The main content area contains instructions: "Download the latest firmware file to your computer from [verizonwireless.com/Support](\"http://verizonwireless.com/Support\"). Select the firmware file below. Then press **Start Update**." Below this is a note: "Note: Software Updates can take a few minutes. Don't unplug your Wi-Fi Extender or press the Reset button until the upgrade process is complete." There is a "Select a file" input field with a "Browse" button next to it. At the bottom is a large "Start Update" button.

### The About Screen

From the Dashboard, click the > in the **About** card or click **About** in the side bar.

The About screen is divided into 5 tabs of information about your Extender, its status, and devices connected to the extended network:

#### 1. Extender Info

**verizon**  
Verizon 5G Home Wi-Fi Extender Sign Out

**Home**  
**Extended Network**  
**Administration**  
**About**  
**Help**

**Extender Info** Ethernet Status Upstream Network Status WLAN Status Connected Devices

Firmware Version: 1.0.00, build 24, Jul 27, 2018  
Model Name: VRE3000  
System Time: Thursday, August 2, 2018 10:12:07 AM  
Active Time: 00:23:22  
Extender MAC Address: 00:11:E0:04:C7:47  
Connection Type: Automatic Configuration - DHCP  
IP Address: 192.168.1.111  
Subnet Mask: 255.255.255.0  
Default Gateway: 192.168.1.1

**Refresh**

#### 2. Ethernet Status

**verizon**  
Verizon 5G Home Wi-Fi Extender Sign Out

**Home**  
**Extended Network**  
**Administration**  
**About**  
**Help**

**Extender Info** **Ethernet Status** Upstream Network Status WLAN Status Connected Devices


Packets Sent (TX): 9024  
Packets Received (RX): 0  
Packets Dropped (TX): 0  
Packets Dropped (RX): 0  
Collisions: 0  
Errors: 0

**Ethernet Connected Device**


Connected Device	Global MAC	IP Address
--	--	--

**Refresh** **Clear**

### 3. Upstream Network Status




Verizon 5G Home Wi-Fi Extender Sign Out ▾

Home	Extender Info	Ethernet Status	<u>Upstream Network Status</u>	WLAN Status	Connected Devices
Extended Network	Network Name (SSID):	VerizonConnect-ex			
Administration	Connected on Upstream AP:	06:01:E0:04:C7:49			
<b>About</b>	Mode:	802.11 ac			
Help	Band / Channel:	5 GHz / CH 40			
	Channel Width:	80 MHz			
	Security:	WPA2 Personal			
	Signal Strength / Link Rate:	 (-30 dBm) 1733 Mbps			

[Refresh](#)

### 4. WLAN Status



Verizon 5G Home Wi-Fi Extender Sign Out ▾

Home	Extender Info	Ethernet Status	Upstream Network Status	<u>WLAN Status</u>	Connected Devices
Extended Network	Radio Band:	2.4 GHz	5 GHz		
Administration	Network Name (SSID):	VerizonConnect	VerizonConnect-5g		
<b>About</b>	AP MAC address:	00:11:E0:04:C7:48	00:11:E0:04:C7:4A		
Help	Mode:	802.11 b/g/n mix	802.11 a/n/ac mix		
	Channel:	CH 1	CH 149		
	Channel Width:	20 MHz	20/40/80 MHz		
	Security:	WPA2 Personal	WPA2 Personal		

[Refresh](#)

### 5. Connected Devices

**verizon**  
Verizon 5G Home Wi-Fi Extender Sign Out

**Home**  
Extended Network  
Administration  
**About**  
Help

**Extender Info** **Ethernet Status** **Upstream Network Status** **WLAN Status** **Connected Devices**

**2.4 GHz Extended Network**

Connected device	Global MAC	IP address	Signal
iPad	A0:17:56:D5:37:F5	192.168.1.123	📶

**5 GHz Extended Network**

Connected device	Global MAC	IP address	Signal
Notebook	A1:34:B2:D6:25:00	192.168.1.50	📶
iPhone	F3:E7:98:EC:01:20	192.168.1.116	📶

**Refresh** **Save**

Note: You can rename connected devices on the **Connected Devices** screen to make them easier to identify.

### The Help Screen

From the Dashboard, click the > in the **Help** card or click **Help** in the side bar.

From here you'll find instructions on a variety of Help topics and a link to [verizonwireless.com/Support](https://www.verizonwireless.com/Support).

