

NETGEAR®

User Manual

Nighthawk M6 Pro, Nighthawk M6

Models

MR6500

MR6110

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202-12253-01

NETGEAR, Inc.

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Meet your Nighthawk M6

The Nighthawk M6 front panel has a touch screen, a Home button, and a Back button.



Figure 1. Nighthawk M6 front panel

The Nighthawk M6 comes with a USB-C charging cable.

The Nighthawk M6 connectors are located on the rear panel. The connectors include a USB Type-C connector, an RJ45 Ethernet port, and two antenna ports.

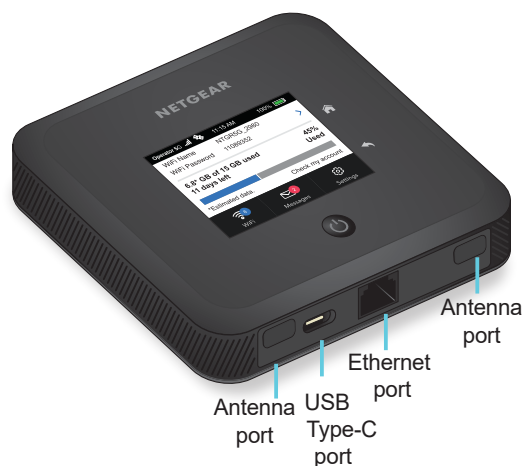


Figure 2. Nighthawk M6 connectors

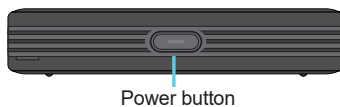
Set up your Nighthawk M6

To set up your Nighthawk M6:

1. Insert the battery.



2. Install the back cover.
3. Firmly close the back cover.
4. Push the **Power** button to power on the Nighthawk M6.



The Home screen appears.

Nighthawk M6

Familiarize yourself with its LCD screen, icons, buttons, and connectors.



Charge the battery

Your battery comes partially charged.

To charge your battery:

1. Connect the USB-C charging cable to your Nighthawk M6.



2. Connect the other end of the cable to an USB port on your computer or to the USB charger.

Connect to the Internet

When you turn on your Nighthawk M6, it automatically connects to the network in your area. Connect your device to the Nighthawk M6 WiFi network to access the Internet.

The Nighthawk M6 comes with a preinstalled SIM card. The SIM must be activated on a data plan with AT&T.

Nighthawk M6

To connect to the Internet:

1. Press the **Power** button to turn on the Nighthawk M6

The device powers up and the Lock screen appears.



2. On your laptop or WiFi device, open your WiFi network connection manager.
3. Select the Nighthawk M6 network with the WiFi name and password.

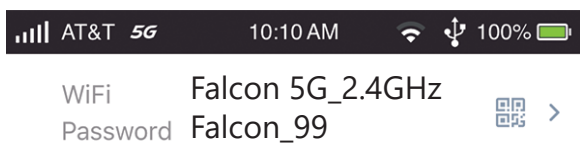
The Nighthawk M6 WiFi network name and password display on the LCD Home page. If the LCD screen is blank (a power saving feature) press and quickly release the Power button. The default WiFi password is also printed on a label under the battery.

Connect from a smartphone using the QR code

The top area of the dashboard contains a QR code. You can connect from a smartphone by tapping the QR code.

To connect using the QR code:

1. Tap the QR code icon the Nighthawk M6 LCD home screen.



A QR code displays.

2. Point your phone's camera at the QR code.
Your phone connects to the Nighthawk M6 WiFi network.
3. Launch your Internet browser.

Replace a SIM card

In some circumstances you might need to replace the SIM card.

To replace a SIM card:

1. Remove the back cover by lifting the corners.
2. Remove the battery.



3. Slide out the SIM card.
4. Insert the replacement SIM card.

5. Insert the battery.



6. Install the back cover.

Home screen

You can use the Home screen to view the Nighthawk M6's status, configure WiFi settings, view data usage details, and view system alerts.

