Sierra Wireless AirCard 770S Mobile Hotspot

>>

User Guide



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Important Notice	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 Sierra Wireless modem are used in a normal manner with a well-constructed network, the Sierra Wireless 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. Sierra Wireless accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sierra Wireless modem, or for failure of the Sierra Wireless modem to transmit or receive such data.
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	Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. Sierra Wireless modems may be used at this time.
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>> 1: Get Started

This chapter provides an overview of the AirCard 770S 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 access point anywhere there is cellular network coverage. You can use that Wi-Fi access point to connect your laptop and other Wi-Fi capable devices to your service 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
- Wi-Fi Protected Setup (WPS)—A fast, easy way to connect WPS-enabled devices to your Wi-Fi network
- Guest Wi-Fi—Create a second Wi-Fi network on the hotspot for guests to use



Power Button

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 LCD screen	Press and quickly release the power button.

Touchscreen LCD

The mobile hotspot's touchscreen LCD displays:

- Wi-Fi network name and password (SSID and passphrase)
- Status icons (See LCD screen elements on page 9 for details.)
- Data Usage information
- Wi-Fi configuration options (Wi-Fi network range, network preference, etc.)
- Device configuration options (screen brightness, show/hide network name and password, update software, show device details such as firmware version, wireless number, etc.)
- System alerts
- Network provider messages
- Device tutorial

To personalize the mobile hotspot and change basic settings, use the Settings and Wi-Fi options on the Dashboard.

For advanced settings, connect to the device and then use a browser to display the web interface homepage (http://192.168.1.1).

Note: The information and options available on the touchscreen and in the web interface homepage vary depending on your device and your service provider.

LCD screen elements

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

Note: The layout of your LCD screen resembles the following image. Specific details vary depending on service provider and device model.



Element	Indicates
	Signal strength The more bars the stronger the RF signal.
\otimes	No signal
	Indicates the network type. (The icons that may appear depend on your service provider and device.)

Element	Indicates
	Battery status Indicates the charge status of the battery. Green bar—26–100% Yellow bar—11–25% Red bar — 5–10% Flashing red bar—< 5%
*	Battery charging
Alerts	Number of system alerts waiting to be read. Tap the alert bar to view the messages.
Wi-Fi network name and password	Mobile hotspot's Wi-Fi network name and password. Used by Wi-Fi enabled devices to connect to the mobile hotspot.
Data usage	Data usage for billing period or session, depending on service provider, presence of billing server, etc. Tap the data bar to view detailed information.
Wi-Fi icon	Tap to configure basic Wi-Fi settings.
Messages icon	Tap to view network provider messages.
Settings icon	Tap to configure basic device settings.

Status LED

The LED shows the device connection status:

- Slow blue blink—Data connection ready
- Double blue blink—Transferring data
- Slow amber blink—Not ready

Accessories

- Micro USB cable—Used mainly for recharging the battery, although you can also use it to tether the mobile hotspot to your computer
- AC adapter—Used with the USB cable to recharge the battery or to power the mobile hotspot from a wall socket

Additional accessories are available from www.sierrawireless.com/wheretobuy/ onlinestore/default.aspx.

Power Sources

You can power your mobile hotspot from:

- Rechargable battery included with the mobile hotspot
- Wall socket using the AC adapter and USB cable
- USB port on your computer

Set Up and Connect to the Internet

Insert the SIM Card

Depending on your service provider, the SIM card may already be inserted. If you need to insert (or replace) the SIM card:

1. Open the SIM card cover.



2. Remove the existing SIM card (if present)—push the SIM card in to unlock it, then pull it out of the slot.



3. Insert the new SIM card—push the SIM fully into the slot.



4. Close the SIM card cover.

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: Depending on your service provider, the battery may come partially-charged and ready to go. When the battery needs recharging, follow the instructions in Recharge the Battery on page 16.

Connect to the Internet

Note: Your mobile hotspot does not need to be connected to the computer with the USB cable to connect to 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.)

To connect to the Internet:

 Turn on the mobile hotspot. Press and hold the power button for a few seconds. Once powered up, the mobile hotspot automatically searches for and connects to your service provider's mobile broadband network.

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

- 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 SSID displayed on the mobile hotspot LCD screen, and connect to it.
 - **c.** When prompted, enter your Wi-Fi Passphrase, as it appears on the mobile hotspot LCD screen.

3. Launch your browser to surf the Internet.

Optional: To personalize your mobile hotspot go to http://192.168.1.1.

Note: To make changes to the mobile hotspot settings on the homepage, you must first log in as Administrator. Type **swiadmin** in the Admin Password field.

Device configuration

Your mobile hotspot comes configured, perfectly secure and ready to use, but if you want to change the security settings, the SSID and other settings, use the touchscreen LCD Wi-Fi and Settings menus or go to your mobile hotspot's homepage.

The homepage URL (http://192.168.1.1) is shown on the LCD during setup. You can also find it in the Quick Start Guide that came with your mobile hotspot.

