AirCard® 781S Mobile Hotspot

User Guide



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Due to the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the NETGEAR® modem are used in a normal manner with a well-constructed network, the NETGEAR modem should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. NETGEAR accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the NETGEAR modem, or for failure of the NETGEAR modem to transmit or receive such data.

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1: Get Started

This chapter provides an overview of the AirCard 781S Mobile Hotspot features, and instructions on how to set up your mobile hotspot and connect to the Internet.

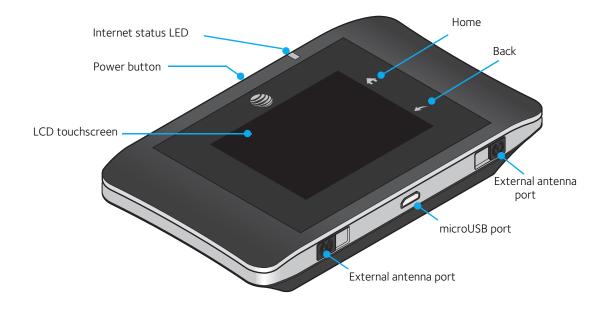
Know your device

Your mobile hotspot enables you to create a Wi-Fi network anywhere there is cellular network coverage. You can use that Wi-Fi network to connect your laptop and other Wi-Fi capable devices to your network provider's mobile broadband network and connect to the Internet.

You can also use your mobile hotspot in tethered mode by connecting it to your laptop with the USB cable to access the Internet.

Additional features include:

- Touchscreen LCD interface Configure basic Wi-Fi and display settings, view data usage details, view system and network provider alerts and messages
- On-screen keyboard Change your Wi-Fi network names and passwords without accessing the AT&T Unite Pro Manager from your computer.
- BatteryBoost —Used to charge your smartphone if its battery is low or out of power.
- Wi-Fi Protected Setup (WPS) A fast, easy way to connect WPS-enabled devices to your Wi-Fi network
- Dual-Band Wi-Fi If you have devices that support Dual-Band Wi-Fi (2.4 GHz and 5 GHz), enable this feature to achieve higher throughputs and less interference.
- Guest Wi-Fi Set up a guest Wi-Fi network for temporary users, and use the main network for trusted devices.



Manage your device and settings

You can manage your device and change settings using:

- The device's LCD touchscreen (see page 11) Configure basic Wi-Fi and device settings, and view data usage, alerts, and messages.
- The AT&T Unite Pro Manager homepage (see page 17) Web user interface for configuring mobile broadband network settings and advanced Wi-Fi and device settings.

Note: To personalize the mobile hotspot and change basic settings, use the LCD homescreen Settings and Wi–Fi options. For advanced settings, use a Wi–Fi enabled device to connect to the mobile hotspot and then use a browser to display the AT&T Unite Pro Manager homepage (http://attunitepro). Log in as Administrator to make changes. (default Admin Login is attadmin).

Power button

Table 1-1: Power button usage

Desired result	Action		
Turn mobile hotspot on	Press and hold the power button for two seconds.		
Turn mobile hotspot off	Press and hold the power button for two seconds.		
Wake up the Wi-Fi radio and device screen	Press and quickly release the power button.		

LCD touchscreen

Icons on the LCD screen's top row indicate the status of the mobile hotspot, and several screen elements can be tapped or swiped to configure Wi-Fi and device settings, view data usage details, and view system alerts and carrier messages.

Note: The LCD screen may go into sleep mode to save power. To wake the LCD screen, press and quickly release the power button.

Homescreen

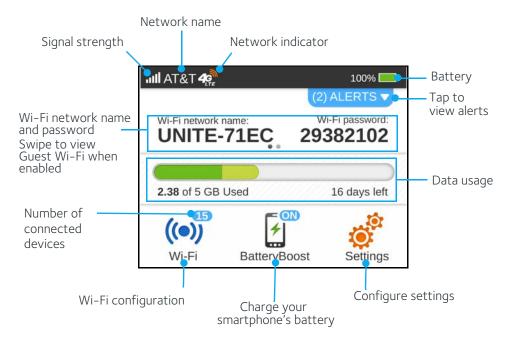


Figure 1-1: LCD homescreen

Table 1-2: LCD homescreen elements

Element	Element Indicates	
.ıll	Signal strength The more bars the stronger the network provider's signal.	
\Diamond	No signal	
46 [®]	The type of network available.* 4G LTE — LTE 4G — HSPA, HSPA+	
	The orange bars indicate network activity by radiating in and out when data is being received or transmitted.	
	Battery status Indicates the charge status of the battery. Green bar — 26–100% Yellow bar — 11–25% Red bar — <10%. Connect charger.	
*	Battery charging	
X	BatteryBoost is active. The mobile hotspot cannot be charged while it is boosting another device.	
(2) ALERTS ▼	Number of system alerts Slide down to view the messages.	
Wi-Fi network name and Wi-Fi password	Used by Wi-Fi enabled devices to connect to the mobile hotspot. Swipe left/right to switch between Main and Guest Wi-Fi details.	
1.25 GB of 5 GB Plan Used 12 days left	Data usage for current billing period. Tap the data bar to view detailed information.	
((o))	Wi-Fi menu Number indicates currently connected devices.	
Wi-Fi	Tap to configure basic Wi-Fi settings, including Wi-Fi profiles.	
BatteryBoost	Tap to charge another device's battery (using the BatteryBoost cable).	
Settings	Settings menu Tap to configure basic device settings.	

Charge your hotspot

You can power your mobile hotspot from:

- Rechargable battery included with the mobile hotspot
- Wall socket using the wall charger and USB cable

• USB port on your computer

Status LED indicator

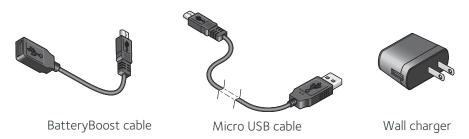
The LED indicates the device's connection status:

Table 1-3: LED indicator patterns

Color	LED pattern	Indicates
Blue	Slow pulsing blink (every 3 seconds)	Data connection is ready for use
Amber	Blink (every 3 seconds)	Data connection is not ready (disconnected or no signal)
Blue	Double blink (every 3 seconds)	Data is transferring (uploading/downloading) on the data connection
Blue / Amber	Slow blink, alternating blue and amber	Software is installing on the device
Amber	Slow pulsing blink (every 1 second)	Device is booting up

Accessories

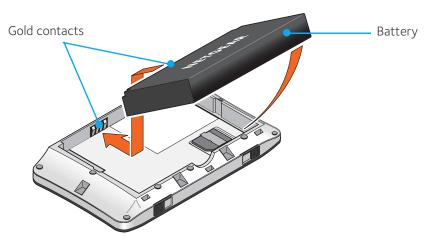
- Micro USB BatteryBoost cable Used to charge your smartphone from the mobile hotspot. To be used in conjunction with your smartphone charging cable.
- Micro USB cable Used mainly for recharging the battery, although you can also use it to tether the mobile hotspot to your computer.
- Wall charger Used with the USB cable to recharge the battery or to power the mobile hotspot from a wall socket.



Set up and connect to the Internet

Install the battery

1. Insert the battery as shown in the illustration. Ensure that the gold contacts on the battery are lined up with the gold contacts on the device.



2. Replace the back cover.

Note: The battery comes partially-charged and ready to go. When the battery needs recharging, follow the instructions in Recharge the battery on page 34.

Connect to the Internet

To connect to the Internet:

- Turn on the mobile hotspot.
 Press the power button for about two seconds and release it when the screen turns
 on. Once powered up, the mobile hotspot automatically searches for and connects
 to your network provider's mobile broadband network.
- 2. Connect your computer or other device to your Wi-Fi network.
 - a. On your computer, view the list of available Wi-Fi networks
 - b. Select the Wi-Fi network name displayed on the mobile hotspot LCD screen, and connect to it.
 - c. When prompted, enter your Wi-Fi network password, as it appears on the mobile hotspot LCD screen.
- 3. Launch your browser to surf the Internet.

Wi-Fi name

Wi-Fi name

Wi-Fi name

Wi-Fi name

Wi-Fi name

Wi-Fi name

Wi-Fi password

29382102

Wi-Fi password

Wi-Fi passwo

Note: Your computer connects wirelessly to the mobile hotspot to access the Internet.

The USB cable is used mainly for recharging the battery. (You can also connect to the Internet with the mobile hotspot tethered to the laptop with the USB cable.)

Connect devices to your mobile hotspot's Wi-Fi

You can connect up to 15 wireless devices such as smart phones, laptops, tablets, digital cameras, printers, gaming consoles, and digital picture frames to your mobile hotspot's Wi-Fi network(s). (See Set maximum number of connected devices on page 25 for instructions on setting connections for the Main Wi-Fi and Secondary/Guest Wi-Fi networks.)

You can connect:

- A wireless device to your Wi-Fi network by typing the Wi-Fi password
- A WPS-enabled wireless device by pressing the *s* icon on the mobile hotspot and the WPS button on the device

Note: You can also connect a single device directly to the hotspot using the USB cable. (If you have USB tethering enabled. See Enable/disable USB tethering on page 29.)

Connect a wireless device manually

To connect a wireless device to your mobile hotspot's Wi-Fi network, see Connect to the Internet on page 14.