**verizon**  
Verizon 5G Home Wi-Fi Extender Sign Out

**Home**  
Extended Network  
Administration  
About  
**Help**

- How to Set Up Your Wi-Fi Extender to Extend Your Wi-Fi Network +
- How to Place Your Wi-Fi Extender for the Best Signal Strength +
- How to Set Your Wi-Fi Extender's IP Address Settings +
- How to Change the Wi-Fi Network You're Extending +
- How to Update Your Wi-Fi Extender's Software +

Note: For more information, refer to the online user guide at [verizonwireless.com/Support](https://www.verizonwireless.com/Support)

# 5

## Troubleshooting

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Frequently Asked Questions

## Frequently Asked Questions

### *Q1. How do I know if my computer or tablet is directly connected to the Wi-Fi Extender?*

- **If your Extender hasn't been connected to router yet, or has recently been reset:** You can check your computer or tablet's Wi-Fi settings to see if it's connected to the Extender's default Wi-Fi network. You'll find the **Default Network Name** on the sticker on the bottom of the Extender.
- **If your Extender has been connected to a router:** Make sure your device is connected to the extended network. Then follow the instructions in Chapter 4 Wi-Fi Extender Settings: Using the Admin Website: Signing In to the Admin Website. If you're able to connect to the Admin website, your device is connected to the Extender.

### *Q2. What can I do if I cannot access the Extender's Admin website?*

1. Make sure you're connected to the correct Wi-Fi network:
  - If your Extender isn't connected to a router or has been reset, connect to the Default Network listed on the sticker on the bottom of the Extender.
  - If your Extender is connected to a router, connect to the extended network. (Usually this will have the same network name and password as your router's network.)
2. Check your connection:
  - **If your computer or tablet is connected via Wi-Fi:**
    - a. Disconnect the device from the Wi-Fi network.
    - b. Move the device closer to the Wi-Fi Extender.
    - c. Reconnect to the network.
  - **If you're using a computer connected via an Ethernet cable to the Wi-Fi Extender:** Make sure that the cable is connected at both ends.

### *Q3. What can I do if I forgot my Admin password?*

- If you haven't changed the default Admin password, it's **admin**.
- If you changed the password and forgot it, the only way to access the Admin website is to reset your Extender to Factory Default Settings. (See Q4.)

Note: Returning your Extender to factory default settings will erase all settings on your Wi-Fi Extender. Devices connected to your extended network may become disconnected.

### *Q4. How do I reset my Wi-Fi Extender to its factory default settings?*

**To reset your Extender from the Extender itself:**

1. Press the **Reset** button on the back of your Extender for at least 10 seconds until the **Power** indicator turns off.

2. The Extender will reset to factory default settings and turn back on again.

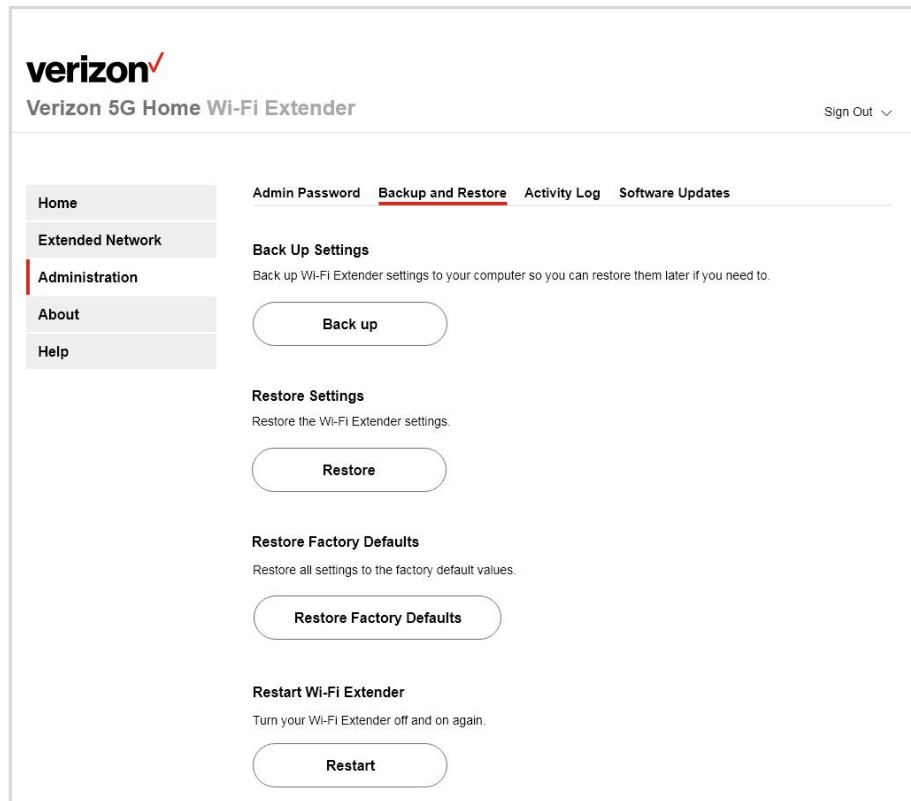
**To reset your Extender from the Admin website:**

1. Go to **Administration > Backup and Restore**.
2. Click **Restore Factory Defaults**.

Both of these options will erase all the settings on your Wi-Fi Extender. Devices connected to your extended network may become disconnected.