To make changes to the settings on the homepage, you must be logged in as Administrator (default Admin Password is **swiadmin**).

Security Credentials

Two (or three) passwords are associated with the mobile hotspot:

- Wi-Fi Passphrase— Used to connect your computer or other Wi-Fi device to your mobile hotspot network. This character string is unique to your device. It is 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. The default Wi-Fi Passphrase is also printed on a label under the battery.
- Admin Password Used to log into the 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 Password,
 swiadmin, is printed on a label under the battery. The Admin Password can
 be 5 31 characters.
- Guest Wi-Fi Passphrase—Used to provide temporary access to your mobile hotspot.

You can change these passwords on the homepage, http://192.168.1.1.

2: Use Your Mobile Hotspot

This chapter provides information on how to use 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 11.

Add a Wireless Device to your Wi-Fi Network

You can connect up to ten wireless devices such as smart phones, laptops, tablets, digital cameras, printers, gaming consoles, and digital picture frames to your mobile hotspot network.

You can add a wireless device to your Wi-Fi network manually, or if the device you are adding is Wi-Fi Protected Setup (WPS) enabled, you can use the WPS method.

Manually (works for any Wi-Fi device)

- 1. On the wireless device you want to add to your network, view the list of available Wi-Fi networks.
- **2.** Connect to the network that corresponds to your mobile hotspot network, as displayed on the LCD.
- 3. When prompted, enter the Wi-Fi Passphrase for your mobile hotspot network. The Wi-Fi Passphrase is displayed on the mobile hotspot LCD screen. (If the screen has turned off to save power, press and quickly release the power button to wake up the screen.)

WPS (works for WPS-enabled devices)

You can add a WPS-enabled Wi-Fi device to your Wi-Fi network using the mobile hotspot LCD screen.

- 1. On your mobile hotspot, tap Wi-Fi > WPS.
- 2. Select pairing with your Main or Guest Wi-Fi network.
- **3.** Within 2 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.

View SMS Messages and Alerts

Your mobile hotspot can receive SMS messages from your service provider and displays alerts to advise you of the device status.

The Messages icon on the device LCD indicates that you have network messages, and the Alerts bar indicates that you have system alerts.

To view messages:

- 1. On the LCD, tap Messages.
- **2.** Read each message that appears, tapping the next page and previous page icons to move between messages.

To view alerts:

- 1. On the LCD, tap the Alerts bar.
- **2.** Read each alert that appears, tapping the next page and previous page icons to move between alerts.

Battery Settings

The mobile hotspot, by default, is configured 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)

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 AC adapter (included).



2. Plug the AC adapter 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. (

Note: The LCD goes into sleep mode after a set time to extend battery life. To wake up the LCD screen, press and quickly release the power button.

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



3: Frequently Asked Questions

This chapter provides answers to questions you may have about your mobile hotspot. (Also see Troubleshooting on page 21.)

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 users are connected to my mobile hotspot network?

The number beside the Wi-Fi icon on the mobile hotspot LCD shows the number of users (or devices) connected to your Wi-Fi network. For more details about the devices or users connected to your network, tap Wi-Fi > Devices.

Note: You can also use the options on the homepage to block particular users from connecting to your network.

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 blue LED continues to flash (provided you have not turned this feature off) to indicate that the mobile hotspot is still powered on. To wake up the LCD, press and quickly release the power button.

Where can I find more information?

Refer to the Quick Start Guide that came with your mobile hotspot.

>> 4: Troubleshooting

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

Reset the Mobile Hotspot

You can reset the Mobile hotspot to the factory setting on the device. This is useful if you have lost your Wi-Fi Passphrase.

To reset the mobile hotspot on the device:

- 1. On the touchscreen, tap Settings > Software > Factory Reset.
- 2. Follow the instructions that appear.
- 3. After the device has reset, reconnect Wi-Fi devices.

Alerts

Temperature-related alerts

The mobile hotspot is designed to work over a wide temperature range. (See Environmental Specifications on page 23 for details.) The mobile hotspot will shut 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 mobile hotspot is too warm, make sure the area is wellventilated and air can circulate around the device.

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

5: Specifications

Mechanical Specifications

Weight	105g (3.70 oz.)	
Length	109.9 mm (4.33 in.)	
Width	69.12 mm (2.72 in.)	
Thickness	15.5 mm (0.61 in.)	

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 5-1: AirCard 770S 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 2 (1900 MHz) Band 5 (850 MHz)
GSM GPRS EDGE	GSM 850 (850 MHz) PCS 1900 (1900 MHz)

>>> 6: 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 770S Mobile Hotspot are used in a normal manner with a well-constructed network, the AirCard 770S 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. Sierra Wireless and its affiliates accept no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the AirCard 770S Mobile Hotspot, or for failure of the AirCard 770S 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 Sierra Wireless, 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

Caution: The AirCard 770S Mobile Hotspot must be 1 cm or more from users during operation, to satisfy FCC / IC RF 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.

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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