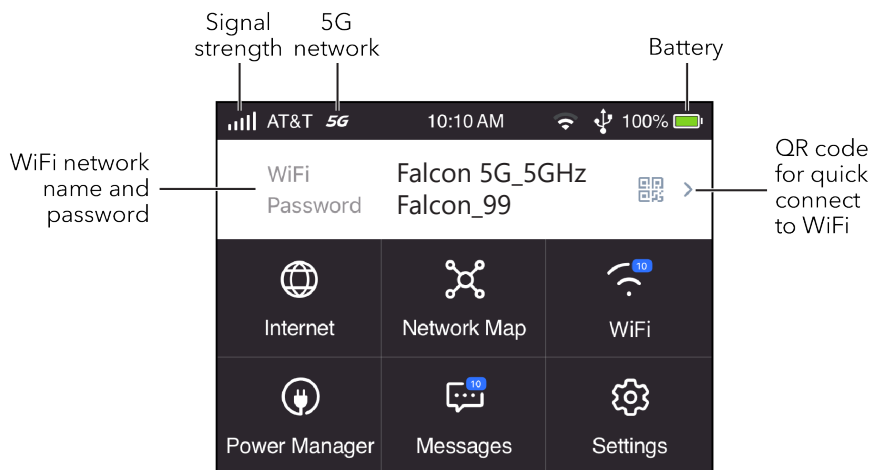


Figure 3. Home screen

Nighthawk M6



NOTE: Deletion of message must be done on the Nighthawk M6 Web UI.

Table 1. Icons

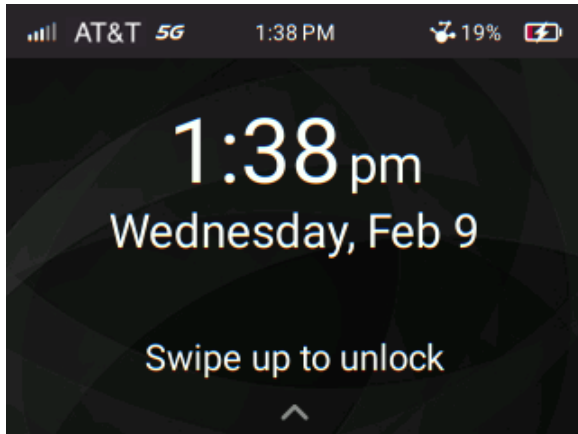
Icons	Description
	This indicates the strength of the mobile broadband network signal.
	5G network indicator. Lets you know you are connected to the 5G network.
	5G+ network indicator. Appears if the device is connected to mmWave or the C-band (MR6500), or for the MR6110, appears if the device is connected to the C-band .
	This indicates the amount of charge in the battery.

Manage the Nighthawk M6 with NETGEAR Insight Pro

You can manage the Nighthawk M6 with NETGEAR Insight Pro. NETGEAR Insight Pro is a Cloud-based management platform that allows you to manage, deploy, and configure enterprise mobile devices such as the Nighthawk M6 with complete visibility and simple control, centrally applying company policies, profiles, monitoring, and more.

Nighthawk M6

When the Nighthawk M6 is running under Insight Pro, the Nighthawk M6 shows the Insight icon as shown in the following dashboard image.



For more information on NETGEAR Insight Pro, visit this site:
<https://www.netgear.com/insight/mobile-hotspot>

Power off or reset the Nighthawk M6

To power off or reset the device:

1. Hold down the **Power** button for 5 seconds.
The Power Off/Reset menu appears and you are prompted to power off or restart the device.
2. Tap **Power Off** to power off the device, or choose **restart** to reset the device.

Security credentials

Three passwords are associated with the Nighthawk M6:

- **WiFi password.** Use this to connect your computer or WiFi device to your Nighthawk M6 network. This character string is unique to your device. It displays on the home screen. If the screen is blank (a power-saving feature), press and quickly release the **Power** button.
- **Web admin login password.** Use this password to log in to the Nighthawk M6 web page as an administrator. Some changes can be made using the LCD. You must log

in as an administrator to use certain features. The default login password is printed on a label under the battery and can be 5-31 characters in length.

Connect to the Nighthawk M6 with tethering

You can connect a computer to the Nighthawk M6 using the USB-C cable instead of connecting with WiFi. This kind of cable connection is called tethering.