Note: Before resetting your Extender, you may want to back up your settings, so you can restore them later.

1. From the Admin website, go to **Administration > Backup and Restore**.
2. Click **Back up** and follow the instructions to save a backup file to your computer.
3. Reset your Extender following the steps above.
4. When you're ready to restore your settings, come back to **Administration > Backup and Restore**.
5. Click **Restore Settings** to restore the Wi-Fi Extender backup settings from the file on your computer.



### **Q5. Why can't I connect my Wi-Fi Extender to my router using WPS?**

Your VRE3000 Wi-Fi Extender is designed to work with routers that have the 5 GHz Wi-Fi band (Band-1: 5150MHz ~ 5250MHz). Before you begin, make sure that your Wi-Fi router has this band. One way to check is to see if its network name (SSID) ends with "-5g". (Check your router's user guide, if you're not sure.)

Also, some routers do not support WPS.

But don't worry. If your router does have the 5 GHz band, but doesn't have WPS, it's still easy to connect. If you're connecting a router for the first time (or have recently reset your Extender) connect to the Admin website and follow the instructions in the Setup Wizard to connect manually.

Or in the Admin website, go to **Extended Network > Available Networks** to select and connect to your router's Wi-Fi network.

### ***Q6. I'm connected to the extended network. Why don't I have an internet connection?***

If your device is connected to the extended network, but doesn't have an internet connection, follow these steps to troubleshoot the problem:

1. Make sure your Wi-Fi Extender is connected to the Wi-Fi router. Look at the Wi-Fi Link indicator. If the light is solid blue, you have a connection. If it's blinking. Move to step 2.



2. Check to see if your Wi-Fi router or modem has internet connection. If it doesn't, restart your router or modem.
3. If the problem persists, check your modem ISP connection and restart the modem. (For wireless modems, make sure the modem is connected to the wireless network. For wired modems, check the cables connected to your modem.)
4. If your router still doesn't have an internet connection, contact your ISP (Internet Service Provider) for assistance.

### ***Q7. How do I know if my Wi-Fi Extender is connected to the Wi-Fi Router?***

The quickest way is to look at the Wi-Fi Link indicator:

- If it's solid blue, your Extender is connected to your W-Fi router.

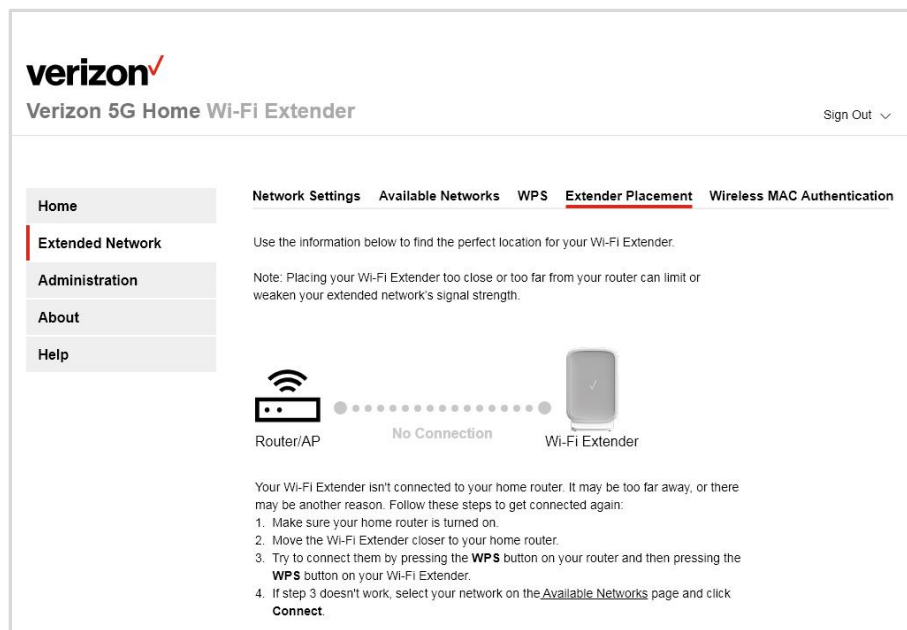


- If it's flashing, either the Wi-Fi router isn't available or the Wi-Fi Extender has been reset to default settings. You can check your Wi-Fi device's list of available networks. If you see the Extender's default network name, **Verizon Extender Setup - XXXX**, it hasn't connected to a router yet (or has been reset to factory default settings.) Follow the instructions in the Getting Started section of this guide to connect your Extender to your router.