Connect a WPS-enabled wireless device

You can connect a WPS-enabled Wi-Fi device to your Wi-Fi network without a Wi-Fi password from the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

- 1. On the home screen, tap **Wi-Fi** (**).
- 2. Tap **WPS**
- 3. Tap **Pair with Main Wi-Fi** or **Pair with Secondary Wi-Fi** (if Secondary/Guest Wi-Fi is enabled).



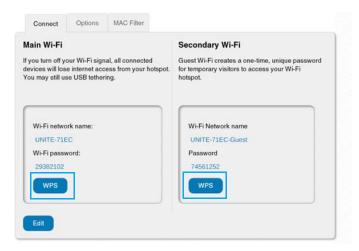
4. Within two minutes, press the WPS button on the wireless device you want to connect.

Your mobile hotspot and the wireless device will communicate and establish the connection.

On the AT&T Unite Pro Manager homepage:

1. Log in as Administrator.

- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click WPS for either the Main Wi-Fi or Secondary Wi-Fi (if enabled).



- 4. Choose the WPS method you want to use:
 - If the device you want to connect has a WPS button:
 Click WPS button pairing, and then within two minutes (120 seconds) press the device's WPS button
 - If the device you want to connect has a WPS PIN associated with it: Click **Enter WPS PIN**, and then enter the device's WPS PIN.

Your mobile hotspot and the wireless device will communicate and establish the connection.

2: Use Your Mobile Hotspot

This chapter describes the main features of the touchscreen and web interfaces for managing your mobile hotspot.

Note: To change settings you need to be logged in as Administrator. See Set up and connect to the Internet on page 14.

AT&T Unite Pro Manager homepage

Your mobile hotspot comes configured and ready to use, but if you want to access advanced settings such as router security settings and custom Dual-Band setup, go to your mobile hotspot's AT&T Unite Pro Manager homepage.

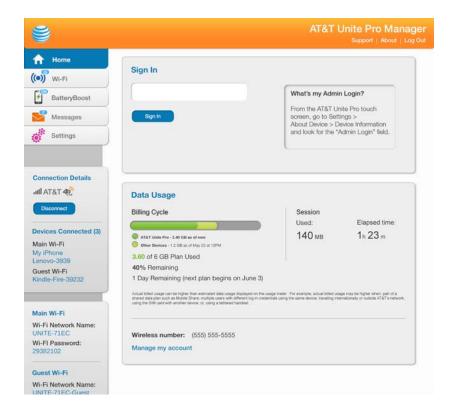
The AT&T Unite Pro Manager homepage URL is shown on the LCD (Settings > About Device > Device Information).

You must be logged in as Administrator to change settings and view detailed information.

- Default homepage URL http://attunitepro
- Default Administrator Login attadmin

To log in as Administrator:

- 1. On the AT&T Unite Pro Manager homepage, place your cursor in the Sign In field and type attadmin (the default Admin Login).
- 2. Click Sign In.



Security credentials

The mobile hotspot uses three passwords:

- Wi-Fi password Used to authenticate wireless devices (notebook, etc.) to your mobile hotspot network. It is:
 - · Unique to your device.
 - Displayed on the main mobile hotspot LCD screen. If the screen is blank (a power-saving feature), press and quickly release the power button to view the information on the screen.
 - · Printed on a label under the battery (default password)
 - If you want to change the Wi-Fi password, see Change Wi-Fi network names and passwords on page 37,
- Secondary / Guest Wi-Fi Password When enabled, temporary users can use this password to access the Secondary / Guest Wi-Fi network. If you want to change the Wi-Fi password, see Change Wi-Fi network names and passwords on page 37,
- Admin Login Used to log into the AT&T Unite Pro Manager homepage as Administrator. You must be logged in as Administrator to use certain features and to make changes to your mobile hotspot settings. The default Admin Login, attadmin, is printed on a label under the battery. The Admin Login can be changed to 5–31 characters.

You can change these passwords on the mobile hotspot or on the AT&T Unite Pro Manager homepage, http://attunitepro.

AirCard Watcher app for Smartphones and Tablets



Download and use the complimentary AirCard Watcher™ app to view your connection, settings, and data usage from your smartphone or tablet while it is connected to the mobile hotspot's Wi-Fi. Search the app store for NETGEAR AirCard.

To manage all mobile hotspot settings, go to the homepage http://attunitepro.

View your data usage

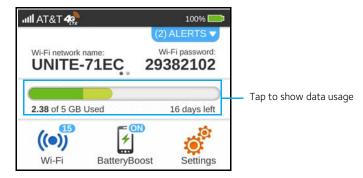
You can view estimates of your data usage (not accurate for billing purposes) on the mobile hotspot and the AT&T Unite Pro Manager homepage.

- Plan data counter resets automatically when the next billing cycle starts.
- Session data counter resets automatically each time the mobile hotspot is restarted (turned off and on).

Note: When the mobile hotspot powers on, it may take a few seconds to connect to AT&T to retrieve plan details.

On the touchscreen:

The home screen shows the data usage for the current billing cycle.



To view detailed data usage information:

- 1. On the home screen, tap the data usage bar. Detail billing information displays.
- 2. On the Data Usage screen, swipe down/up to view all of the details for:
 - Plan Details for the current billing cycle: Amount of data used
 Days remaining in the current cycle
 The date the next cycle begins
 - International Roaming:
 Amount of data used while roaming internationally.

· Current Connection:

Amount of data used in current broadband session Time the connection started Amount of time connection has been active

On the AT&T Unite Pro Manager homepage:

The homepage (http://attunitepro) shows the data usage for the current billing cycle and for the current broadband session.

1. The data usage information appears for the Billing Cycle and for the current Session.



Manage Wi-Fi

Wi-Fi Profiles

The mobile hotspot provides the flexibility of matching the mobile hotspot's Wi-Fi features to your needs by choosing a predefined or customized Wi-Fi profile:

- On the touchscreen Select from predefined profiles
- On the AT&T Unite Pro Manager homepage Select from predefined profiles or customize your own profile

Depending on your profile, you can:

- Choose to use single- or Dual-Band Wi-Fi to suit your range requirements and connected device capabilities (many newer devices support Dual-Band Wi-Fi)
- Set up a Guest Wi-Fi network to share your Wi-Fi with temporary visitors without exposing them to your devices on the Main Wi-Fi network

By default, the mobile hotspot's Main Wi-Fi network is enabled on 2.4 GHz.

Note: Whenever you make changes to Wi-Fi settings, the Wi-Fi radio resets to activate the new settings. Any devices connected to the mobile hotspot will be disconnected when the Wi-Fi resets. Most of these devices will reconnect automatically.

Key Wi-Fi profile settings

When you select a Wi-Fi profile, consider the following table to choose the correct profile for your setup.

If you want to use your mobile hotspot to				
Connect 5 GHz devices 1	Share with guests ²	Use this predefined profile	By doing this	
No	No	Default	 Brand-new device? It's ready. Using a custom profile? From the AT&T Unite Pro Manager homepage: Click Wi-Fi > Options, then select the Default Wi-Fi profile 	
Yes	No	Dual-Band ³	On the touchscreen: Tap Wi-Fi > Dual-Band , then tap On	
No	Yes	Guest Wi-Fi ⁴	On the touchscreen: Tap Wi-Fi > Guest Wi-Fi , then tap On	
Yes	Yes	Custom	From the AT&T Unite Pro Manager homepage: Click Wi-Fi > Options , then select the Custom Wi-Fi profile	

- 1. Wireless devices typically support 2.4 GHz, and newer devices support 5 GHz, which may provide higher throughput with less interference.
- 2. You may wish to provide a separate Wi-Fi network connection for temporary 'guest' users.
- 3. By default, the Secondary network uses 5 GHz and broadcasts the same network name as the Main network (using 2.4 GHz). A Dual-Band device (smartphone, tablet, etc.) will connect to the strongest of the two signals.
- 4. By default, the Secondary network and Main network both use 2.4 GHz. The Secondary network name is the same as the Main network name, with "-GUEST" appended.

Advanced users may choose to customize the following options in the AT&T Unite Pro Manager:

Note: If you choose a predefined profile and then change detailed options in the AT&T Unite Pro Manager, the profile automatically becomes a custom profile.

- Frequency Use 2.4 GHz for longer range (but slower) Wi-Fi, or 5 GHz for higher throughput and less interference (but shorter range).
 (Note: If you change the Frequency, the Mode field automatically sets to the best value.)
- Enable secondary Wi-Fi network Select this to use dual band Wi-Fi (2.4 GHz and 5 GHz) or to give temporary access to guest users.
- Guest Wi-Fi Select this to use the secondary Wi-Fi network for temporary visitors without letting them see the devices using your Main Wi-Fi. Give your guests the Guest Wi-Fi network name and password, which are different from Main Wi-Fi.
- Wi-Fi network name and password Keep the randomly assigned names and passwords, or change them as appropriate. For example, you may have a standard method for referring to Wi-Fi networks, or for assigning passwords.

Note: If you are using Dual–Band Wi–Fi and want the 2.4 GHz and 5 GHz networks isolated from each other, set different Wi–Fi network names in the AT&T Unite Pro Manager.

Use the default profile (Main Wi-Fi network only)

By default, the mobile hotspot uses only the Main Wi-Fi network, since the standby power consumption is lower.

