NETGEAR®

User Manual

Nighthawk M3

Model
- MH3110
- MH3150

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Applicable to 6 GHz devices only: Only use the device indoors when the 6 GHz band is enabled. The operation of 6 GHz devices is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

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Compliance

When using external antennas, their net gain (antenna + cable loss) must be less than what is specified in "LTE and 5GNR transmission specifications" in Appendix A, "Specifications" as required by the FCC.

ISED regulation requires that the device shall not be used for control of or communications with unmanned aircraft systems. Operation shall be limited to indoor use only. Operation on oil platforms, automobiles, trains, maritime vessels and aircraft shall be prohibited except for on large aircraft flying above 3,048 m (10,000 ft).

Restrictions applicable in AT/BE/BG/CZ/DK/EE/FR/DE/IS/IE/IT/EL/ES/CY/ LV/LI/LT/LU/HU/MT/NL/NO/PL/PT/RO/SI/SK/TR/FI/SE/CH/UK(NI)/HR:

Operation in 5150-5350MHz is restricted to indoor use only.

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

SAR is measured with the device at 5 mm from the body, while transmitting at the highest certified output power level in all frequency bands of the device. The maximum SAR value is 1.649 W/kg (body) averaged over 10 gram of tissue.

Revision History

Publication Part Number	Publish Date	Comments
202-12746-02	April 2025	Corrections to some web interface-related content. Added Battery Boost content. Added MH3110 SKU.
202-12746-01	November 2024	First publication.

Contents

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Overview and Setup

This user manual is for the NETGEAR Nighthawk M3 5G WiFi 6 Mobile WiFi Hotspot.

Figure 1. Nighthawk M3 mobile WiFi hotspot

This manual describes how to manage your mobile WiFi hotspot from the device user interface and web user interface.

(!) **NOTE:** This manual might refer to the M3 5G WiFi 6 Mobile WiFi Hotspot as the *mobile hotspot*.

The Nighthawk M3 supports AX3600 WiFi 6 with dual-band concurrent radio operation:

- 2.4 GHz radio: 40 MHz channel width, speeds up to 688 Mbps

- 5 GHz radio: 80 MHz channel width, speeds up to 2882 Mbps

This chapter contains the following sections:

- Nighthawk M3 hardware overview

- Install or replace a SIM card

- <u>Set up for travel or fixed use</u>
- <u>Power on your hotspot and finish setup</u>
- <u>View the home screen</u>
- <u>Navigate the hotspot screens</u>
- <u>Charge a mobile device with Battery Boost</u>
- <u>Restart or power off your mobile hotspot</u>

For more information about the topics covered in this manual, visit the support website at <u>netgear.com/support</u>.

Nighthawk M3 hardware overview

The Nighthawk M3 package includes your mobile hotspot, a battery, and a USB-A to USB-C charging cable.

Figure 2. Nighthawk M3 package contents

The Nighthawk M3 has an LCD screen and a Power/Navigation button.

LCD screen ●

Power/navigation button ●

Figure 3. Nighthawk M3 device

The Nighthawk M3 connectors are located on the rear panel. The connectors include a USB Type-C connector and two TS-9 external antenna ports.

TS-9
antenna port

USB-C
port

TS-9
antenna port

Figure 4. Nighthawk M3 connectors

Install or replace a SIM card

To use your mobile hotspot, you need to install a valid, activated nano SIM card with a data plan from your mobile provider. If you change your mobile data provider or plan, you might need to replace the SIM card that you previously installed.

Battery cover

Battery

Nano SIM card

Figure 5. Nighthawk M3 SIM card installation

To replace a SIM card:

1. Remove the mobile hotspot back cover by lifting the corners.

2. Remove the battery.

3. If a SIM card is already installed, slide the SIM card out of its slot.

4. Insert the replacement SIM card in the slot.

5. Reinstall the battery.

6. Reinstall the back cover.

Set up for travel or fixed use

You can set up your mobile hotspot for travel usage using battery power, or you can set it up for fixed usage inside a home or office using wall power for extra performance.

Travel setup

To set up your mobile hotspot for travel usage, install and fully charge the battery before turning the device on.

Charge the battery

Your mobile hotspot battery comes partially charged. We recommend that you fully charge the battery before using your mobile hotspot away from home.

(!) **NOTE:** For the fastest possible charging, use the USB cable included with your mobile hotspot and a high quality Quick Charge 2.0-certified or Quick Charge 3.0-certified USB power adapter. Low quality third-party USB power adapters and computer USB ports typically do not provide sufficient current and will not charge your battery as quickly. Third-party cables can also limit battery charging speed.

Figure 6. Nighthawk M3 battery charging

To charge your battery:

1. Connect the USB charging cable to your mobile hotspot.
2. Connect the other end of the charging cable to a USB power source.

Charging best practices

Charging your mobile hotspot properly is important to ensure its longevity and maintain its performance. Follow these best practices when charging your mobile hotspot:

- **Use a high quality USB cable and power adapter**: Typical third-party USB power adapters and computer USB ports do not provide the same amount of current as official NETGEAR power adapters and will not charge your battery as quickly. Third-party cables can also limit battery charging speed. However, high quality third-party USB power adapters and cables that meet certain standards should provide similar performance to the official NETGEAR parts. For more information, see Third-party power adapters and USB cables on page 57.

- **Check the charging status:** When you plug in the charging cable, check the device's charging status. The charging indicator in the status bar shows a lightning bolt over the battery icon if the device is charging. If the charging indicator does not appear, try unplugging the cable and plugging it back in.

- **Charge the device fully:** We recommend that you charge the mobile hotspot fully before using it for the first time, and that you let the device recharge fully before

using it again when you discharge the battery. This helps to maintain the battery's lifespan and overall performance.

- **Avoid overcharging:** Overcharging the device can damage the battery and shorten its lifespan. When the device is fully charged, unplug it from the power source. Don't leave it plugged in overnight or for long periods of time. Remove the battery and use **Plugged-In Mode** if you are using the device in a fixed location.

- **Charge in a well-ventilated area:** Charging your mobile hotspot in a well-ventilated area can prevent overheating and ensures that the device charges efficiently. Avoid charging the device in an enclosed space or in direct sunlight.

By following these guidelines, you can ensure that your mobile hotspot stays charged and performs well for years to come.

Fixed setup

Depending on your needs, you might want to use your mobile hotspot in a fixed location as a replacement for a conventional modem or a modem router/gateway.

(!) **NOTE:** Attempting to use Plugged-In Mode with low quality third-party USB power adapters or cables might cause your hotspot to malfunction. For more information, see <u>Third-party power adapters and USB cables</u>

Set up Plugged-In Mode for fixed usage

Removing your Nighthawk M3's battery and plugging it into wall power enables **Plugged-In Mode**, which boosts performance and improves WiFi coverage.