NOTE: The computer's operating system detects the Nighthawk M6 the first time you use the USB-C cable to connect the computer to the Nighthawk M6.

To install drivers on computers running Windows:

1. Make sure the Nighthawk M6 is connected to the internet.
2. Ensure that the Nighthawk M6 is powered off.
3. Connect the Nighthawk M6 to your computer using the USB cable.



The Nighthawk M6 automatically powers on.

After the driver is installed, you can visit the Nighthawk M6 web page to customize your Nighthawk M6's advanced settings. This is an optional step.

Log in to the Nighthawk M6 web page to view or change settings

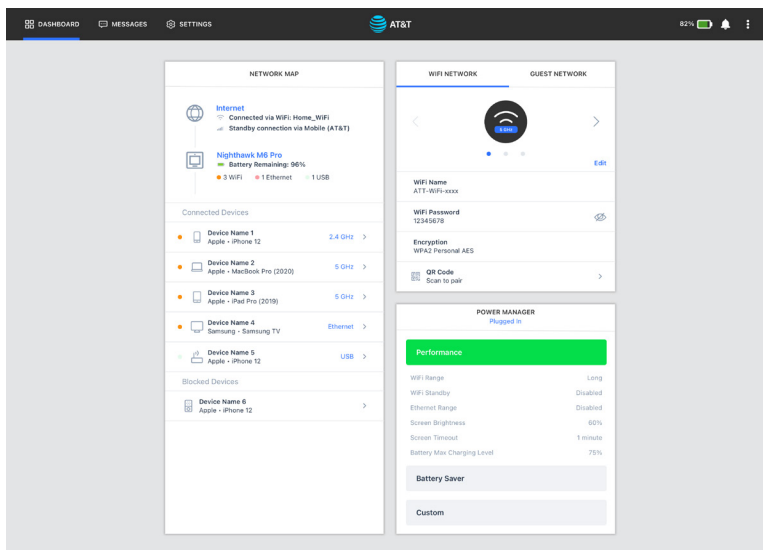
Your Nighthawk M6 comes configured and ready to use as is. You can use the Nighthawk M6 web page to manage advanced settings.

Nighthawk M6

To log in to your Nighthawk M6 web page:

1. From the computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.
The Nighthawk M6 web page displays.
3. Log in using your admin password.
The default admin login password is **Falcon_admin_99**

The web dashboard displays.



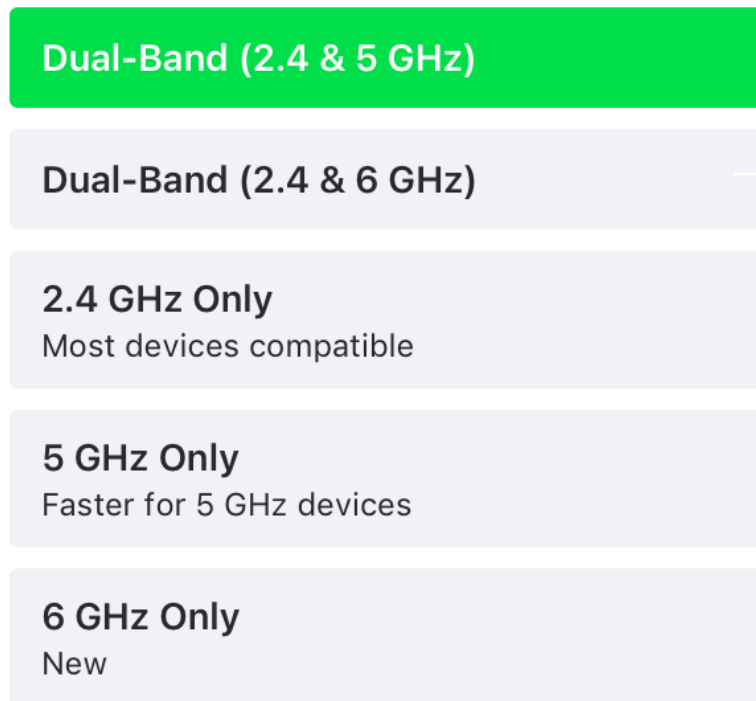
Turn on dual-band WiFi from the Nighthawk M6

The Nighthawk M6 can broadcast WiFi signals in the 2.4 GHz and 5 GHz WiFi bands. Note that the overall throughput speed could decrease when WiFi dual-band is enabled.