If your mobile hotspot is currently using the Guest Wi-Fi or Dual-Band Wi-Fi profile, or a custom profile, you can revert to the default profile (Main Wi-Fi on 2.4 GHz) from the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

To revert to the default profile:

- 1. From the home screen, tap **Wi-Fi** (**).
- 2. Tap the appropriate option:
 - · If the Dual-Band Wi-Fi icon shows 'On', tap **Dual-Band Wi-Fi** .
 - · If the Guest Wi-Fi icon shows 'On', tap **Guest Wi-Fi** ().
 - · If neither icon shows 'On', tap **Dual-Band Wi-Fi** or **Guest Wi-Fi** (•)".
- 3. Tap the appropriate option (the option shown depends on the profile currently in use):
 - · Off
 - · Revert to Default Wi-Fi Profile. and then tap Continue

On the AT&T Unite Pro Manager homepage:

To revert to the default profile:

- 1. Log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the **Options** tab.
- 4. In the Wi-Fi Profiles field, select Default (No secondary network).
- 5. Click **Submit**. (Submit button appears once you make a selection.)

Use the predefined Dual-Band Wi-Fi profile

The Dual-Band Wi-Fi profile sets your Main Wi-Fi network to use the 2.4 GHz frequency range and creates a secondary Wi-Fi network to use the 5 GHz frequency range.

You can choose this profile from the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

- 1. From the home screen, tap **Wi-Fi** (•) .

- 3. If the Reset to Default Wi-Fi Profile button appears, this means the device is using a custom profile.
 - a. Tap Reset to Default Wi-Fi Profile.
 - b. Tap Continue.
 - c. Tap the 'X' button.
 - d. Go back to step 1.
- 4. Tap **On**.
- 5. Tap Continue.

On the AT&T Unite Pro Manager homepage:

To select the Dual-Band Wi-Fi profile:

- 1. Log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the Options tab.
- 4. In the Wi-Fi Profiles field, select Dual-Band Wi-Fi.
- 5. Click **Submit**. (Submit button appears once you make a selection.)

Use the predefined Guest Wi-Fi profile

The Guest Wi-Fi profile sets your Main Wi-Fi network to use the 2.4 GHz frequency range and creates a secondary Wi-Fi network using the same range for temporary users to share your data connection.

You can choose this profile from the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

- 1. From the home screen, tap **Wi-Fi** (**).
- 2. Tap Guest Wi-Fi ().
- 3. If the Reset to Default Wi-Fi Profile button appears, this means the device is using a custom profile.
 - a. Tap Reset to Default Wi-Fi Profile.
 - b. Tap Continue.
 - c. Tap the 'X' 🗷 button.
 - d. Go back to step 1.
- 4. Tap **On**.
- 5. Tap Continue.

On the AT&T Unite Pro Manager homepage:

To revert to the default profile:

1. Log in as Administrator.

- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the Options tab.
- 4. In the Wi-Fi Profiles field, select Guest Wi-Fi.
- 5. Click **Submit**. (Submit button appears once you make a selection.)

Use a custom Wi-Fi profile

If you want to use a different set of options for the Main Wi-Fi, Dual-Band Wi-Fi, or Guest Wi-Fi networks, you can create a customized Wi-Fi profile from the AT&T Unite Pro Manager.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the **Options** tab.
- 4. In the Wi-Fi Profiles field, select Custom Setup.
- 5. In the Main Wi-Fi and Guest Wi-Fi sections, select the combination of options you want for your Wi-Fi profile. Some of the main options to consider include:
 - **Enable secondary Wi-Fi network** Enables Dual-Band Wi-Fi and/or a Guest Wi-Fi network.
 - Guest Wi-Fi Share your Secondary Wi-Fi network with temporary users, without giving them access to other devices connected to your Main Wi-Fi network.
 - **Frequency** To support Dual-Band Wi-Fi, choose different frequencies in the Main Wi-Fi and Guest Wi-Fi sections.
 - · 2.4 GHz Longer range, lower power consumption
 - 5 GHz Shorter range, faster data rates (typically)
 - Wi-Fi Network name and Password Set unique names and passwords for the Main and Secondary/Guest Wi-Fi networks
- 6. Click **Submit**. (Submit button appears once you make a selection.)

View connected devices

You can view a list of devices connected to your mobile hotspot on the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

- 1. From the home screen, tap Wi-Fi (**).
- 2. Tap **Devices** A list of devices connected to the Main Wi-Fi and Secondary Wi-Fi networks appears.
- 3. To view the IP and MAC addresses of one of the devices, tap the device name.

On the AT&T Unite Pro Manager homepage:

To view connected devices:

Log in as Administrator.
 A list of Devices Connected to the Main Wi-Fi and Secondary/Guest Wi-Fi networks appears on the left side of the screen.



2. To view the IP and MAC addresses of one of the devices, tap the device name.

Set maximum number of connected devices

You can connect up to 15 wireless devices to the mobile hotspot. These connections are shared between the mobile hotspot's Main and Secondary (e.g. Guest or 5 GHz) Wi-Fi networks.

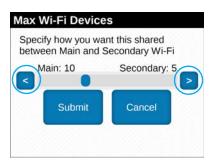
You can customize the distribution of devices from the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

- 1. From the home screen, tap **Wi-Fi**
- 2. Tap Devices -.
- 3. Tap Max Wi-Fi Devices.

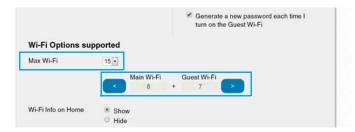


4. Tap or to adjust the number of connections available for the Main or Secondary Wi-Fi networks.



On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Select Wi-Fi > Options.
- 3. From the **Max Wi-Fi Devices** drop-down box, select the total number of devices that you want to allow to connect to the mobile hotspot at the same time.



- 4. Tap or to adjust the number of connections available for the Main or Secondary Wi-Fi networks.
- 5. Click **Submit**. (Submit button appears once you make a selection.)

Block/unblock devices

Note: Whenever you block or unblock devices, the Wi-Fi radio resets to activate the new settings. Any devices connected to the mobile hotspot will be disconnected when the Wi-Fi radio resets.

You can block a device that is currently connected to your mobile hotspot and it will not be able to connect to your Wi-Fi unless you choose to unblock it.

Some reasons that you may want to block a device include:

- Stopping them from overusing your bandwidth (and possibly resulting in charges for overages on your plan)
- Temporarily blocking a child from surfing the Internet

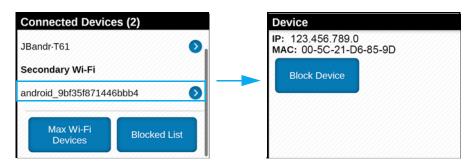
You can block/unblock devices from the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

To block a connected device:

1. From the home screen, tap **Wi-Fi** (**).

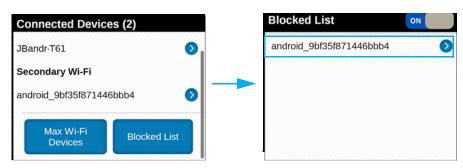
- 2. Tap **Devices** A list of devices connected to the Main Wi-Fi and Secondary Wi-Fi networks appears.
- 3. To block a listed device from connecting to your mobile hotspot, tap the device name. The device's IP and MAC addresses appear.



- 4. Tap Block Device.
- Tap Continue Block.
 The mobile hotspot will reset and the blocked device will not be able to reconnect to access the Internet.

To unblock a device:

- 1. From the home screen, tap **Wi-Fi** (**).
- 2. Tap **Devices** A list of devices connected to the Main Wi-Fi and Secondary Wi-Fi networks appears.
- 3. At the bottom of the list (swipe up if required), tap **Blocked List**. A list of blocked devices appears.



- 4. To unblock one of these devices so it can connect to your mobile hotspot, tap the device you want to unblock.
- 5. Tap Unblock.

On the AT&T Unite Pro Manager homepage:

To block a connected device:

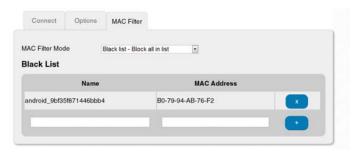
Log in as Administrator.
 A list of Devices Connected to the Main Wi-Fi and Secondary/Guest Wi-Fi networks appears on the left side of the screen.



- 2. To block a listed device from connecting to your mobile hotspot, click the device name. The device's IP and MAC addresses appear.
- 3. Click Block Device.
- 4. When prompted, click **Block Device** again.

To unblock a device:

- 1. Click **Wi-Fi** on the navigation menu on the left side.
- 2. Click the **MAC Filter** tab. The Black List shows all blocked devices. (Note: The Black List appears and is active only if MAC Filter Mode is set to Black List.)



3. To unblock a listed device so it can connect to your mobile hotspot, click beside the device's MAC Address.

USB Tethering

You can attach (tether) the mobile hotspot directly to a single device to charge the mobile hotspot or to allow the attached device to use the mobile hotspot's data connection instead of connecting via Wi-Fi.

- For the attached device to use the data connection, enable USB Tethering. To only charge the device without routing the traffic, disable USB Tethering.
- If your device is a computer running Windows XP, the first time you tether it you must load device drivers from the mobile hotspot.

Enable / disable USB tethering

You can enable / disable tethering from the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

- 1. From the home screen, tap **Settings** 🥳.
- 2. Tap **USB Tethering** 🔮
- 3. Tap the **On/Off** button in the top right corner to enable (On) or disable (Off) USB tethering.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the **General** tab.
- 4. Click the **Device** tab.
- 5. Beside USB Tethering, select **On/Off**.