(!) **NOTE:** Low quality third-party USB power adapters and computer USB ports typically do not provide sufficient current for Plugged-In Mode. Use the USB cable included with your mobile hotspot and a high quality Quick Charge 2.0-certified or Quick Charge 3.0-certified USB power adapter for reliable operation in Plugged-In Mode.

Figure 7. Nighthawk M3 fixed setup

To enable Plugged-In Mode for fixed usage:

1. Remove the mobile hotspot back cover by lifting the corners.

2. Remove the battery.

   (!) **NOTE:** When using Plugged-In Mode, we recommend that you do not reinstall the back cover after removing the battery for better device cooling performance.

3. Connect the USB charging cable to your mobile hotspot.

4. Connect the other end of the charging cable to a Quick Charge 2.0-certified or Quick Charge 3.0-certified USB power adapter.

5. Plug the USB power adapter into a wall outlet.

Power on your hotspot and finish setup

After configuring your mobile hotspot for travel or fixed usage, power on the device to complete the setup process.

(!) NOTE: When idle, the touch screen goes dark to save power. Quickly press and release the **Power/Navigation** button to wake the screen.

To power on your hotspot and finish setup:

1. Press and hold the **Power/Navigation** button for two seconds.

   The NETGEAR logo displays and your mobile hotspot starts up.

   The welcome screen displays.

2. Follow the onscreen instructions to set up your WiFi network and connect your first device.

   Your mobile hotspot is set up.

View the home screen

From your mobile hotspot's home screen, you can view information about your device and connection status.

Figure 8. Home screen

Table 1. Icons

Icons	Description
	Indicates the strength of the mobile broadband network signal.
	Indicates that you are connected to the 5G network.
	Indicates the amount of charge in the battery.

Navigate the hotspot screens

You can navigate through your mobile hotspot's screens using the **Power/Navigation** button on the device. To navigate to the next screen on the device, press the button one time.

Press to navigate

The icons at the bottom of the screen indicate which screen in the sequence you are currently viewing. After you have cycled through every screen, pressing the button again returns you to the first screen.

To perform an action when the device prompts you, press and hold the button.

⚠ **NOTE:** If no prompt is displayed, pressing and holding the button opens the **Power Options** menu, where you can shut off or restart the device.

Charge a mobile device with Battery Boost

Your hotspot's Battery Boost feature can charge other devices via the USB-C port. The hotspot provides 5V @ 500mA (or 2.5W) over USB to charge compatible mobile devices.

🛈 **NOTE:** Certain mobile devices can also be set up to charge your hotspot's battery instead of receiving a charge. You might need to configure your device's USB settings to enable this function.

To charge a mobile device with Battery Boost:

1. Locate a suitable cable with a USB-C connection on one end and your mobile device's connection on the other end.

    This might be a Micro USB, Apple Lightning, or USB-C connection depending on your mobile device.

2. Connect one end of the cable to your hotspot.

3. Connect the other end of the cable to your mobile device.

    If your mobile device is compatible with Battery Boost, the charge indicator displays.

    Your mobile device is charging with Battery Boost.

Restart or power off your mobile hotspot

When you are done using your mobile hotspot, power it off to preserve battery life. You can also restart your mobile hotspot.

To power off or restart your mobile hotspot:

1. Hold down the **Power/Navigation** button for 5 seconds.

    The Restart/Power Off/Sleep menu appears.

2. Press the **Power/Navigation** button to select an option, then press and hold to confirm.

    Depending on your selection, your mobile hotspot restarts, powers off, or goes to sleep.

2

Connect devices to the Internet

When you turn on your mobile hotspot, it automatically connects to the mobile broadband network in your area. To access the Internet on other devices, connect them to your mobile hotspot's WiFi or wired network.

This chapter contains the following sections:

- Connect to WiFi using the SSID and password
- Connect to WiFi using the QR code
- Connect a computer to the Internet using tethering

Connect to WiFi using the SSID and password

When your mobile hotspot is powered on, it broadcasts a WiFi network name (SSID) and password. You can connect to the Internet by selecting your hotspot's SSID and entering the password on your WiFi devices.

(!) **NOTE:** You can choose to connect to your hotspot using the 2.4 GHz band (slower speeds, longer range) or the 5 GHz band (faster speeds, shorter range) by cycling to the appropriate screen on your hotspot.

To connect to WiFi using the SSID and password:

1. Quickly press and release the **Power/Navigation** button to wake your mobile hotspot.

   The home screen displays.

2. Press the **Power/Navigation** button one time to cycle to the 2.4 GHz WiFi screen, or press the button two times to cycle to the 5 GHz WiFi screen.

   The 2.4 GHz or 5 GHz WiFi screen displays your mobile hotspot SSID in the **Wi-Fi Name** field and your hotspot password in the **Password** field for other devices to connect with.

3. From your WiFi device, open your WiFi network connection manager.

4. Select or enter the SSID shown on your mobile hotspot's home screen.

5. Enter the password shown on your mobile hotspot's home screen.

   Your WiFi device connects to your mobile hotspot's WiFi network.

Connect to WiFi using the QR code

Your mobile hotspot's WiFi QR code enables mobile devices like smartphones and tablets to connect to WiFi without manually entering an SSID and password.

(!) **NOTE:** You can choose to connect to your hotspot using the 2.4 GHz band (slower speeds, longer range) or the 5 GHz band (faster speeds, shorter range) by cycling to the appropriate screen on your hotspot.

To connect to WiFi using the QR code:

1. Quickly press and release the **Power/Navigation** button to wake your mobile hotspot.

   The home screen displays.

2. Press the **Power/Navigation** button one time to cycle to the 2.4 GHz WiFi screen, or press the button two times to cycle to the 5 GHz WiFi screen.

   The 2.4 GHz or 5 GHz WiFi screen displays, with a QR code that you can scan to connect directly to the network.

3. Open your mobile device's camera application and aim the camera at the QR code.

   Depending on your mobile device, you might need to tap the QR code in your camera app to proceed.

   Your mobile device connects to your mobile hotspot's WiFi network.

Connect a computer to the Internet using tethering

You can connect a computer to your mobile hotspot using the included USB cable instead of connecting with WiFi. This kind of cable connection is called *tethering*.

(!) **NOTE:** There might be a brief delay when your computer's operating system detects the mobile hotspot the first time you use the USB cable to connect your mobile hotspot to your computer.

To connect a computer to the Internet using tethering:

1. If your mobile hotspot is powered on, press and hold the Power button for two seconds, then select **Shut down** to power it off.