To turn on dual-band WiFi from the Nighthawk M6 web page:

1. Press the **Power** button to wake the device.
2. Tap **Band**.

The Band screen displays.



3. Tap **Dual-Band (2.4 & 5 GHz)** or **Dual-Band (2.4 & 6 GHz)**.
4. Tap **OK**.

Your settings are saved.

Turn on dual-band WiFi from the Nighthawk M6 web page

The Nighthawk M6 can broadcast WiFi signals in the 2.4 GHz and 5 GHz WiFi bands. Note that the overall throughput speed could decrease when WiFi dual-band is enabled.

To turn on dual-band WiFi from the Nighthawk M6 web page:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.

The Nighthawk M6 web page displays.

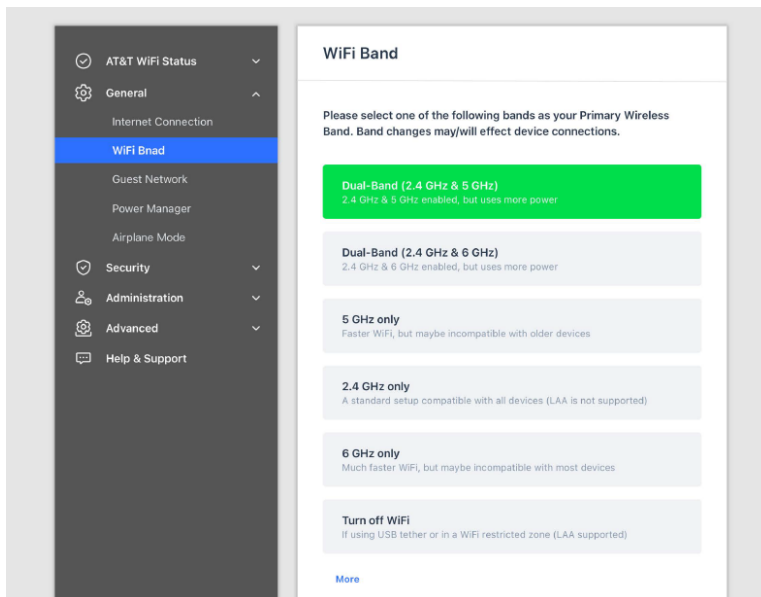
3. Enter the administrator login password.

The default password is **Falcon_admin_99**

The home page displays.

4. Select **WiFi Band**.

The WiFi Band page displays.



5. Select **Dual-Band (2.4 & 5 GHz)** or **Dual-Band (2.4 & 6 GHz)**.

Nighthawk M6

The Save and Cancel buttons display at the bottom of the page.

6. Click the **Save** button.

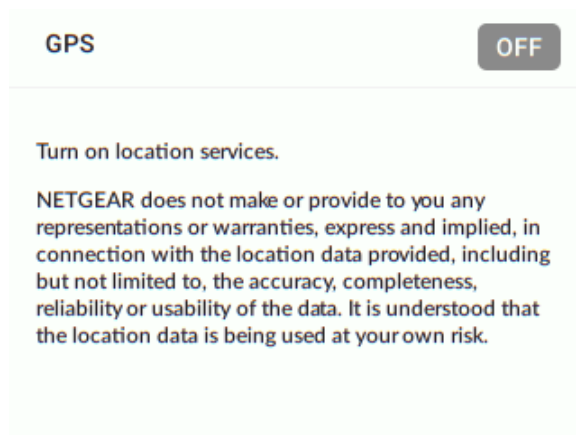
A message displays telling you that to save this change, your device must restart WiFi connections.

Enable GPS from the Nighthawk M6

You can enable GPS location services on the Nighthawk M6. When GPS is enabled, users can launch GPS-enabled apps on a computer and use the NMEA port to obtain a GPS location.