Tether to Windows 7 or Windows 8

The first time you connect the hotspot with a USB cable to your Windows 7 or Windows 8 computer, drivers begin installing automatically and the 'Installing device driver software' popup will appear.



When the drivers finish installing, you will be able to access the mobile hotspot.

Tether to Windows XP

If the computer system being tethered uses Windows XP, you must use the LCD touchscreen to download the required drivers to the computer when you tether the computer for the first time.

On the touchscreen:

- Before you connect the mobile hotspot to your computer, from the home screen, tap Settings .
- 2. Tap **USB Tethering** ①
- 3. Tap **Install Win XP Drivers**. This prepares the mobile hotspot for installing the drivers.
- **4.** Use your USB cable to connect the mobile hotspot to your computer. The drivers will install automatically and a progress indicator will pop up on the system tray.

When the drivers finish installing, you will be able to access the mobile hotspot.

Tether to Mac OS

If the computer system being tethered uses Mac OS, you should be able to use the mobile hotspot shortly after the mobile hotspot enumerates as a USB device.

Alerts and Messages

View alerts

Your mobile hotspot and the AT&T Unite Pro Manager homepage display alerts to advise you of the device status. For a list of alerts that may appear, see Alerts on page 61.

On the touchscreen:

On the home screen, the Alerts bar indicates that you have system alerts to view.

To view alerts:

1. On the home screen, tap the Alerts bar.



2. Read each alert that appears and follow any displayed instructions. Swipe up in the text area to view the next alert, or swipe up from the bottom to hide the alerts.

Note: Alerts remain as long as the issues that cause them are active. When the issues are dealt with, the alerts are removed automatically.

On the AT&T Unite Pro Manager homepage:

Note: The AT&T Unite Pro Manager homepage displays alerts that you may need to take action on. To take action on an alert, you must be logged in as Administrator.

To view alerts:

- 1. Log in as Administrator. Alerts appear at the top of the homepage.
- 2. Follow the instructions in each alert to address the conditions that caused them to appear.

Note: Alerts remain as long as the issues that cause them are active. When the issues are dealt with, the alerts are removed automatically.

View SMS messages

You can view SMS messages from AT&T on the mobile hotspot or AT&T Unite Pro Manager homepage.

On the touchscreen:

To view or delete messages:

- 1. On the home screen, tap Wi-Fi (**).
- 2. Tap **Messages** . (Note: the Messages icon shows the number of unread messages.)
- 3. A list of messages appears, previewing the first portion of the text (new messages are displayed in bold).
- 4. Tap any message to read the full text. If the message is long, swipe to view the rest of the message.
- 5. If you want to delete the message, go to the bottom of the message and tap **Delete**.

On the AT&T Unite Pro Manager homepage:

If you have logged in as Administrator, the Messaging icon on the side menu indicates if you have unread network messages.

To view or delete messages:

- 1. Log in as Administrator.
- 2. Click **Messaging** on the navigation menu on the left side. A list of messages appears. (New messages are displayed in bold.)
- 3. For any message in the list, click the message to read the full text on the right side of the page.
- 4. If you want to delete the message, tap **Delete**.

Battery

Battery life

The mobile hotspot is configured (by default) to optimize battery life. Battery life is affected by:

- Standby time
- Data throughput
- Mobile Broadband signal strength (the better the signal, the longer the battery life)
- Wi-Fi range:
 - · Standard Longest battery life
 - Extended Range Enables you to have connected Wi-Fi devices further from your mobile hotspot and still connect to your Wi-Fi network, but battery life is shorter

Using BatteryBoost to charge your smartphone

There are several methods you can use to extend the battery life:

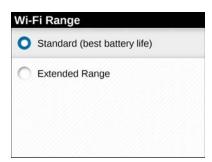
- Adjust Wi-Fi settings:
 - · Shorten the Wi-Fi range If the devices you are connecting to your Wi-Fi network are always near the mobile hotspot device, shorten the Wi-Fi range.
 - Set the Wi-Fi Standby timer to a shorter period Reduce the amount of time to wait when no devices are connected to either Wi-Fi network before going into standby mode (Wi-Fi radio turns off).
- · Adjust display settings:
 - · Dim the screen Reduce the LCD's brightness level.
 - · Set the Display Timeout to a shorter period Reduce the amount of time to wait without the LCD being used before turning the screen blank.

Extend battery life

You can choose Wi-Fi and display settings on the mobile hotspot or the AT&T Unite Pro Manager homepage to extend the mobile hotspot's battery life.

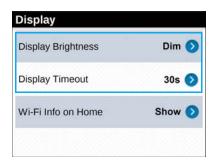
On the touchscreen:

- 1. On the home screen, tap **Settings** 🥳.
- 2. Tap Wi-Fi 🛜.
- **3.** Adjust these settings:
 - · Wi-Fi Standby Tap **Wi-Fi Standby**, then select a shorter time period. (The shorter the time, the longer the battery life.)
 - · Wi-Fi Range Tap **Wi-Fi Range**, then select Standard (best battery life).



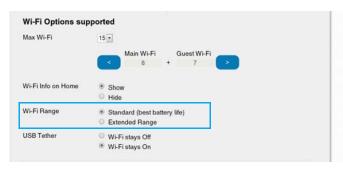
4. Go back to the Settings screen, then tap **Display** ...

- **5.** Adjust these settings:
 - · Brightness Tap **Display Brightness**, then select **Dim**.
 - · Timeout Tap **Display Timeout**, then select a shorter time period.

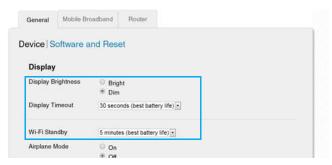


On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the **Options** tab.
- 4. Adjust this setting in the Wi-Fi Options supported section:
 - · Wi-Fi Range Select Standard (best battery life).



- 5. Click **Submit**. (Submit button appears once you make a selection.)
- 6. Click **Settings** on the navigation menu on the left side.
- 7. Click the **General** tab.
- 8. Click the Device tab.
- 9. Adjust these settings in the Display section:
 - · Display Brightness Select **Dim**.
 - $\cdot\;$ Display Timeout From the drop-down box, select a shorter time period.
 - · Wi-Fi Standby From the drop-down box, select a shorter time period.



10. Click **Submit**. (Submit button appears once you make a selection.)

Recharge the battery

The battery comes partially charged. You can recharge the battery from a wall socket or from the USB port on your computer.

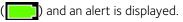
To recharge the battery from a wall socket (Fastest option):

1. Attach one end of the micro USB cable to the mobile hotspot and attach the other end to the wall charger (included).



2. Plug the wall charger into a wall socket. The battery icon includes a lightning bolt to indicate that the battery is charging.

The battery icon on the LCD screen indicates when the battery is fully charged

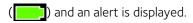


To recharge the battery from the USB port on your computer:

1. Attach one end of the micro USB cable to the mobile hotspot and plug the other end into the USB port on your computer. The battery icon includes a lightning bolt to indicate that the battery is charging. ().



The battery icon on the LCD screen indicates when the battery is fully charged



BatteryBoost (Charge) your smartphone

If your smartphone is low or out of battery power, you can boost it using the mobile hotspot's BatteryBoost cable. You can start the boost from the mobile hotspot or the AT&T Unite Pro Manager homepage.

Caution: If you want to use the BatteryBoost feature on an airplane or similar area where radios must be turned off, make sure you set the device to Airplane mode first. See Airplane mode on page 36.

Note: BatteryBoost supports most smartphones that accept charging from a USB port. To ensure proper performance, use the BatteryBoost cable included in the box, or a replacement that you purchased from AT&T. A regular microUSB cable with a female end will not work.



Note: You can't charge the mobile hotspot with the BatteryBoost cable.

On the touchscreen:

- 1. Plug the BatteryBoost cable into your mobile hotspot.
- 2. Connect your smartphone's USB charging cable to the BatteryBoost cable.
- 3. Plug your smartphone's charging cable into the phone. The BatteryBoost screen pops up on the mobile hotspot.
- 4. Tap one of the boosting options (30 minutes/60 minutes/90 minutes).
- 5. The boost ends automatically after the selected period. If you want to continue boosting, from the home screen tap BatteryBoost, then repeat step 4.

Note

- If you want to stop boosting early, go back to the BatteryBoost screen (on the home screen, tap **BatteryBoost**, then tap **End Boost**).
- To avoid depleting the hotspot's battery, the hotspot stops boosting when its battery reaches 10%. If you want to continue boosting, from the homescreen tap BatteryBoost, then repeat step 4.

On the AT&T Unite Pro Manager homepage:

- 1. On the homepage, log in as Administrator.
- 2. Plug the BatteryBoost cable into your mobile hotspot.
- 3. Connect your smartphone's USB charging cable to the BatteryBoost cable.
- 4. Plug your smartphone's charging cable into the phone.
- 5. Click **BatteryBoost** on the navigation menu on the left side.
- 6. Click one of the boosting options (30 minutes/60 minutes/90 minutes).
- 7. The boost ends automatically after the selected period. If you want to continue boosting, go back to the BatteryBoost screen, then repeat step 6.

Note:

- If you want to stop boosting early, go back to the BatteryBoost screen and click **End Boost**.
- To avoid depleting the hotspot's battery, the hotspot stops boosting when its battery reaches 10%. If you want to continue boosting, go back to the BatteryBoost screen, then repeat step 6.