2. Connect your mobile hotspot to your computer using the included USB cable.

   The mobile hotspot powers on and your computer detects the mobile hotspot.

   Your computer connects to the Internet.

3

View alerts and device information

This chapter contains the following sections:

View alerts from your mobile hotspot

Your mobile hotspot displays alerts on the LCD screen to inform you of device status changes. Alerts display as long as the cause of the alert is present. When the cause of an alert is resolved, the corresponding alert is removed automatically.

To view alerts from your mobile hotspot:

Quickly press and release the **Power/Navigation** button to wake your mobile hotspot.

The home screen displays.

If any alerts are active, your mobile hotspot displays them.

For example, if no SIM card is installed, the following alert appears:

Update software and firmware from an Update Available alert

Your mobile hotspot automatically checks for new software and firmware updates. If an update becomes available, your hotspot displays an alert. Because software and firmware updates typically improve device performance and usability, we recommend that you update your hotspot whenever possible.

⚠ **NOTE:** Updating your mobile hotspot temporarily interrupts your network connection. Make sure that you are prepared to lose connectivity before starting the update process.

To update software or firmware from an Update Available alert:

1. Quickly press and release the **Power/Navigation** button to wake your mobile hotspot.

   The home screen displays a Software Update Available alert, and your hotspot downloads the update.

2. Do one of the following:

   • Press and hold the **Power/Navigation** button to install the update immediately.

   • Press the **Power/Navigation** button to install the update later and return to the home screen.

   ⓘ **NOTE:** Your hotspot battery must have a charge of at least 20% to install updates.

View details about your mobile hotspot

You can view details about your device, such as the model number, software version, and serial number.

To view details about your mobile hotspot:

1. Quickly press and release the **Power/Navigation** button to wake your mobile hotspot.

   The home screen displays.

2. Press the **Power/Navigation** button four times.

   The Hotspot Information screen displays the following information:

   • Model Number

   • Software Version

   • Serial Number

Manually check for software and firmware updates

Your mobile hotspot will notify you when it detects the availability of new software or firmware. However, you can also check for updates manually. Because software and firmware updates typically improve device performance and usability, we recommend that you update your hotspot whenever possible.

⚠ **NOTE:** Updating your mobile hotspot temporarily interrupts your network connection. Make sure that you are prepared to lose connectivity before starting the update process.
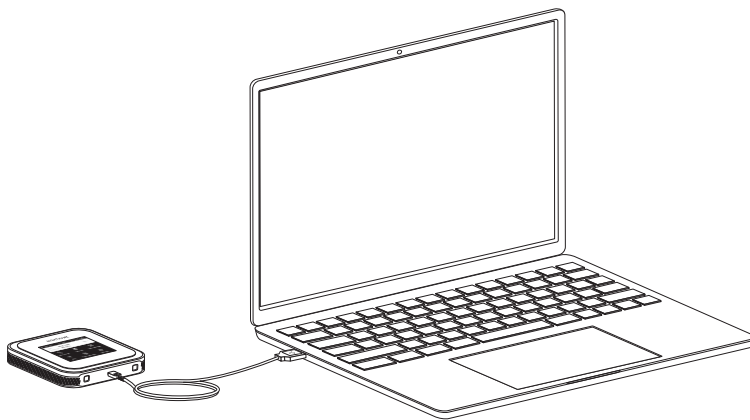
To manually check for software and firmware updates:

1. Quickly press and release the **Power/Navigation** button to wake your mobile hotspot.

   The home screen displays.

2. Press the **Power/Navigation** button four times.

   The Hotspot Information screen displays a prompt to check for updates.

3. Press and hold the **Power/Navigation** button to check for updates.

   The screen refreshes and your hotspot checks for updates.

   If no update is available, press the **Power/Navigation** button to return to the Hotspot Information screen.

   If an update is available, your hotspot downloads the update, and you receive additional options:

   - Press and hold the **Power/Navigation** button to install the update immediately

   - Press the **Power/Navigation** button to install the update later and return to the Hotspot Information screen

   ⚠ **NOTE:** Your hotspot battery must have a charge of at least 20% to install updates.

View details about your SIM

You can view details about your SIM, such as the SIM type, ICCID, and IMEI number.

To view details about your SIM:

1. Quickly press and release the **Power/Navigation** button to wake your mobile hotspot.

   The home screen displays.

2. Press the **Power/Navigation** button five times.

   The SIM Information screen displays the following information:

   - SIM Type
   - ICCID
   - IMEI

4

Access the web user interface

Your mobile hotspot is equipped with a web user interface that you can use to change settings and access advanced features.

This chapter contains the following sections:

- Factory reset your mobile hotspot from the web user interface
- Enable or disable IP passthrough from the web user interface
- Disable or re-enable the DHCP server feature from the web user interface
- Change tethering settings from the web user interface
- View data usage from the web user interface
- Configure cellular settings from the web user interface
- Configure access point names (APNs) from the web user interface
- Configure port forwarding from the web user interface
- Configure port filtering from the web user interface
- Change display settings from the web user interface
- Change the date and time format from the web user interface
- Enable or disable GPS services from the web user interface
- Disable or re-enable device analytics from the web user interface
- Disable or re-enable VPN passthrough from the web user interface
- Disable or re-enable UPnP from the web user interface
- Configure a DMZ server from the web user interface

Log in to the web user interface from a browser

You can access the mobile hotspot web user interface by visiting the hotspot's IP address in a web browser on a computer, laptop, or other WiFi device.

To log in to the web user interface:

1. From a computer or WiFi device that is connected to the mobile hotspot, launch a web browser.

2. Enter your device's IP address.

   By default, the IP address is **http://192.168.1.1**. If you've configured a different IP address, are using WiFi offloading, or are using other advanced features, your IP address might be different.

   The mobile hotspot web page displays.

3. Log in using your admin password.

   The password is the one that you specified when you set up your device. The password is case sensitive.

   The web user interface dashboard displays. The dashboard displays any active alerts.

Log in to the web user interface using the QR code

You can quickly connect to the mobile hotspot web user interface by scanning the QR code on a mobile device like a smartphone or tablet.

To log in to the web user interface using the QR code:

1. Quickly press and release the **Power/Navigation** button to wake your mobile hotspot.

   The home screen displays.

2. Press the **Power/Navigation** button three times.

   The Web User Interface screen displays, with a QR code that you can scan to connect to the web user interface.

3. Open your mobile device's camera application and aim the camera at the QR code.

Depending on your mobile device, you might need to tap the QR code in your camera app to proceed.

The mobile hotspot web page displays.

4. Log in using your admin password.

The password is the one that you specified when you set up your device. The password is case sensitive.

The web user interface dashboard displays. The dashboard displays any active alerts.