To enable GPS on the Nighthawk M6:

1. From the Nighthawk M6 dashboard, select **Settings > More > GPS**.
The GPS screen displays.



2. Pull the slider to the right (On) to enable GPS.
GPS is enabled.

Turn international roaming on and off from the Nighthawk M6 web page

Before you turn on international roaming, make sure that you are aware of any extra charges for data that you might incur.

To turn international roaming on and off:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.

The Nighthawk M6 web page displays.

3. Enter the administrator login password.

The default password is **Falcon_admin_99**

The home page displays.

4. Select **Settings > Advanced > Cellular**.
The preferences page displays.
5. In the check box for **Roaming Data**, check the box to turn roaming **On** or uncheck it to turn roaming **Off**.

The Apply and Discard buttons display at the bottom of the page. >

6. Select **Apply**.

Your settings are saved.

Connect to WiFi

You can connect up to 32 devices (such as smartphones, laptops, tablets, digital cameras, printers, gaming consoles, and digital picture frames) to your Nighthawk M6 network.

To connect using the WiFi password:

1. On the WiFi device, view the list of available WiFi networks.
2. Connect to the network that corresponds to your Nighthawk M6 network as displayed on the LCD screen.
3. When prompted, enter the WiFi password for your Nighthawk M6 network.

The WiFi password displays on the Nighthawk M6 LCD screen. If the screen is turned off, press and quickly release the **Power** button to wake the Nighthawk M6.

Manage WiFi

You can set up the WiFi radio of the Nighthawk M6 to meet your WiFi needs by customizing settings on the Nighthawk M6 web page.

On the Nighthawk M6 web page, the following WiFi profiles are available:

- **Dual-Band (2.4 & 5 GHz) or Dual-Band (2.4 & 6 GHz).** Support two separate WiFi networks simultaneously using both a 2.4- and 5-GHz frequency band or using a 2.4- and 6-GHz frequency band.
- **2.4 GHz only.** Share your main WiFi with 2.4 GHz devices that you trust.
- **5 GHz Only.** Share your main WiFi with 5 GHz devices that you trust
- **6 GHz Only.** Share your main WiFi with 6 GHz devices that you trust
- **Turn Off WiFi.** Turn off WiFi.

By default, 5 GHz Only WiFi is enabled. If your place of business does not allow WiFi or for any other reason you want to disable WiFi and use the Nighthawk M6 only in tethered mode, the Nighthawk M6 gives you that option.

 **NOTE:** Whenever you change WiFi settings, any devices connected to the Nighthawk M6 are disconnected and might need to be reconnected.

Turn on 5 GHz Only or 6 GHz Only WiFi from the Nighthawk M6

When all of your devices support 5 GHz WiFi, use 5 GHz WiFi for faster downloads. 5 GHz WiFi is mandatory when going from indoor use to mobile use.

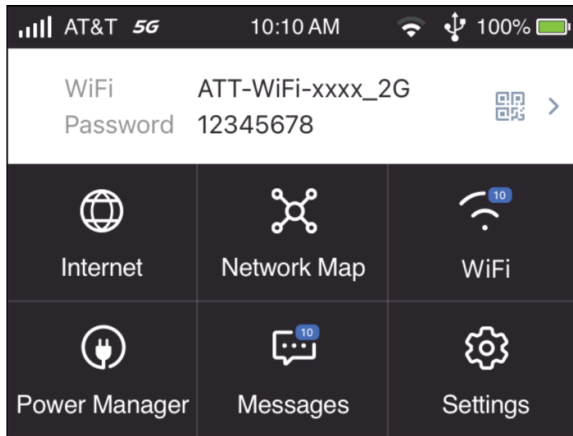
Nighthawk M6

For indoor usage when the device is on the AC charger, WiFi 6E is available.

NOTE: When you go from indoor use to mobile use, you must turn on 5GHz WiFi, and when you connect to AC power you must manually switch back to 6 GHz WiFi.

To turn 5 GHz Only WiFi or 6GHz Only WiFi on and off from the Nighthawk M6:

1. Press the **Power** button to wake the device.



2. Tap **WiFi**.
3. Tap **Band**.
The WiFi Band screen displays.
4. Tap **5 GHz Only** or **6 GHz Only**.
A message displays to tell you that changing the WiFi info temporarily causes connectivity loss.
5. Tap **OK**.
Your settings are saved.