Note: You can see the full **Default Network Name** on the sticker on the bottom of your Extender.

If your Extender has already connected to a router, but you think it's lost the connection or you want to check the quality of the connection, you can check the Extender Placement tool.

1. Sign in to the Extender's Admin website. On your computer or tablet, open a web browser and enter:
  - **http://verizonre** (Windows and Android)
  - **http://verizonre.local** (Mac OS X or iOS)
2. You'll see the Extender Placement tool in the Dashboard. Tap the > in the Extender Placement card for more information, including steps to follow if the tool says **No connection**.



Note: For more information on connecting your Wi-Fi Extender to your Router, go to chapter 3 Getting Started.

### **Q8. Can the Wi-Fi Extender's Network Names (SSIDs) be the same as that of my existing Wi-Fi Router?**

Yes. It's recommended that your Extender's 2.4 GHz and 5 GHz extended networks' network names be the same as your router's network names. This will enable you to move between your router's network and the extended network's coverage areas without having to switch manually or becoming disconnected.

To manage your Extender's network names, from the Admin website, go to **Extended Network > Network Settings**.

Note: Don't forget to scroll down and click **Save** when you're done.

# 6

## Product Spec. and Regulatory Information

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Product Specifications  
Regulatory Information

# Product Specifications

## Hardware Feature

### Wired Interface

Two 10/100/1000 gigabit Ethernet ports by RJ45 connectors, with auto MDIX sensing, for connecting Ethernet-capable client devices to the home wireless network.

### Wireless Interface

- IEEE 802.11ac wireless interface, backward compatible with 802.11a/n
- IEEE 802.11b/g/n wireless interface
- Tri-band concurrent (2.4 GHz and 2 x 5 GHz)
- 6 x internal antennas
- Wi-Fi Protected Setup (PIN and PBC)

### I/O Interface

- 1 x DC-Jack
- 2 x 10/100/1000 Gigabit Ethernet ports by RJ45 connectors
- 2 x Buttons (Reset, WPS)
- 3 x LED (WPS, Power, Wi-Fi)

### Power Supply Specification

Characteristic	Specification
Type	External, switching, barrel jack
Input Voltage	100-240 V
Input Frequency Range	50~60Hz
Output Voltage / Current	DC 12V/2A
Efficiency Level	6
CEC compliant	Yes, Level 6

## Internal Antenna Specification

2x2 dual band antenna (2.4 GHz and 5 GHz band)  
4x4 single band antenna (5 GHz band)

## Firmware Feature List

- http Browser-based GUI for user configuration
- Setup Wizard with WPS or connect manually
- Available Networks for user choosing upstream
- Configuration backup and restore

## 6 Product Spec. and Regulatory Information

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- DHCP server for easy device setup
- IPv6 pass through support
- Wireless Security (WPA-Personal and WPA2-Personal)
- Upgradeable Firmware from GUI
- 802.11k roaming support
- Automatically choose better 5 GHz as dedicated backhaul link
- Support DFS channels for both AP and STA mode (future supporting)
- Wireless MAC Authentication
- Dual Image for fail-safe update
- Smart WPS process for both upstream link and client
- NTP with Time zone, daylight saving
- Extender Placement
- NetBIOS/mDNS/URL domain name for web connection
- URL redirection while no uplink connection
- Activity Log
- Only signed image is allowed for FW update

### Operational and Environmental Requirement

- Operational Temperature: 0° C to 40° C (32° F to 104° F)
- Storage Temperature: -20° C to 60° C (-4° F to 140° F)
- Operational Humidity: 10% to 80% relative humidity, non-condensing
- Storage Humidity: 5% to 90% non-condensing

### Certification/Regulation Requirement

- FCC (without DFS)
- UL 60950-1
- 802.11ac and 802.11a/b/g/n Wi-Fi certification (AP mode)
- WPS certification

# Regulatory Information

## Federal Communications Commission (FCC) Statement

This device is for indoor application only.

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

This equipment has been tested and found to be within the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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 FCC Rules.**

**Operation is subject to the following two conditions:**

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

**FCC RF Radiation Exposure Statement:**

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

**Allowed maximum gain (dBi), including antenna cable loss**

Frequency Band	Antenna gain (dBi, including cable loss)
2.4 GHz	2.9 dBi
5 GHz (low band)	3.4 dBi
5 GHz (high band)	3.8 dBi

End user product of external antennas available from vendors specified by the equipment supplier. Please contact the equipment supplier for end user antenna and connector recommendations

**RF Exposure Content**

**FCC Equipment Authorization ID: S15VRE3000**

This device is authorized for use in mobile applications. At least 20 cm (8 in) of separation between the user's body must be maintained at all times.