View SMS messages from the web user interface

Your mobile hotspot can receive text (SMS) messages. You can view them from the web user interface.

To view SMS messages from the web user interface:

1. From the web user interface dashboard, select **Messages**.

A list of messages displays, showing the first portion of the text.

2. Click or tap a message to read the full text.

Delete an SMS message from the web user interface

You can delete SMS messages from the web user interface when you are done reading them.

To delete an SMS message from the web user interface:

1. From the web user interface dashboard, select **Messages**.

A list of messages displays, showing the first portion of the text.

2. Select a message and click or tap **Delete**.

The message is deleted.

View details about your mobile hotspot from the web user interface

You can view details about your mobile hotspot from the web user interface.

To view details about your mobile hotspot from the web user interface:

1. From the web user interface dashboard, select **Settings > WiFi Status**.

    The Status menu expands.

2. Select one of the following pages to view additional information:

    - **Account**: Displays cellular account info, such as your service number, IMEI, and MAC address.

    - **Network**: Displays network connection info, such as your time connected, data transfer totals, and IP addresses.

    - **Device**: Displays mobile hotspot info, such as the hardware and software versions.

    - **WiFi Details**: Displays WiFi network info, such as your encryption type, connected devices, and broadcast mode.

    - **Diagnostics**: Displays diagnostic info, such as cellular band technical info, device temperature, and battery voltage.

Connect through local WiFi to conserve data

Your mobile hotspot supports WiFi offloading, which can lower your device's cellular data usage and power consumption, along with other benefits:

- **WiFi offloading** lets your mobile hotspot use a local WiFi Internet connection for data instead of your cellular network. WiFi offloading can extend your battery life, prevent connection interruptions when switching between networks, and enable consistent Internet access in areas where cellular coverage is weak or unavailable.

You might want to use WiFi offloading in locations where a public Internet connection is available, but you get poor cellular reception on your hotspot or want to conserve cellular data usage.

For example, if you need to use the Internet at an airport that provides public WiFi, you can set up your mobile hotspot to offload data to the airport WiFi. In addition to

conserving your cellular data, using offloading to connect through your hotspot to public Internet connections provides an extra layer of security for your devices.

Enable WiFi offloading from the web user interface

To enable WiFi offloading from the web user interface:

1. From the web user interface dashboard, select **Settings > General > Internet**.

   The Internet page displays.

2. Click or tap **WiFi + Cellular** to enable WiFi offloading.

   The default setting is **Cellular Only** (no offloading).

3. Click or tap **Apply**.

   A message displays telling you that to save this change, your device must restart WiFi connections.

4. Click or tap **Continue**.

   Your settings are saved.

Change WiFi band settings from the web user interface

Your mobile hotspot can broadcast WiFi signals on two WiFi bands simultaneously. Note that the overall throughput speed could decrease when WiFi dual-band is enabled.

To change WiFi band settings from the web user interface:

1. From the web user interface dashboard, select **Settings > General > WiFi Band**.

   The WiFi Band page displays.

2. Select a WiFi band option from the following:
   - Dual-Band (2.4 & 5 GHz)
   - 5 GHz Only
   - 2.4 GHz Only
   - Turn Off WiFi

3. Click or tap **Apply**.

A message displays telling you that to save this change, your device must restart WiFi connections.

4. Click or tap **Continue**.

   Your settings are saved.

Change WiFi network name, password, encryption, or channel settings from the web user interface

The WiFi network name (SSID) identifies your WiFi network and is visible to other WiFi-enabled devices. From the web user interface, you can change the SSID, password, WiFi encryption type, and broadcast channel settings.

(!) **NOTE:** In some regions, not all channels are available. Do not change the channel unless you experience interference (shown by lost connections or slow data transfers). If this happens, experiment with different channels to see which is the best.

To change the WiFi network name, password, encryption, or channel settings from the web user interface:

1. From the web user interface dashboard, select **Settings > General > WiFi Band**.

   The WiFi Band page displays.

2. Click or tap **More**.

   Additional settings display.

3. Enter a **WiFi Name** and **WiFi Password**.

4. Select an **Encryption Type** and **Channel**.

   Your WiFi client devices must support the encryption type that you select for your mobile hotspot, or they will not be able to connect.

5. Clear or select the **Broadcast WiFi Name SSID** check box.

   If you clear the check box, you must manually enter your SSID when connecting your WiFi devices.

6. Click or tap **Apply**.

   A message displays telling you that to save this change, your device must restart WiFi connections.

7. Click or tap **Continue**.

Your settings are saved.

If you changed the SSID or password, your previously connected WiFi devices must reconnect using the new credentials.

Change WiFi standby, range, bandwidth, and info display settings from the web user interface

To change WiFi standby, range, bandwidth, and info display settings from the web user interface:

1. From the web user interface dashboard, select **Settings > General > WiFi Band**.

   The WiFi Band page displays.

2. Click or tap **More**.

   Additional settings display.

3. Select **Global Settings**.

   The Global Settings page displays.

4. Select a **WiFi Standby** time period and **WiFi Range** setting.

5. Select a **Bandwidth** (channel frequency) option for each WiFi band that your device supports.

6. To allow the WiFi information to be displayed on your mobile hotspot home screen, leave the **WiFi Info on Home** check box selected.

7. Click or tap **Apply**.

   A message displays telling you that to save this change, your device must restart WiFi connections.

8. Click or tap **Continue**.

   Your settings are saved.

Enable or disable Guest WiFi from the web user interface

You can turn on Guest WiFi to share your Internet connection with temporary visitors on a separate connection from your personal WiFi devices. Guest WiFi is disabled by default.

To enable or disable Guest WiFi from the web user interface:

1. From the web user interface dashboard, select **Settings > General > Guest Network**.

   The Guest Network page displays.

2. Select the **Enable** check box to enable Guest WiFi, or clear the check box to disable Guest WiFi.

3. Click or tap **Apply**.

   A message displays telling you that to save this change, your device must restart WiFi connections.

4. Click or tap **Continue**.

   Guest WiFi is enabled.

   A QR code for devices to connect with displays on the Guest Network page. Additional settings also display.

Change Guest WiFi settings from the web user interface

When Guest WiFi is enabled, your mobile hotspot's web user interface displays additional settings for the Guest WiFi network. You can change the Guest WiFi network name, password, encryption, and channel settings. You can also choose to randomly generate a Guest WiFi password or disable Guest WiFi SSID broadcast.

To change Guest WiFi settings from the web user interface:

1. From the web user interface dashboard, select **Settings > General > Guest Network**.

    The Guest Network page displays.

2. Enter a **WiFi Name** and **WiFi Password**.

3. Select an **Encryption Type** and **Channel**.

    Your WiFi client devices must support the encryption type that you select for your mobile hotspot, or they will not be able to connect.