Specify WiFi settings from the Nighthawk M6

To specify the WiFi settings from the Nighthawk M6:

1. Press the **Power** button to wake the device.



2. To turn the WiFi signal on or off:
 - a. Tap **WiFi**.
The WiFi screen displays.
 - b. Tap **Options**.
The WiFi Options screen displays.
 - c. Tap the **WiFi** field.
 - d. To toggle the WiFi radio, tap **WiFi On/Off**.
A message displays to tell you that changing the WiFi info temporarily causes connectivity loss.
 - e. Tap **OK**.
Your settings are saved.
3. To power down the WiFi radio after a set period of inactivity:
 - a. Tap **WiFi**.
The WiFi Options screen displays.
 - b. Tap **Options**.
The WiFi Options screen displays.
 - c. Tap the **WiFi Standby** field to modify the standby timer.
The WiFi Standby screen displays.
 - d. Tap the setting for the selection that you want.
The Changes Saved screen appears.
 - e. Tap **OK** to continue.
Your settings are saved.

Nighthawk M6

Use the Nighthawk M6 web page to set up a profile that is more detailed than the basic profiles offered on the Nighthawk M6.

Turn on 5 GHz WiFi or 6 GHz WiFi from the Nighthawk M6 web page

For indoor usage when the device is on the AC charger, 6 GHz is available.



NOTE: When you go from indoor use to mobile use, you must turn on 5GHz WiFi, and when you connect to AC power you must manually switch back to 6GHz WiFi.

When all of your devices support 5 GHz WiFi, use 5 GHz WiFi for faster downloads.

To turn on 5 GHz WiFi or 6GHz from the Nighthawk M6 web page:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.

The Nighthawk M6 web page displays.

3. Enter the administrator login password.

The default password **Falcon_admin_99**

The home page displays.

4. Select **Settings > General > WiFi Band**.

The WiFi Options page displays.

5. Select **5GHz Only** or select **6GHz Only**.

The Save and Cancel buttons display at the bottom of the page.

6. Click the **Apply** button.

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

7. Click the **Continue** button.

Your settings are saved.

Change WiFi settings from the Nighthawk M6 web page

To specify WiFi settings on the Nighthawk M6 web page:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.

The Nighthawk M6 web page displays.

3. Enter the administrator login password.

The default password is **Falcon_admin_99**

The home page displays.

4. Select **Settings > General > WiFi Band > More > 5GHz > Global Settings**.
5. To allow the WiFi information to be displayed on the Nighthawk M6 home screen, leave the WiFi Info on Home check box selected.
6. Click the **Apply** button.

A message displays to tell you that changing the WiFi info will temporarily cause connectivity loss.

Your settings are saved.

Manage WiFi Security



NOTE: When you change the WiFi settings, the Nighthawk M6 resets. Any devices connected to the Nighthawk M6 are disconnected when the Nighthawk M6 resets.

Change WiFi network name and password from the Nighthawk M6

The WiFi network name identifies your WiFi network and is visible to other WiFi-enabled devices.

To change the network name and password from the Nighthawk M6.

1. Press the **Power** button to wake the device.



2. Tap **WiFi > Main Wifi**.
The settings screen for the network displays.
3. Tap the **Pencil** (Edit) icon beside the name or password.
A message displays telling you that currently connected devices must re-authenticate to the network with the updated information.
4. Tap **Continue**.
The message closes.
5. Enter the new WiFi name and password.
6. Tap **Done**.
Your settings are saved.

Change WiFi network names and passwords from the Nighthawk M6 web page

The WiFi network name identifies your WiFi network and is visible to other WiFi-enabled devices.

To change network name and password from the Nighthawk M6 web page:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.

The Nighthawk M6 web page displays.

3. Enter the administrator login password.

The default password is **Falcon_admin_99**

The home page displays.

4. Select **Settings > General > WiFi Band**.

The WiFi connect page displays.

5. Change the **WiFi Name** and **WiFi Password** fields as desired.
6. Click the **Apply**.

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

7. Click the **Continue** button.

Your settings are saved.