Airplane mode

The mobile hotspot features an airplane mode setting that turns off the device's radios so you can still use the BatteryBoost feature to boost your smartphone's battery.

On the touchscreen:

- 1. On the home screen, tap **Settings** 🥳.
 - Tap **Airplane Mode X**.
- 3. Tap the **On/Off** button in the top right corner to turn airplane mode on or off.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **BatteryBoost** on the navigation menu on the left side.
- 3. Click Enable Airplane Mode (or Disable Airplane Mode).

Security

Change Wi-Fi network names and passwords

You can customize the network names and passwords for the Main and Secondary Wi-Fi networks on the mobile hotspot (depending on the Wi-Fi network type and Wi-Fi profile) or the AT&T Unite Pro Manager homepage.

- Main Wi-Fi network Mobile hotspot or AT&T Unite Pro Manager homepage
- Guest Wi-Fi network Mobile hotspot (if using the Guest Wi-Fi profile) or AT&T Unite Pro Manager homepage
- Dual-Band or Secondary network AT&T Unite Pro Manager homepage

Change Main Wi-Fi name and password

You can change the Main Wi-Fi name or password from the mobile hotspot or the AT&T Unite Pro Manager homepage, regardless of the Wi-Fi profile type.

Note: If you are using the Dual-Band Wi-Fi profile, changing the Main Wi-Fi name will automatically switch the Profile type to Custom.

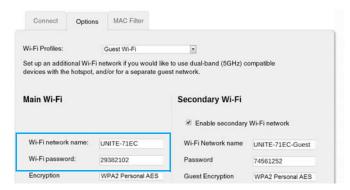
On the touchscreen:

- 1. On the home screen, tap **Wi-Fi**. (6).
- 2. Tap Main Wi-Fi
- 3. Tap **Edit** beside the field that you want to change (Name or Password).
- 4. Tap **Continue**. The keyboard window appears.
- 5. Enter the new value. See Using the LCD Keyboard on page 40.

Note: If you saved your changes, all devices that were connected will have to reconnect with the new name and password.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the **Options** tab.
- 4. Change the Main Wi-Fi network name and/or password.



5. Click **Submit**. (Submit button appears once you make a selection.)

Note: If you changed the Wi-Fi network name or password, all connected devices will be disconnected and have to reconnect.

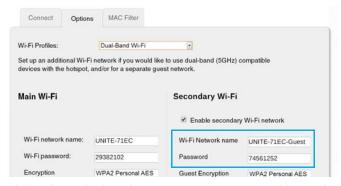
Change Secondary (Dual-Band) Wi-Fi name and password

If you have Dual-Band Wi-Fi turned on (you are using the predefined Dual-Band Wi-Fi profile), or are using a Custom Wi-Fi profile, you can change the Secondary Wi-Fi name or password from the AT&T Unite Pro Manager homepage.

Note: By default, the Secondary Wi-Fi name is the same as the Main Wi-Fi name. If you change the Secondary Wi-Fi name to be different than the Main Wi-Fi name, the Wi-Fi Profile type will automatically switch to Custom.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the Options tab.
- 4. Change the Secondary Wi-Fi network name and/or password.



5. Click **Submit**. (Submit button appears once you make a selection.)

Note: If you changed the Wi-Fi network name or password, all connected devices will be disconnected and have to reconnect.

Change Guest Wi-Fi name and password

If you are using the default Guest Wi-Fi profile, you can always change the Guest Wi-Fi name or password from the mobile hotspot or the AT&T Unite Pro Manager homepage. If you are using a Custom Wi-Fi profile, you can only change the name or password from the AT&T Unite Pro Manager homepage.

Note: By default, the Guest Wi-Fi name is the same as the Main Wi-Fi name, with "-Guest" appended.

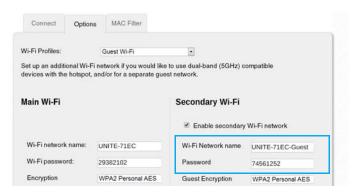
On the touchscreen:

- 1. On the home screen, tap **Wi-Fi**. (6) .
- 2. Tap **Guest Wi-Fi (⑥)**.
- 3. Tap Edit beside the field that you want to change (Name or Password).
- 4. Tap Continue. The keyboard window appears.
- 5. Enter the new value. See Using the LCD Keyboard on page 40.

Note: If you saved your changes, all devices that were connected will have to reconnect with the new name and password.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the **Options** tab.
- 4. Change the Guest Wi-Fi network name and/or password.



5. Click **Submit**. (Submit button appears once you make a selection.)

Note: If you changed the Wi-Fi network name or password, all connected devices will be disconnected and have to reconnect.

Using the LCD Keyboard

The mobile hotspot uses an on-screen keyboard for editing the Wi-Fi name and Wi-Fi password values.



Special keyboard buttons and controls:

- · Tap inside the value to change the position of the cursor.
- Backspace. Erase the character to the left of the cursor.
- Caps Lock. Switch between lowercase and uppercase letters.
- Switch keyboard from letters to numbers and symbols.
- . abc (not shown) Switch keyboard from numbers and symbols to lowercase letters.
- Enter Save the new value.

Note: The touchscreen symbols keyboard only includes commonly used symbols. To use other symbols, you have to use the AT&T Unite Pro Manager homepage to type them in.

- 1. Edit the network name or password shown at the top of the screen.
- 2. When you are finished, tap Enter to save your change, or tap to cancel it.

Change AT&T Unite Pro Manager homepage access settings

You can customize the AT&T Unite Pro Manager web interface's URL and the Admin Login used to access it AT&T Unite Pro Manager homepage.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the **General** tab.
- 4. Click the **Device** tab.

5. If desired, change the name used to access AT&T Unite Pro Manager (maximum 31 characters).

6. If desired, change the Admin Login (maximum 31 characters).

5 minutes (best battery life)

7. Click **Submit**. (Submit button appears once you make a selection.)

Note: If you forget the Admin login, you can check it on the mobile hotspot. Tap Settings > About Device > Device Information.

Change Wi-Fi encryption settings

You can set the mobile hotspot's Wi-Fi encryption settings in the AT&T Unite Pro Manager homepage.

On the AT&T Unite Pro Manager homepage:

1. Log in as Administrator.

Airplane Mode
Homepage

AT&T Unite Pro Manager: attunitepro

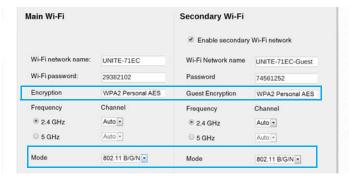
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the **Options** tab.
- 4. Select the desired encryption options for the Main Wi-Fi and the Secondary/Guest Wi-Fi networks. (It is recommended that you use WPA2 Personal AES whenever possible.)

The **Encryption** options (for 802.11 B/G/N mode, the most common mode) are:

- WPA2 Personal/AES Strong security supported by newer Wi-Fi devices (default)
- WPA/WPA2 (Personal) Strong security supported by most Wi-Fi devices (Use this if you want to connect Wi-Fi devices that do not support WPA2 Personal AES.)
- None Not recommended. Anyone can access your Wi-Fi network without a
 password and you are responsible for charges incurred.

The options available depend on the Wi-Fi Mode. If you want to choose a Wi-Fi encryption other than WPA2 Personal AES or WPA/WPA2 Personal:

- a. Change the **Mode** to the encryption type you want to use.
- b. Select the desired encryption options.



- 5. Click **Submit**. (Submit button appears once you make a selection.)
- 6. Reconnect your Wi-Fi devices, if necessary, using the new Wi-Fi credentials. See Connect to the Internet on page 14.

Note: The length of the Wi-Fi Password depends on the Wi-Fi Encryption selected.

Configure data network options

You can choose the network types that your mobile hotspot can connect to, and choose whether to allow the mobile hotspot to be used when roaming internationally, from the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

- 1. From the home screen, tap **Settings**
- 2. Tap **Mobile Broadband**
- 3. Choose the appropriate option:
 - To enable / disable international roaming, tap Int'l Roaming and then tap the On/ Off button in the top right corner to switch international roaming on or off.
 - To choose the type of network the mobile hotspot will connect to (LTE Only, 4G Only, or Auto), tap **Network Mode** and then select the network type. (**Auto** is recommended the best available network will be used.)

Note: For most users, it's best to leave the default setting (Auto). When this option is selected, your mobile hotspot connects to the fastest service available. If you change this setting, the mobile hotspot will not be able to connect if the option you choose is not available. For example, if you select LTE only and you are in an area where there is no LTE network available, the mobile hotspot will not be able to connect to a mobile broadband network until you change this setting.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the Mobile Broadband tab.
- 4. To enable / disable international roaming, select **On** or **Off** beside **Int'l Roaming**.

- 5. Beside Network Mode, select the type of network the mobile hotspot will connect to (LTE Only, 4G Only, or Auto) **Auto** is recommended the best available network will be used.)
- 6. If you are roaming and want to select a mobile network other AT&T's, click **Scan** and then select the network from the list that appears.
- 7. Click **Submit**. (Submit button appears once you make a selection.)

Note: For most users, it's best to leave the default setting (Auto). When this option is selected, your mobile hotspot connects to the fastest service available. If you change this setting, the mobile hotspot will not be able to connect if the option you choose is not available. For example, if you select LTE only and you are in an area where there is no LTE network available, the mobile hotspot will not be able to connect to a mobile broadband network until you change this setting.