4. Clear or select the **Generate Passphrase** check box.

    If you clear the check box, you must enter your own WiFi password for the guest network.

5. Clear or select the **Broadcast WiFi Name SSID** check box.

    If you clear the check box, you must manually enter the guest SSID when connecting your WiFi devices.

6. Click or tap **Apply**.

    A message displays telling you that to save this change, your device must restart WiFi connections.

7. Click or tap **Continue**.

    Your settings are saved.

    If you changed the SSID or password, your previously connected WiFi devices must reconnect using the new credentials.

Enable or disable Airplane Mode from the web user interface

You can turn on Airplane Mode to disable cellular service, but keep your WiFi connection active. Airplane Mode is disabled by default.

To enable or disable Airplane Mode from the web user interface:

1. From the web user interface dashboard, select **Settings > General > Airplane Mode**.

   The Airplane Mode page displays.

2. Select the **Enable** check box to enable Airplane Mode, or clear the check box to disable Airplane Mode.

3. Click or tap **Apply**.

   A message displays telling you that to save this change, your device must restart WiFi connections.

4. Click or tap **Continue**.

   Airplane Mode is enabled.

Configure access controls from the web user interface

You can use access control to set up a list of specific devices to be allowed access or blocked from accessing your mobile hotspot's Internet connection.

To configure access controls from the web user interface:

1. From the web user interface dashboard, select **Settings > Security > Access Controls**.

   The Access Controls page displays.

2. Select the **Enable** check box.

3. From the **Filter Type** menu, select **Allow List** or **Block List**.

   Depending on your selection, the page displays an Allow List or a Block List.

4. To add a device to the list, click or tap **Add**.

   The Add Device window displays.

5. Enter a **Device Name** and **MAC Address**.

6. Click or tap **Add**.

   The device is added to the list.

7. To remove a device from the list, select the device and then click or tap **Delete**.

   The device is removed from the list.

Configure website filters from the web user interface

You can set up a filter to block or allow access to websites that you specify. You can also set up a list of devices that are unrestricted. The website filtering does not apply to unrestricted devices.

To configure website filters from the web user interface:

1. From the web user interface dashboard, select **Settings > Security > Website Filters**.

    The Website Filters page displays.

2. Select the **Enable** check box.

3. From the **Filter Type** menu, select **Block List** or **Allow List**.

    Depending on your selection, a Blocked Websites list or an Allowed Websites list displays.

4. To add a website to the list, click or tap **Add** and enter the website.

    The website is added to the list.

5. To edit an entry in the list, do the following:

    a. Select its check box.

    b. Click the **Edit** icon.

    c. Enter the changes.

6. To remove a website from the list, select its check box and then click or tap **Delete**.

    The website is removed from the list.

7. To create a list of unrestricted devices, do the following:

    a. In the Unrestricted Devices section, click or tap **Add**.

    b. Select the device.

        The device is added to the list.

8. Click or tap **Apply**.

    Your settings are saved.

Configure a WiFi schedule from the web user interface

You can configure rules that determine time periods when your mobile hotspot's Internet connection is accessible to devices.

To configure a WiFi schedule from the web user interface:

1. From the web user interface dashboard, select **Settings > Security > Schedule**.

   The Schedule page displays.

2. Select the **Enable** check box.

3. To add a schedule rule, click or tap **Add**.

   The New Rule page displays.

4. Specify the name of the rule and the days and times for the rule.

5. Select the **Enable** check box.

6. Click or tap **Save**.

   Your settings are saved.

Enable SIM security from the web user interface

You can create another level of security by configuring a PIN that you must enter each time that you power on your mobile hotspot.

To enable SIM security from the web user interface:

1. From the web user interface dashboard, select **Settings > Security > SIM Security**.

   The SIM Security page displays.

2. Click or tap **ACTIVATE**.

3. Enter a PIN to use for your device and click or tap **Apply**.

   Your PIN is saved.

   > ⓘ **NOTE:** If you enter an incorrect PIN three times, the SIM is blocked. If the SIM is blocked, contact your cellular data service provider to receive a PUK number to unblock the SIM.

Change the web user interface login password

When you first set up your mobile hotspot, you choose an admin login password for your device. You can change the password later on from the web user interface.

To change the web user interface login password:

1. From the web user interface dashboard, select **Settings > Administration > Set Password**.

   The password settings are displayed.

2. In the **New Password** field, enter the password that you want to use.

   The maximum password length is 31 characters. The password is case sensitive.

3. In the **Repeat Password** field, enter the new password a second time to confirm.

4. Click or tap **Apply**.

   Your settings are saved.

Back up mobile hotspot settings from the web user interface

You can back up and restore settings. Backing up and restoring is useful if you use more than one device and you want the same settings on all of your devices.

You can also save your settings before resetting to factory defaults or changing the settings.

To back up mobile hotspot settings from the web user interface:

1. From the web user interface dashboard, select **Settings > Administration > Backup Settings**. The Backup Settings page displays.

2. Click or tap **Backup**. By default, the file (`export.cfg`) is saved to your Downloads folder.

Restore backed up settings from the web user interface

To restore backed up settings from the web user interface:

1. From the web user interface dashboard, select **Settings > Administration > Backup Settings**.

   The Backup Settings page displays.

2. Select the `export.cfg` file to restore using one of the following methods:

   - To browse and select a local file, click the **Choose File** button.

   - To select a backup file from the network, click or tap **Upload**.

   By default, mobile hotspot setting files are saved to your Downloads folder.

3. Click or tap **Open**.

   Your mobile hotspot is restored with the uploaded file's settings.

Factory reset your mobile hotspot from the web user interface

To factory reset your mobile hotspot from the web user interface:

1. From the web user interface dashboard, select **Settings > Administration > Factory Reset**.

   The Factory Reset page displays.

2. Click or tap **Factory Reset**.

3. Click or tap **Yes** to confirm.

   Your mobile hotspot resets and returns to its factory settings.

Enable or disable IP passthrough from the web user interface

Depending on how you use your mobile hotspot, you might want to enable IP passthrough. When IP passthrough is enabled, your mobile hotspot takes the IP address that your cellular service provider assigned to your device and passes it through to a connected device.

Enabling IP passthrough can help prevent a double network address translation (double NAT) scenario when you connect your mobile hotspot to a downstream routing device. When double NAT occurs, you might experience problems with secure websites that use SSL, VPN connections, online games, and other communication problems.

> (!) **NOTE:** Most carriers issue a private wireless wide area network (WWAN) IP address to your device. Some carriers have special plans that issue a public WWAN IP, or can add a public WWAN IP to your existing plan for an additional charge. Contact your carrier for more information if your situation requires a public WWAN IP address.