All devices that were connected must reconnect with the new name and password.

Change WiFi encryption settings

For information about WiFi security, see [Security credentials](#) on page 16.

To change the type of security used for main WiFi:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.

The Nighthawk M6 web page displays.

3. Enter the administrator login password.

The default password is **Falcon_admin_99**

The home page displays.

4. Select **Settings > General > WiFi Band > More > 5GHz Wireless**.

The wireless settings display.

5. In the Encryption menu for main WiFi or guest WiFi, select a security option:

WPA2 Personal AES (default) WPA WPA2 WPA2 WPA3 WPA3 Personal AES>

- **WPA2 Personal AES** (default). Strong security supported by newer WiFi devices, the default.
- **WPA WPA2**

- **WPA2 WPA3**
- **WPA3 Personal AES**

The Apply and Discard buttons display at the bottom of the page.

6. Click **Apply**.
A message displays telling you that to save this change, your device must restart WiFi connections.
7. Click **Continue**.
Your settings are saved.
8. Reconnect your WiFi devices, if necessary, using the new WiFi credentials.

View details about your device from the Nighthawk M6 web page

You can view details about your device such as the model number, software version, and IMEI (International Mobile Station Equipment Identity).

To view details about your device from the Nighthawk M6 web page:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.
The Nighthawk M6 web page displays.
3. Enter the administrator login password.
The default password is `Falcon_admin_99`
The home page displays.
4. Select **Settings > AT&T WiFi Status > Account**.
The About page displays details for your Nighthawk M6.

Add and select access point names (APN)

Your Nighthawk M6 comes preconfigured with the access point name (APN) for your network service provider. You can add additional APNs and select among the configured APN for use by the Nighthawk M6. The Nighthawk M6 checks the APN to determine the type of network connection to establish.

Add an APN for another network

To add an APN for another network:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.
The Nighthawk M6 web page displays.
3. Enter the administrator login password.
The default password is printed on the product label. The password is case-sensitive.

The home page displays.

4. Select **Settings > Advanced > Cellular**.

The Add APN screen displays.

5. Click the **Add** button.

The APN page displays.

6. Specify the APN name.

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

7. Specify the APN

This step specifies the APN as defined by the carrier

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

- **IPV4**
- **IPV6**
- **IPV4V6**

9. 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).

10. Select the network authentication mode:

- **None**
- **PAP**
- **CHAP**
- **PAPCHAP**

11. Enter the name and password, if they are required for the network.

12. Click the **ADD** button.

The entry is added to the table.

Select an APN to use

To select an APN to use:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.
The Nighthawk M6 web page displays.
3. Enter the administrator login password.

The default password is printed on the product label. The password is case-sensitive.

The home page displays.

4. Select **Settings > Advanced Settings > Cellular**.
The APN page displays.
5. 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 a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.
The Nighthawk M6 web page displays.
3. Enter the administrator login password.

The default password is printed on the product label. The password is case-sensitive.

The home page displays.

4. Select **Settings > Advanced > Cellular**.
The APN page displays.
5. Select the box to the left of the APN.
6. Click the **Delete** button.

The APN is removed.

Enable DMZ

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 enable the DMZ and designate a computer to screen incoming traffic:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.

2. Enter **http://192.168.1.1**.

The Nighthawk M6 web page displays.

3. Enter the administrator login **Falcon_admin_99**

The default password **attadmin**.

The home page displays.

4. Select **Settings > Advanced > Other**.

The Nighthawk M6 page displays.

5. Scroll down to display the DMZ section.

6. Check the **Enable** check box.

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

If the Nighthawk M6 is tethered using a USB cable, this address is 192.168.1.4. If the Nighthawk M6 is connected using WiFi, the first WiFi client's IP address is usually 192.168.1.XX.

8. Click the **Apply** button.

Your settings are saved.

Troubleshooting

This chapter provides suggestions for troubleshooting problems that might arise when you are using your Nighthawk M6. The chapter covers the following topics:

- [View alerts](#)
- [Reset the Nighthawk M6](#)

View alerts

Your Nighthawk M6 displays alerts to advise you of device status changes. See [View alerts from the Nighthawk M6 web page](#)

SIM Not Installed

Ensure that the SIM card is installed correctly. For information about replacing a SIM, see [Replace a SIM card](#)

SIM Error – Check SIM

Ensure that your network service provider's micro SIM card is inserted in the Nighthawk M6. If a problem still exists, contact customer service. The micro SIM card might be damaged and need replacing.