View details

You can view details about your device such as the model number, software version, and IMEI on the mobile hotspot or the AT&T Unite Pro Manager homepage.

On the touchscreen:

- 1. From the home screen, tap **Settings** 🥳.
- 2. Tap About Device ①.
- 3. Tap Device Information.
- **4.** Swipe the screen to scroll through the information.

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. Click About.



Software update

Software or firmware updates for the mobile hotspot may become available periodically. You will receive an alert when an update becomes available, and you can check for updates manually from the mobile hotspot or from the AT&T Unite Pro Manager.

Once an update becomes available, you can load it immediately or postpone installation for up to 12 hours. After 12 hours, the update installs automatically.

On the touchscreen:

- 1. If you read an alert indicating an update is available, you can choose to update 'now' or postpone. Go to step 6.
- 2. If you want to check for updates manually, from the home screen, tap
 - Settings 🥳
- 3. Tap **About Device** ①.
- 4. Tap Software Updates.
- 5. Tap Check for update.
- 6. If an update is available:
 - · Tap **Update Now** to load the update immediately, or
 - Tap **Postpone** to wait for 4 hours. An alert will appear after 4 hours reminding you that the update is available.
- 7. If you are updating now, a message will appear if your mobile hotspot's battery is low. Plug your mobile hotspot into your wall charger, and then tap **Begin**. (This ensures the update will complete without the device shutting off midway.)

On the AT&T Unite Pro Manager homepage:

- 1. Log in as Administrator.
- 2. If you read an alert indicating an update is available, you can choose to update 'now' or postpone. Go to step 5.
- 3. If you want to check for updates manually:
 - a. Click **Settings** on the navigation menu on the left side.
 - b. Click the General tab.
 - c. Click the **Software and Reset** tab.
- 4. Click Check for update.
- 5. If an update is available, either:
 - · Click Continue to load the update immediately, or
 - Click **Postpone** to wait for 4 hours. An alert will appear after 4 hours reminding you that the update is available.

Replace the SIM card

Your mobile hotspot comes with the SIM card inserted. If you need to replace the SIM card:

1. Remove the back cover.



- 2. Remove the battery.
- 3. Remove the existing SIM card (if present) slide the card out of the slot.



4. Insert the SIM



5. Insert the battery.



6. Replace the back cover.

3: Advanced Settings

This chapter provides information on how to configure advanced settings for various aspects of the device such as Wi-Fi settings, WAN settings, router settings, etc.

Hotspot settings

Download and restore settings

The mobile hotspot allows you to download (for the purpose of backup) and restore your mobile hotspot settings. This is useful if you have more than one mobile hotspot and you want the same settings on both, or to save your settings before doing a factory reset or changing the settings.

To download (backup) mobile hotspot settings:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the **General** tab.
- 4. Click the **Software and Reset** tab.
- 5. Click **Save**. By default, the file (export.cfg) is saved to your Downloads folder.

To restore mobile hotspot settings:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the **General** tab.
- 4. Click the **Software and Reset** tab.
- 5. In the Restore Settings section, click **Choose File**.
- 6. Navigate to the folder where the backup file is stored. (By default, mobile hotspot setting files are saved to your Downloads folder.)
- 7. Select the backup file and click **Open** to restore your mobile hotspot with the imported file settings.

Manage Wi-Fi

Set Wi-Fi network options

To configure the Wi-Fi network options:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.

- 3. Click the **Options** tab.
- 4. For the Main Wi-Fi and Secondary/Guest Wi-Fi networks, select the desired options. (Note: If you are using a predefined Wi-Fi Profile and you change any values in the Main Wi-Fi or Guest Wi-Fi sections, the Wi-Fi Profile will be marked as a Custom Setup.)
 - **Frequency** The Wi-Fi frequency range used for the selected network. 2.4 GHz uses less power and is longer ranged than 5 GHz, but 5 GHz can provide higher speeds with less interference.
 - Mode The WLAN protocol being used. The recommended value depends on the Frequency range selected:
 - · 2.4 GHz 802.11 B/G/N
 - · 5 GHz 802.11 A/N
 - **Channel** The Wi-Fi channel used. The recommended value is Auto, which chooses the channel that will provide the least interference.
- 5. In the Connection and Security sections, you can edit these options:
 - RTS Threshold The smallest packet size (in bytes) used by the Request to Send/Clear to Send handshaking protocol. The recommended value is 2347. If you are experiencing inconsistent data flow, you can make minor changes to this value to try to alleviate the problem.
 - Fragmentation Threshold The largest allowable size (in bytes) for a packet. If the packet is larger than this, it is sent in multiple packets, which can affect network performance. It is recommended to keep this value as large as possible (up to 2346).
 - Broadcast Network Name If you select Show, your Wi-Fi network name (SSID) will be broadcast to devices within Wi-Fi range. (Select Hide if you do not want it broadcast.)

Note: The Mode field usage is explained in Change Wi-Fi encryption settings on page 41.

6. Click **Submit**. (Submit button appears once you make a selection.)

Set MAC Filter mode

You can use MAC (Media Access Control) filtering to block unauthorized Wi-Fi devices from accessing your Wi-Fi network (Black list on page 49), or permit only authorized Wi-Fi devices to access the network (White list on page 49), based on each device's MAC address.

Note: Only one list can be active at any time — either the black (block) list or the white (allow) list.

Note: The MAC filtering black list is also referred to as the block list. See View connected devices on page 24 for another method of blocking connected devices.

Black list

To block devices from connecting to your mobile hotspot Wi-Fi networks, use the MAC Filter black list:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the MAC Filter tab.
- 4. From the MAC Filter Mode drop-down menu, select **Black list**.
- 5. Either:
 - Enter the MAC Address of the device and click _____, or
 - If the device is currently connected, click the device in the Devices Connected listing and then click **Block**.
- 6. Click **Submit**. (Submit button appears once you make a selection.)

To unblock a device so it can connect to your mobile hotspot:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the MAC Filter tab.
- 4. Click beside the device details in the Black List.

White list

To create a list of the only devices that are allowed to connect to your mobile hotspot, use the MAC Filter White list.

Caution: If the device you are using is connected via Wi-Fi to the mobile hotspot, make sure you add it to the White list. If you do not, then when you save the White list, you will be disconnected and not able to reconnect.

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the MAC Filter tab.
- 4. From the MAC Filter Mode drop-down menu, select White list.
- 5. Enter the MAC Address of the device and click
- 6. Click **Submit**. (Submit button appears once you make a selection.)

To remove a device from the list of allowed devices:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the MAC Filter tab.
- 4. Click beside the device details in the White List.

Security

Enable SIM security

You can create another level of security by setting up a PIN number that must be entered before you can view the information available to an Administrator or change the mobile hotspot settings on the AT&T Unite Pro Manager homepage.

If you set up a PIN number, when you log in to the Unite AT&T Unite Pro Manager homepage, you will be asked to enter the PIN number before you can access the homepage as an Administrator.

To enable SIM security:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the Mobile Broadband tab.
- 4. Click the SIM Security tab.
- 5. Click Activate.
- 6. Enter your SIM PIN (provided by your carrier) and click **Submit**.

Caution: If you run out of available attempts the PIN will be locked. If this happens, contact your network provider to receive a PUK number to unlock the PIN.

Configure mobile broadband

View WAN information

To view detailed network information, such as the active network, connection status, signal strength, etc.:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click About.

Enable port forwarding

If your computer hosts a server, you can enable port forwarding so that other users can access the server.

To enable port forwarding:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the Router tab.
- 4. Click the **Port Forwarding** tab.
- 5. Select **Enable** beside Port Forwarding. The Port Forwarding list will appear.

- Incoming traffic is forwarded to specific ports and devices on your network (using their local IP addresses).
- 6. Identify the ports to forward—Enter the port forwarding information (a descriptive Label, the IP address, the Port number, and the Protocol), then click
 - . Repeat for each port being forwarded.
- 7. Click **Submit**. (Submit button appears once you make a selection.)

Caution: Port forwarding creates a security risk. When not required, port forwarding should be disabled.

Enable port filtering

You can use port filtering to select which applications (for example, http, ftp, email servers) can access the Internet. Used in conjunction with other security measures such as firewall, port filtering can enhance network security.

To enable port filtering:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the Router tab.
- 4. Click the Port Filtering tab.
- 5. Select the Port Filtering Mode:
 - · Black List (Block list) Specific applications not allowed to access the Internet
 - · White List (Allow list) Specific applications allowed to access the Internet

Note: Only one list at a time can be active, either a Black List or a White List.

- 6. Identify a port to filter Enter a meaningful label that describes the service, and the port and communication protocol being used. Repeat for each port being filtered.
- 7. Once you have identified the desired applications, click **Submit**. (Submit button appears once you make a selection.)

Enable VPN passthrough

If you want to connect to a corporate network using VPN, you first need to enable VPN connections (passthrough).

To enable VPN passthrough:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the Router tab.
- 4. Click the Basic tab.

5. In the LAN section, select **On** beside VPN Passthrough, and click **Submit**. (Submit button appears once you make a selection.)

Configure APN details

The APN is checked to determine the type of network connection to establish.

Your mobile hotspot comes preconfigured with the APN (Access Point Name) for AT&T.