To enable or disable IP passthrough from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Mobile Router Setup**.

   The Mobile Router Setup page displays.

2. Select the IP Passthrough **ON** or **OFF** button.

   If you select **ON**, additional options display:

   a. From the Type menu, select IP passthrough over **USB**.

   b. Enter a **MAC** address.

3. Tap **Apply**.

   Your mobile hotspot asks you to confirm that it must restart to enable or disable IP passthrough.

4. Tap **Continue**.

   Your mobile hotspot restarts with IP passthrough enabled or disabled.

Disable or re-enable the DHCP server feature from the web user interface

By default, your mobile hotspot acts as a DHCP server. The server assigns IP, DNS server, and default gateway addresses to all computers connected to the LAN. The assigned default gateway address is the LAN address of the router.

You can use another device on your network as the DHCP server, or specify the network settings of all your computers.

To disable or re-enable the DHCP server feature from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Mobile Router Setup**.

    The Mobile Router Setup page displays.

2. Clear the **Use mobile router as DHCP server** check box to disable the DHCP server feature, or select the check box to re-enable it.

3. Click or tap **Apply**.

    A message displays telling you that to save this change, your device must restart.

4. Click or tap **Continue**.

    Your settings are saved.

Change tethering settings from the web user interface

By default, tethering is enabled on your hotspot, and it continues broadcasting WiFi when tethering is used. You can change these settings from the web user interface.

To change tethering settings from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Mobile Router Setup**.

    The Mobile Router Setup page displays.

2. In the TETHERING section, select the **Turn off WiFi when tethering** check box to disable WiFi broadcasting when tethered, or clear it to enable WiFi broadcasting when tethered.

3. Select an option from the **Use USB port for** drop-down:

    - **Charge + tether** (default): your hotspot battery charges and uses WiFi tethering when connected to a computer USB port.

    - **Charge only**: tethering is disabled and your hotspot only charges when connected to a computer USB port.

4. Click or tap **Apply**.

    Your settings are saved.

View data usage from the web user interface

To view data usage from the web user interface:

1. From the web user interface dashboard, click or tap **See data usage**, or select **Settings > Advanced > Data Usage**.

    The Data Usage page displays.

2. (Optional) To reset the data usage counter, click or tap **Reset**.

    The counter is reset.

3. (Optional) To set a regular reset date or data plan limit, select the appropriate check box and enter or select your desired values.

4. Click or tap **Apply**.

    Your settings are saved.

Configure cellular settings from the web user interface

To configure cellular settings from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Cellular**.

    The Cellular page displays.

2. Change the data, band region, and network mode settings as needed.

Configure access point names (APNs) from the web user interface

Your mobile hotspot comes preconfigured with the access point names (APNs) for most cellular network service providers. You can add additional APNs and select among the configured APNs for use by the mobile hotspot. The mobile hotspot checks the APN to determine the type of network connection to establish.

> ⓘ **NOTE:** Your carrier determines its own APN information and must provide you the information for its own data plan. APN settings can also vary depending on the type of plan that you subscribe to. We recommend that you contact your carrier for the correct APN settings and only use the APN that your carrier instructs you to use for your specific plan.

Add an APN for another network

To add an APN for another network:

1. From the web user interface dashboard, select **Settings > Advanced > Cellular**.

    The Cellular page displays.

2. Click or tap **Add**.

    The APN page displays.

3. Specify the APN name.

    The APN name is a label for display in the UI.

4. Specify the APN.

    This step specifies the APN as defined by the carrier.

5. Change the PDP (data protocol), if necessary:

    *   **IPV4**

    *   **IPV6**

    *   **IPV4V6**

6. Change the PDP roaming protocol, if necessary:

    *   **None**

    *   **IPV4**

    *   **IPV6**

    *   **IPV4V6**

(!) **NOTE:** PDP roaming protocol is the IP protocol used while you are roaming (for example when you are traveling and the roaming network does not support IPv6).

7. Select the network authentication mode:
   - **None**
   - **PAP**
   - **CHAP**
   - **PAPCHAP**
8. Enter the name and password, if they are required for the network.
9. Click or tap **Add**.

   The entry is added to the table.

Select an APN to use

To select an APN to use:

1. From the web user interface dashboard, select **Settings > Advanced > Cellular**.

   The Cellular page displays.
2. Select the **Active** radio button next to the APN entry.

   The APN is selected.

Remove an APN entry

To remove an APN entry:

1. From the web user interface dashboard, select **Settings > Advanced > Cellular**.

   The Cellular page displays.
2. Select the box to the left of the APN.
3. Click or tap **Delete**.

   The APN is removed.

Configure port forwarding from the web user interface

Port forwarding is an advanced feature. If your computer is hosting a server, you can enable port forwarding so that other users can access the server.

ⓘ **NOTE:** Port forwarding creates a security risk. When not required, disable port forwarding.

To configure port forwarding from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Port Forwarding**.

   The Port Forwarding page displays.

2. Click or tap to select the **Enable** check box.

   The Port Forwarding list displays.

   Incoming traffic is forwarded to specific ports and devices on your network using their local IP addresses.

3. To add a port forwarding address, click or tap **Add**.

   The Add Service page displays.

4. Enter the following port forwarding information:

   - **Rule Name**. Enter a descriptive name.

   - **IP Address**. Enter the IP address of the connected device.

   - **Port**. Enter the port number or range of port numbers that the application uses.

   - **Protocol**. If you are unsure, select **TCP**.

5. Click or tap **Add**.

   Your settings are saved.

Configure port filtering from the web user interface

You can select which applications (for example, HTTP, FTP, email servers) can access the Internet. Used with other security measures such as a firewall, port filtering can enhance network security.

To configure port filtering from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Port Filtering**.

   The Port Filtering page displays.

2. Click or tap to select the **Enable** check box.

   The Port Filtering list displays.

3. From the **Port Filtering** list, select one of the following:

   - **Block List**. Specific applications and services are not allowed to access the Internet (block list).

   - **Allow List**. Only specific applications and services are allowed to access the Internet (allow list).

   Only one list at a time can be active, either a block list or an allow list.

4. Identify the ports to filter.

   Enter a meaningful label that describes the application or service.

5. Enter the port being used.

6. Enter the communication protocol being used.

7. Click or tap **Save**.

   Your settings are saved.

Change display settings from the web user interface

You can change your mobile hotspot's display settings from the web user interface. Lowering the LCD screen's brightness level or reducing the screen time-out to a shorter period reduces power consumption and might increase your mobile hotspot's battery life.

To change display settings from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Device**.

   The Device page displays.

2. Adjust the following settings:

   - **Screen Brightness**: From the menu, select the screen brightness level.