SIM Locked

You can unlock the SIM.

To unlock the micro SIM card from the Nighthawk M6 web page:

1. If you did not add a PIN for the SIM, contact customer service for the PIN to unlock the micro SIM card.
2. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
3. Enter **http://192.168.1.1**.
The Nighthawk M6 web page displays.
4. Enter the administrator login password.

The default password is printed on the product label. The password is case-sensitive.

The home page displays.

5. Enter the micro SIM PIN when prompted.
6. Click the **Apply** button.

Your settings are saved.

Temperature-related alerts

The Nighthawk M6 is designed to work over a wide temperature range (for more information, see [Environmental specifications](#)). The Nighthawk M6 shuts down automatically if it goes out of the supported temperature range.

Move the device to an area where the temperature is more suitable and, if the Nighthawk M6 is too warm, make sure that the area is well ventilated and air can circulate around the device.

NOTE: The battery might not recharge if the Nighthawk M6 is outside the operating temperature range.

Reset the Nighthawk M6

You can reset the Nighthawk M6 to the factory settings. This is useful if you reset the admin login password for the Nighthawk M6 web page and forgot the new password.

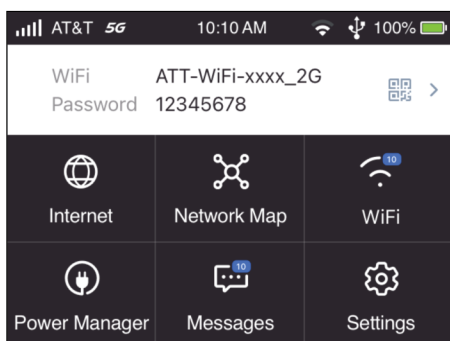
NOTE: When you reset the Nighthawk M6, any currently connected devices lose access and must be reconnected after the Nighthawk M6 restarts.

Reset the Nighthawk M6 from the Nighthawk M6

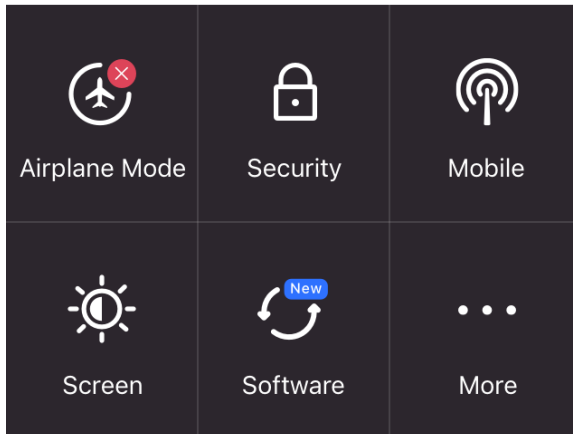
Start with the Nighthawk M6 turned on.

To reset the Nighthawk M6 directly from the Nighthawk M6:

1. Press the **Power** button to wake the device.



2. Tap **Settings**.



3. Tap **More**.
The additional settings screen displays.
4. Tap **Factory Reset**.
A message displays telling you that devices currently connected will lose Internet access.
5. Tap **Yes**.
The Nighthawk M6 resets to its factory settings.

Reset the Nighthawk M6 from the Nighthawk M6 web page

To reset the Nighthawk M6 to its factory settings:

1. From a computer or WiFi device that is connected to the Nighthawk M6, launch a web browser.
2. Enter **http://192.168.1.1**.
The Nighthawk M6 web page displays.
3. Enter the administrator login password.
The default password is **Falcon_admin_99**
The home page displays.
4. Select **Settings > Administration > Factory Reset**.
The Factory Reset page displays.
5. Click the **Reset** button.

Nighthawk M6

A message displays telling you that devices currently connected will lose Internet access.

6. Click the **Yes** button.

The Nighthawk M6 returns to its factory settings.