To add an APN for another network:

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the Mobile Broadband tab.
- 4. Click the APN tab.
- 5. In the blank line, enter the APN (obtained from your carrier).
- 6. Enter the **Username** and **Password**, if these are required for the wireless network.
- 7. Select the network **Authentication mode**. The options are:
 - · None (default)
 - · PAP
 - · CHAP
 - · PAP or CHAP
- 8. Click beside the new APN entry.

To select the APN to use:

1. Select **Active** beside the APN entry to be used.

To remove an APN entry:

1. Click beside the APN entry.

Enable DMZ

In a DMZ (demilitarized zone) 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.

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

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the Router tab.
- 4. Click the Basic tab.
- 5. Select **On** beside DMZ Enabled.
- 6. In the **DMZ Address** field, enter the IP address of the computer you want to have in the DMZ.
- 7. Click **Submit**. (Submit button appears once you make a selection.)

Set LAN options

To set the mobile hotspot's LAN options:

- 1. On the AT&T Unite Pro Manager, log in as Administrator.
- 2. Click **Settings** on the navigation menu on the left side.
- 3. Click the Router tab.
- 4. Click the Basic tab.
- Enter the desired information in the LAN section.
 If the DHCP Server is enabled, it automatically assigns an IP address to each device on the network and manages their configuration information.
 - The DNS mode setting specifies how the DNS servers are obtained. If you select **Auto**, the servers use the DNS relay specified by the Internet provider.
- 6. Click **Submit**. (Submit button appears once you make a selection.)

4: Frequently Asked Questions

This chapter provides answers to questions you may have about your mobile hotspot. (Also see Troubleshooting on page 59.)

What do I do if I forget my Main or Guest Wi-Fi Password

The Wi-Fi Passwords appear:

- On the mobile hotspot's:
 - Home screen, unless you have configured it not to show. (Swipe the network name and password to see the secondary name and password.)
 - · Wi-Fi Info screen (Wi-Fi > Main Wi-Fi, and Wi-Fi > Guest Wi-Fi)
 - About screen (Settings > About Device > Device Information).
 Note: This screen shows only the Main Wi-Fi name and password.
- On the AT&T Unite Pro Manager homepage (Wi-Fi > Connect)

What do I do if I forget my Admin Login or the AT&T Unite Pro Manager homepage URL?

The Admin Login (default **attadmin**) and AT&T Unite Pro Manager URL are displayed in the mobile hotspot touchscreen (**Settings > About Device > Device Information**).

How do I disconnect from the mobile broadband network?

Do one of the following:

- On the AT&T Unite Pro Manager homepage, click Disconnect (in the Connection Details section).
- On the touchscreen, tap **Settings > Mobile Broadband > Status**, then tap **Disconnect**.

How do I select a different network when I'm roaming?

If you want to connect to a different network when you are roaming:

- Turn on International Roaming (from the touchscreen or from the AT&T Unite Pro Manager homepage).
- 2. From the AT&T Unite Pro manager homepage, scan for available networks and select the network that you want to connect to.

For details, see Configure data network options on page 42.

The Connect / Disconnect button on the AT&T Unite Pro Manager homepage doesn't work.

The Connect / Disconnect button can be used only when you are logged in as Administrator.

To log in as Administrator:

- 1. Place your cursor in the **Sign In field** on the AT&T Unite Pro Manager homepage and type the Admin Login (default **attadmin**).
- 2. Click **Sign In**.

How can I extend the life of the battery?

For information on extending the life of the battery, see Battery life on page 31.

How do I turn the mobile hotspot off?

Press and hold the power button for a few seconds.

How do I find out how many devices (users) are connected to my mobile hotspot network?

The number on the Wi-Fi icon on the mobile hotspot LCD shows the number of devices (users) connected to your Wi-Fi network, and a list of connected devices is shown in the AT&T Unite Pro Manager homepage's Devices Connected section. For more details about the devices or users connected to your network, see View connected devices on page 24.

Note: You can also use the options on the AT&T Unite Pro Manager homepage to block particular devices from connecting to your mobile hotspot. See View connected devices on page 24.

The LCD screen is not lit. How do I know if the mobile hotspot is still powered on?

The LCD screen dims to save energy. The LED continues to flash slowly to indicate that the mobile hotspot is still powered on. To wake up the LCD, press and quickly release the power button.

How do I find my computer's IP address?

The steps for finding your computer's IP address depend on its operating system.

Windows 7 / Vista / XP

- 1. Open the command prompt window.
 - a. Click **Start > Run**.
 - b. Type cmd or command and click OK.
- 2. At the command prompt, type **ipconfig** and press **Enter**.
- 3. Write down the IP address for the entry that relates to the wireless network connection. (The IP address may be listed under "IPv4 Address" or something similar.)

Windows 8

- 1. In the Charms bar, click the Search icon.
- 2. Select Command Prompt.
- 3. At the command prompt, type **ipconfig** and press **Enter**.
- 4. Write down the IP address for the entry that relates to the wireless network connection. (The IP address may be listed under "IPv4 Address" or something similar.)

Mac OS X

- 1. From the Apple menu, select **System Preferences > Network**.
- 2. Select the wireless adapter. The IP address is displayed in the right pane.

Other operating systems

Refer to the user documentation for your operating system or computer.

How do I find a device's MAC address?

You'll need to know the MAC address for a device when:

- Assigning an IP address based on a MAC address (when using DHCP)
- Allowing or denying devices access to your Wi-Fi network (MAC filtering)

Tip: To display a list of connected devices, including the MAC address of each device, go to the AT&T Unite Pro Manager homepage and log in as Administrator. The connected device list appears on the left side of the homepage. (Click the device links to see their IP and MAC addresses.)

The steps for finding a device's MAC address depend on the operating system.

Windows 7 / Vista / XP

- 1. Open the command prompt window.
 - a. Click Start > Run.
 - b. Type **cmd** or **command** and click **OK**.
- 2. At the command prompt, type **ipconfig /all** and press **Enter**.
- 3. Write down the Physical address for the entry that relates to the wireless network connection. (It appears as a series of numbers and letters. This is the MAC address of your wireless adapter.)

Windows 8

- 1. In the Charms bar, click the Search icon.
- 2. Select Command Prompt.
- 3. At the command prompt, type **ipconfig /all** and press **Enter**.
- 4. Write down the Physical address for the entry that relates to the wireless network connection. (It appears as a series of numbers and letters. This is the MAC address of your wireless adapter.)

Mac OS X

- 1. From the Apple menu, select **System Preferences > Network**.
- 2. Select the wireless adapter that is connecting to the routing hardware.
- 3. Select Advanced.
- 4. Select **Ethernet**. The Ethernet ID is displayed. This is the same as the MAC address.

Other operating systems

Refer to the user documentation for your operating system or computer.

Where can I find more information?

- For more information about using your new device, visit the interactive web tutorial available at att.com/devicehowto, then select the brand (AT&T) and model (Unite Pro).
- Additional support is available online including device specifications, troubleshooting and user forums at att.com/DeviceSupport.
- View product information on the NETGEAR support site. Go to support.netgear.com/search/aircard, then search for "AirCard 781S".
- Refer to the Quick Start Guide that came with your mobile hotspot.

5: Troubleshooting

This chapter provides suggestions for troubleshooting problems that may arise when using your mobile hotspot.

The Wi-Fi network name does not appear in the list of networks.

Refresh the list of networks.

- 1. Ensure that the Wi-Fi setting on your laptop (or other device) is turned on.
- 2. Ensure that Wi-Fi is enabled on the mobile hotspot. The Wi-Fi icon on the LCD should be blue (not gray). If you wake up the screen and the icon remains gray, make sure Airplane Mode is turned off:
 - a. From the homescreen, tap **Settings > Airplane Mode**.
 - b. Tap the On/Off switch to change it to **Off**.

The No Signal icon appears on the mobile hotspot's home screen / AT&T Unite Pro Manager homepage.

If the No Signal icon () appears on the mobile hotspot's home screen/AT&T Unite Pro Manager homepage, make sure you are in your network provider's coverage area.

The Wi-Fi icon on the mobile hotspot's home screen is gray (disabled).

If the Wi-Fi icon on the mobile hotspot's home screen remains gray (radio is disabled) after you wake up the device, it is likely in Airplane Mode (the Airplane Mode icon will appear on the top left corner of the screen).

- 1. From the homescreen, tap **Settings > Airplane Mode**.
- 2. Tap the On/Off switch to change it to **Off**.

Unable to access the AT&T Unite Pro Manager homepage when connected to a VPN.

If you are using your mobile hotspot while connected to a VPN, you may not be able to access the AT&T Unite Pro Manager homepage using http://attunitepro.

To directly access the homepage hosted on the device, enter the address http://192.168.1.1 in your browser.

Unable to connect a computer running Windows® Vista® to the mobile hotspot.

Microsoft has a known issue whereby computers running Windows Vista cannot obtain an IP address from certain routers. More information and a fix are available at http://support.microsoft.com/kb/928233 or go to the Microsoft support web site and search for knowledge base article 928233.

My computer (or other Wi-Fi device) loses its Wi-Fi connection to the mobile hotspot.

If a Wi-Fi device connects to your mobile hotspot's Main Wi-Fi or Secondary/Guest Wi-Fi network, but periodically loses the connection, try changing the default basic rate.

- 1. On the AT&T Unite Pro Manager homepage, log in as Administrator.
- 2. Click **Wi-Fi** on the navigation menu on the left side.
- 3. Click the **Options** tab.
- 4. In the **Mode** field for the appropriate Wi-Fi network, select **802.11b/g** compatibility from the drop-down menu.