   - **Screen Timeout**: From the menu, select a time period.

3. Click or tap **Apply**.

   Your settings are saved.

Change the date and time format from the web user interface

Your mobile hotspot is initially set to display a date and time format that is common for your region. However, if you prefer to use a different date and time format, you can change the format that your device uses.

To change the date and time format from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Device**.

   The Device page displays.

2. In the Date Time Format section, select an option for the following settings:

   - **Date Format**
   - **Time Format**

3. Click or tap **Apply**.

   Your settings are saved.

Enable or disable GPS services from the web user interface

You can enable GPS location services on some mobile hotspot models. When GPS is enabled,users can turn on location services to launch GPS-enabled apps on connected devices.

To enable or disable GPS services from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > GPS**.

   The GPS page displays.

2. Select the **Enabled** check box to enable GPS services, or clear it to disable GPS services.

3. Click or tap **Apply**.

   Your settings are saved.

Disable or re-enable device analytics from the web user interface

NETGEAR improves its products and services by automatically sending daily diagnostic and usage data. Device analytics are enabled by default. You can disable or re-enable device analytics from the web user interface.

To disable or re-enable device analytics from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Analytics**.

    The Analytics page displays.

2. Clear the **Enabled** check box to disable device analytics, or select it to re-enable device analytics.

3. Click or tap **Apply**.

    Your settings are saved.

Disable or re-enable VPN passthrough from the web user interface

To connect to a corporate network using VPN, VPN connections (passthrough) must be enabled. VPN passthrough is enabled by default, but you can disable it from the web user interface.

To disable or re-enable VPN passthrough from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Other**.

    The Other page displays.

2. In the VPN Passthrough section, clear the **Enable** check box to disable VPN passthrough, or select the check box to re-enable it.

    VPN passthrough is enabled by default.

3. Click or tap **Apply**.

    Your settings are saved.

Disable or re-enable UPnP from the web user interface

Universal Plug and Play (UPnP) helps devices and computers access the network and connect to other devices as needed. UPnP devices can automatically discover the services from other registered UPnP devices on the network.

If you use applications such as multiplayer gaming, peer-to-peer connections, or real-time communications such as instant messaging, keep UPnP enabled, which is its default setting.

When UPnP is disabled, the router does not allow any device to automatically control router resources, such as port forwarding.

To disable or re-enable UPnP from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Other**.

   The Other page displays.

2. In the UPnP section, clear the **Enable** check box to disable UPnP, or select the check box to re-enable it.

   UPnP is enabled by default.

3. (Optional) If you enabled UPnP, select a **UPnP IGD Version** from the menu.

   This setting typically does not need to be changed unless a specific application or device requires it.

4. Click or tap **Apply**.

   Your settings are saved.

Configure a DMZ server from the web user interface

In a demilitarized zone (DMZ) network configuration, a computer runs outside the firewall in the DMZ. This computer intercepts incoming Internet traffic, providing an extra layer of protection for the rest of the network and sending all incoming data to a particular IP address.

To configure a DMZ server from the web user interface:

1. From the web user interface dashboard, select **Settings > Advanced > Other**.

The Other page displays.

2. In the DMZ section, select the **Enable** check box.

3. In the **DMZ Address** field, enter the IP address of the computer to which you want all data sent.

   If your mobile hotspot is tethered using a USB cable, this address is 192.168.1.4. If your mobile hotspot is connected using WiFi, the first WiFi client's IP address is usually 192.168.1.XX. You can typically check the IP address of your client device from the device's WiFi settings menu or control panel.

   (!) **NOTE:** IPv6 addresses are not supported.

4. Click or tap **Apply**.

   Your settings are saved.

5

Troubleshooting

This chapter provides suggestions for troubleshooting problems that might arise when you are using your mobile hotspot. This chapter covers the following topics:

- <u>View alerts</u>
- <u>Extend battery life</u>
- <u>Third-party power adapters and USB cables</u>
- <u>Improve reception with an external antenna</u>
- <u>Factory reset your mobile hotspot</u>

View alerts

Your mobile hotspot displays alerts to advise you of device status changes.

SIM Error – Check SIM or SIM Not Installed

Ensure that your cellular data carrier's SIM card is fully inserted in your mobile hotspot's SIM card slot. If a problem still exists, contact your carrier's customer service. The SIM card might be damaged and need replacement.

SIM Locked

If your SIM card is locked, you can unlock the SIM.

To unlock the SIM card:

1. If you did not add a PIN for the SIM, contact your cellular data carrier's customer service for the PIN to unlock the SIM card.

2. From a computer or WiFi device that is connected to the mobile hotspot, launch a web browser.

3. Enter **http://192.168.1.1**.

   The mobile hotspot web page displays.

4. Log in using your admin password.

   The password is the one that you specified when you set up your device. The password is case sensitive.

   The web user interface dashboard displays.

5. Enter the SIM PIN when prompted.

6. Click or tap **Apply**.

   Your settings are saved.

Temperature-related alerts

To get the best performance and longest life from your mobile hotspot, managing the device's temperature is important. As your mobile hotspot's temperature increases, its performance is reduced, while overheating the device will cause it to shut down entirely. Considering thermal management when you use your mobile hotspot can prevent it from overheating and ensure that you have the best experience with your device.

Your mobile hotspot has specific heat limits for each operating mode. Removing the battery and plugging your mobile hotspot in raises its temperature limits, as it doesn't need to limit heat as much to protect the battery. Exceeding these limits results in reduced performance, stability issues, or even automatic shutdown.

Understanding temperature limits

- **Battery Powered mode**
  - o **Level 1:** Battery is slow charging. Carrier 4G, 5G, and 5G mmWave (if supported) connections are limited to fewer bands. Device speed is reduced.
  - o **Level 2:** Battery stops charging. Carrier 4G connections are limited to one band. 5G bands stop operating. Device speeds are reduced further, and data connection errors might occur.
  - o **Level 3 (Critical):** Device shuts down to protect itself.
- **Plugged In mode (no battery)**
  - o **Level 1:** Carrier 4G, 5G, and 5G mmWave (if supported) connections are limited to fewer bands. Device speed is reduced.
  - o **Level 2:** Carrier 4G connections are limited to one band. 5G bands stop operating. Device speeds are reduced further, and data connection errors may occur.
  - o **Level 3 (Critical):** Device shuts down to protect itself.

Managing Temperature for Best Performance

The following tips can help you manage your mobile hotspot's heat to get the best performance:

- **Ensure proper ventilation:** Use your mobile hotspot in a well-ventilated area to help keep it cool. Avoid using the device on soft surfaces like beds or couches, because they can block airflow and trap heat.
- **Avoid extreme temperatures:** The mobile hotspot is designed for safe operation in the 0°C to 35°C (32° F to 95°F) ambient air temperature range. Avoid exposing the device to direct sunlight, high-temperature environments, or extremely cold conditions, because they can reduce performance and cause device problems.
- **Remove the battery/battery cover and use Plugged In mode:** When using your mobile hotspot continuously for long periods of time, we recommend that you remove the battery and battery cover and plug your mobile hotspot in to enable Plugged In mode. Plugged In mode allows your mobile hotspot to safely operate at higher temperatures with increased performance. This mode is particularly beneficial for applications that require heavy data usage, such as online gaming, video streaming, or large file downloads. Removing the battery enables Plugged In mode and removing its cover helps your hotspot stay cool.

- **Reduce load on the device:** When using your mobile hotspot in higher temperature environments, limit the number of simultaneous connections and bandwidth-intensive activities. This can help reduce the heat generated by the device.

- **Install firmware updates:** Keep your mobile hotspot's firmware up to date. NETGEAR firmware updates can include performance optimizations and thermal management improvements, ensuring the best performance for your device.

Extend battery life

By default, your mobile hotspot is configured to optimize battery life. The following factors can affect battery life:

- Screen brightness

- Standby time

- Data throughput

- Mobile broadband signal strength (the better the signal, the longer the battery life)

- WiFi range

For example, you can increase battery life by reducing the LCD screen's brightness level, or set the screen time-out to a shorter period.

You might want to try the following to improve your battery life:

-

-

Third-party power adapters and USB cables

The power adapter and USB cable that you use with your mobile hotspot must meet certain standards to provide sufficient power for device charging and Plugged-In Mode.

For mobile hotspot models that include a power adapter, NETGEAR supplies a Quick Charge 2.0-certified or Quick Charge 3.0-certified power adapter (depending on region) and a USB 3.2 Type-A to Type-C cable. If your hotspot includes a power adapter and USB cable, we recommend that you use the included parts with your hotspot for best performance.

NETGEAR cannot guarantee the performance of specific third-party power adapters or USB cables with your hotspot. However, high quality third-party power adapters and USB cables that meet the following standards should provide similar performance to the official NETGEAR parts:

- Quick Charge 2.0 power adapter with USB 3.2 Type-A to Type-C cable
- Quick Charge 3.0 power adapter with USB 3.2 Type-A to Type-C cable
- Quick Charge 4.0 power adapter with USB 3.2 Type-C cable
- USB Power Delivery 3.0 power adapter with USB 3.2 Type-C cable

Improve reception with an external antenna

Using an external antenna can improve the reception of your mobile hotspot if you have less than 2 bars of reception. Improving your reception can increase your data transfer speeds. The NETGEAR Omnidirectional MIMO Antenna is compatible with all recent NETGEAR mobile hotspots and fixed wireless devices.

(!) **NOTE:** If you have more than 2 bars of reception, using an external antenna might decrease your reception due to interference.

NETGEAR mobile hotspots and fixed wireless devices are all equipped with two TS-9 connectors for use with external antennas. The NETGEAR Omnidirectional MIMO Antenna

comes with two SMA to TS-9 adapters so that it can work with devices that have either SMA or TS-9 connectors.

1. SMA to TS-9 adapters
2. SMA connectors

⚠️ **CAUTION:** Be gentle when plugging and unplugging the TS-9 connectors from your device because they can be delicate.

Tips on improving your reception with an external antenna:

- The positioning and aiming of your antenna can have a large impact on its performance.

- Aim your antenna towards your closest cell tower. Contact your carrier for information on where your closest cell tower is located.

- Finding the best location for your antenna might require some trial and error. Move it around your space while monitoring the reception on your device to find the best location.

Factory reset your mobile hotspot

You can reset your mobile hotspot to the factory settings. This is useful if you reset the admin login password for the web user interface and forgot the new password, or if you want to set up your mobile hotspot in a different way.

(!) **NOTE:** When you reset your mobile hotspot, any currently connected devices lose access and must be reconnected after the mobile hotspot restarts.

For more information, see <u>Factory reset your mobile hotspot from the web user interface</u> on page 42.

A

Specifications

This appendix covers the following topics:

- LTE and 5GNR transmission specifications
- Nighthawk M3 family mobile band specifications
- WiFi specifications

LTE and 5GNR transmission specifications

Transmission specifications

The following tables indicate the LTE and 5GNR transmission characteristics.

Table 2. LTE transmission characteristics for MH3150

Frequency (MHz)	Bands	Ext Ant Gain (dBi)
1850-1910	B2	4
1710-1755	B4	4
824-849	B5	4
2500-2570	B7	4
698-716	B12	4
777-787	B13	4
788-798	B14	4
1850-1915	B25	4
814-849	B26	4
2305-2315	B30	1.05
2496-2690	B41	4
3400-3600	B42	-0.23
3550-3700	B48	0.17
1710-1780	B66	4
663-698	B71	4

Table 3. 5GNR transmission characteristics for MH3150

Frequency (Mhz)	Bands	Ext Ant Gain (dBi)
1850-1919	n2	4
824-849	n5	4
698-716	n12	4

Table 3. 5GNR transmission characteristics for MH3150 (Continued)

Frequency (Mhz)	Bands	Ext Ant Gain (dBi)
788-798	n14	4
1850-1915	n25	4
2305-2315	n30	1.05
2496-2690	n41	4
3550-3700	n48	0.17
1710-1780	n66	4
663-698	n71	4
3300-3550, 3700-4200	n77	4

Nighthawk M3 family mobile band specifications

The following table indicates the Nighthawk M3 (model MH3150) mobile band specifications.

Table 4. Mobile bands

Technology	Band
4G/LTE bands	1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 20, 28, 38, 40, 41, 42, 66
5GNR bands	n1, n2, n3, n5, n7, n8, n20, n28, n38, n40, n41, n71, n77, n78

WiFi specifications

WiFi support

- WiFi 802.11a/b/g/n/ac/ax, 2x2 MIMO

- 2.4/5 GHz Standalone

The following restrictions apply in

AT/BE/BG/CZ/DK/EE/FR/DE/IS/IE/IT/EL/ES/CY/LV/LI/LT/LU/HU/MT/NL/NO/PL/PT

/RO/SI/SK/TR/FI/SE/CH/UK(NI)/HR/HK:

- Operation in 5150MHz to 5350MHz is restricted to indoor use only.

- This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

- SAR is measured with the device at 5 mm to the body, while transmitting at the highest certified output power level in all frequency bands of the device. The maximum SAR value is 1.652 W/kg (body) averaged over 10 gram of tissue.

Table 5. GHz specifications

GHz	Range
5GHz	5150-5350MHz, 5470-5875MHz