5. Click Submit.

Reset the mobile hotspot

You can reset the mobile hotspot to the factory setting on the mobile hotspot or the AT&T Unite Pro Manager homepage. (This is useful if you have lost your Admin Login for the AT&T Unite Pro Manager homepage.)

Note: If you reset the modem to factory settings, all of your customizations will be lost. If you want to keep them, save them before doing the reset, then restore them afterward. See Download and restore settings on page 47 for details.

Note: When you reset the mobile hotspot, any currently connected devices will lose access and will have to be reconnected after the mobile hotspot restarts.

On the touchscreen:

- 1. On the home screen, tap **Settings** 🥳 .
- 2. Tap **About Device** 🛈.
- 3. Tap Factory Reset.
- 4. Tap Yes.
- 5. Tap Begin Reset.
- 6. After the device has reset, reconnect Wi-Fi devices.

On the AT&T Unite Pro Manager homepage:

- 1. On the home page, click **Settings** on the navigation menu on the left side.
- 2. Click the General tab.
- 3. Click the **Software and Reset** tab.
- 4. Click Reset.
- 5. Click Begin Reset.
- 6. After the device has reset, reconnect Wi-Fi devices.

Alerts

SIM not installed

Ensure that the SIM card is installed correctly. See Replace the SIM card on page 44.

SIM Error — Check SIM

Ensure that you have an AT&T SIM card inserted in the mobile hotspot. If there is still a problem, contact AT&T Customer Care. (The SIM may be damaged and need replacing.)

SIM Locked

- 1. Contact AT&T Customer Care for the PIN to unlock the SIM.
- 2. Go to the AT&T Unite Pro Manager homepage and log in as Administrator.
- 3. Enter the SIM PIN when prompted.
- 4. Click Save.

SIM MEP Locked

 Contact AT&T Customer Care for the MEP unlock codes and tool to unlock your Mobile Wi-Fi.

Temperature-related alerts

The mobile hotspot is designed to work over a wide temperature range. (See Environmental specifications on page 65 for details.) The mobile hotspot will shut down automatically if it goes out of the supported temperature range.

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

Note: The battery may not recharge if the mobile hotspot is outside the operating temperature range.

Connection alerts

Some connection alerts include instructions for resolving them. For other connection alerts, including those in the following table, contact AT&T Customer Care for assistance.

Table 5-1: Connection alerts

Alert	Description
8	Operator Determined Barring
25	LLC or SNDCP failure
26	Insufficient resources
27	Missing or unknown APN
28	Unknown PDP address or type
29	User authentication failed
30	Activation rejected by GGSN
32	Service Option not supported
33	Service Option not subscribed

Table 5-1: Connection alerts (Continued)

Alert	Description
34	Service Option temporarily out of order
36	Regular deactivation
37	QOS not accepted
38	Network failure
39	Reactivation required
40	Feature not supported
41	Semantic error in the TFT operation
42	Syntactical error in the TFT operation
43	Unknown PDP context
44	PDP context without TFT already activated
45	Semantic errors in packet filter(s)
46	Syntactical errors in packet filter(s)
67	Connection error
81	Invalid transaction identifier value
95	Semantically incorrect message
96	Invalid mandatory information
97	Message type non-existent or not implemented
98	Message type not compatible with the protocol state
99	Information element non-existent or not implemented
100	Conditional IE error
101	Message not compatible with the protocol state
111	Protocol error, unspecified
256	Invalid Connection ID
258	Invalid PRI NSAPI
259	Invalid Field
260	SNDCP Failure
261	RAB Setup Failure
262	No GPRS Context
263	PDP Establish Max Timeout
264	PDP Activate Max Timeout
265	PDP Modify Max Timeout

Table 5-1: Connection alerts (Continued)

Alert	Description
266	PDP Inactivate Max Timeout
267	PDP Lower layer Error
268	PDP Duplicate
269	UE RAT Change

6: Specifications

Mechanical specifications

Table 6-1: Mechanical specifications

Weight	165g (5.82 oz.)
Length	112 mm (4.41 in.)
Width	68 mm (2.68 in.)
Thickness	19 mm (0.75 in.) [excluding feet]

Environmental specifications

Table 6-2: Environmental specifications

Operating temperature	0° C to 35° C (32° F to 95° F)	
Storage temperature	-10° C to +60° C, 96 hours (14° F to 140° F)	

Supported RF bands

Table 6-3: Supported RF bands

Technology	Bands		
LTE	Band 2 (1900 MHz) Band 4 (AWS) (1700/2100 MHz) Band 5 (850 MHz) Band 17 (700 MHz)		
HSPA+	Band 1 (2100 MHz) Band 2 (1900 MHz) Band 5 (850 MHz)		

LTE Release 10 feature support

NETGEAR has confirmed with the FCC regarding the following LTE Release 10 feature support:

- 1. The AC781S supports LTE 3GPP Release 10, but only supports the Carrier Aggregation feature of Release 10. Furthermore, only downlink Carrier Aggregation is supported. There is no support for Carrier Aggregation in the uplink.
- 2. The AC781S does not support any other Release 10 LTE features.
- 3. The output power in LTE mode for the AC781S does not change (stays within ± 0.2 dB) with or without downlink Carrier Aggregation applied.
- 4. The AC781S supports the following bands and bandwidths for downlink (only) Carrier Aggregation:

Primary Cell Band	Primary Cell Bandwidth	Secondary Cell Band	Secondary Cell Bandwidth
B2	5 MHz	B17	10 MHz
B2	10 MHz	B17	10 MHz
B4	5 MHz	B17	5 MHz
B4	5 MHz	B17	10 MHz
B4	10 MHz	B17	5 MHz
B4	10 MHz	B17	10 MHz

7: Regulatory and Safety Information

Notice

Because of the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (that is, have errors), or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the AirCard 781S Mobile Hotspot are used in a normal manner with a well-constructed network, the AirCard 781S Mobile Hotspot should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. NETGEAR and its affiliates accept no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the AirCard 781S Mobile Hotspot, or for failure of the AirCard 781S Mobile Hotspot to transmit or receive such data.

Safety and Hazards

The mobile hotspot **MUST BE POWERED OFF** in all areas that may be susceptible to radio interference, in particular:

- Prohibited areas
 - Obey all signs and notices and follow all rules and regulations. Power off the mobile hotspot when instructed to do so or when you suspect that it may cause interference or danger.
- In areas where blasting is in progress
- Where explosive atmospheres may be present
 - Areas with a potentially explosive atmosphere are not always clearly marked. Such areas include gas stations, fuel depots, chemical transfer or storage facilities, areas where blasting is in progress, areas where the air contains chemicals or particles such as grain, dust, or metal powders, and any other area where you would normally be advised to turn off your cellular phone or vehicle engine.
- Near medical or life-support equipment

 Medical equipment may be susceptible to any form of radio interference. In such areas the mobile hotspot can transmit signals that could interfere with this equipment.
- · On board aircraft

In addition to Federal Aviation Authority (FAA) requirements, many airline regulations state that you must suspend wireless operations before boarding an aircraft. The mobile hotspot is capable of transmitting signals that could interfere with various onboard systems and controls.

Failure to observe this instruction may lead to suspension or denial of cellular telephone services to the offender, legal action, or both.

Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. The mobile hotspot may be used normally at this time.

• While operating a vehicle

The driver or operator of any vehicle should not use a wireless data device while in control of a vehicle. Doing so detracts from the driver or operator's ability to control and operate the vehicle. In some countries, using such communications devices while in control of a vehicle is an offence.

Caution: Unauthorized modifications or changes not expressly approved by NETGEAR, Inc. could void compliance with regulatory rules, and thereby your authority to use this device.

Proper Battery Use and Disposal

Note: Improper battery use may result in a fire, explosion, or other hazard.

To ensure safe and responsible battery use:

- Do not open, disassemble, puncture, crush, bend, or shred.
- Do not expose to water or other liquids, fire, explosion, or other hazards.
- Use the battery only in the mobile hotspot.
- If using with a charger, use only the charger supplied with the mobile hotspot.
- Do not short circuit the battery.
- When replacing a battery, use the same model of battery that was supplied with the mobile hotspot.
- Follow local regulations when disposing of a used battery.
- Avoid dropping the mobile hotspot or the battery. If dropped and you suspect damage, take it to a service center for inspection.

Regulatory Information for North America

FCC ID: PY3AC781S

SAR information: 1.275 W/kg @ 1 g (body)

Caution: The AirCard 781S Mobile Hotspot was tested for typical body-worn operations. A minimum separation distance must be maintained between the user's body and the Hotspot: 1 cm to comply with the RF exposure requirements in the U.S. for FCC exposure requirements.

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, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Where appropriate, the use of the equipment is subject to the following conditions:

Note: **(EMI)** – United States FCC Information – This equipment has been tested and found to comply with the limits pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in an appropriate installation. 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 communication. However, there is no guarantee that interference will not occur in a particular installation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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:

- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

If you have purchased this product under a United States Government contract, it shall be subject to restrictions as set forth in subparagraph (c)(1)(ii) of Defense Federal Acquisitions Regulations (DFARs) Section 252.227-7013 for Department of Defense contracts, and as set forth in Federal Acquisitions Regulations (FARs) Section 52.227-19 for civilian agency contracts or any successor regulations. If further government regulations apply, it is your responsibility to ensure compliance with such regulations.

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