



# Sierra Wireless AirCard Watcher Help for Mac OS X

Sierra Wireless AirCard Watcher® allows you to manage and monitor the connection between your modem and the network. With Watcher, you can:

- Determine signal strength, roaming status, high-speed data availability, and other network connection parameters
- Initiate and end data calls
- [Send and receive SMS messages](#)
- [Manage profiles](#)
- Use [GPS Monitor](#) to track your position

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*Note: Depending on your device and your service provider, some of the features described in this document may not be available.*

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## Install Watcher

To install Watcher:

1. Insert the modem into a USB slot on your computer.
2. Double-click the installer package and follow the on-screen instructions.
3. When instructed to do so, restart your computer.

### Mac OS X 10.5 and later

1. When your computer detects the modem, the message "New network interfaces have been detected" appears.
2. Click the **Network Preferences...** button.
3. In the Network window, click **Apply**.

### Mac OS X 10.4.11

1. After your computer restarts, go to **Applications > System Preferences > Network**. The New Port Detected pop-up window opens on top of the network window.
2. Click **OK**.
3. Click **Apply** and then close the window.

## Launch Watcher

To launch Watcher:

1. Navigate to **Applications > Sierra Wireless > AirCard Watcher**.
2. Double-click **Watcher**.

## Tips

**To keep the Watcher icon in the dock**

1. Launch Watcher.
2. Click and hold the Watcher icon in the dock.
3. From the pop-up menu, select **Keep in Dock**.

**To automatically launch Watcher at Login**

1. On the AirCard Watcher menu, select **Preferences...**
2. On the General tab, select **Open AirCard Watcher at Login**.

## Close Watcher

To close Watcher:

1. Select **AirCard Watcher > Quit AirCard Watcher**.

## Upgrade Watcher

New versions of Watcher become available from time to time. You can download the new versions free from [www.sierrawireless.com/support](http://www.sierrawireless.com/support).

You can also enable Watcher to check for updates automatically.

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*Note: The availability of these features depends on your carrier or your version of Watcher.*

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To enable Watcher to check for updates:

1. Go to **AirCard Watcher > Preferences... > General**.
2. Select the **Automatically check for updates** check box.
3. In the **Check for updates** list, select a time period.

Or if you want Watcher to check for updates immediately, click **Check for Updates Now**.

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# Uninstall Watcher

To uninstall Watcher:

1. Select **AirCard Watcher > Uninstall AirCard Watcher...**
2. Follow the on-screen instructions.






## Connect to the network

1. Click **Connect**.
  - a. If there is no profile defined, a message opens asking if you want to create a new profile.
  - b. Click **Create a new profile**. In the Profiles window, click **+** to create a profile. For more information, see [Create a profile](#) on page 6.

To end a high-speed connection, click **Disconnect**.

## Interpret status icons

The main Watcher window uses these indicators:

	<b>Signal strength and service status.</b> The number of bars increases as signal strength increases, to a maximum of five bars. In some cases, the appearance of the signal strength bars varies depending on whether or not you are connected to the network. (Green = connected; Red = not connected)
<b>Coverage</b>	The icon indicates the fastest service that is: <ul style="list-style-type: none"><li>• Available in your current coverage area</li><li>• Supported by your modem</li></ul>
HSPA	When only the letters are displayed, you are within the coverage area, but have not yet acquired the service.
	When the indicator has an outline, you have acquired service and are able to establish a data connection.
	When the indicator is filled, you have a data connection on the wireless service.
	<b>Roaming.</b> You are connected to a network other than your local carrier's. There may be a surcharge for roaming service. (This service may not be available.)
	SMS message indicator. When this indicator is blinking, you have a new SMS message.
<b>Data transmission.</b> When the modem is connected to the network, the main Watcher window shows the amount of data received and sent.	

## Wireless data connections

The type of connection your modem establishes depends on:

- The type of modem
- The type of service(s) available from your service provider
- The networks available in your current coverage area

Your modem always uses the fastest service available to it in a given area. The icons on the main Watcher window indicate the type of service that is currently available and the connection status of your modem.

Technology	Maximum theoretical speed <sup>a</sup>	
	Downlink <sup>b</sup>	Uplink <sup>c</sup>
4G — Fourth generation wireless. The next major evolution of wireless technology; faster data rates and new features.		
3G — Third generation wireless. Increased network capacity and faster data rates compared to 2G.		
HSPA+ (Evolved HSPA)	21 Mbps	5.76 Mbps
HSPA (concurrent HSDPA and HSUPA)	3.6 Mbps	1.5 Mbps
HSUPA (High-Speed Uplink Packet Access)	Not applicable	2.0 Mbps (5.76 Mbps with future upgrade)
HSDPA (High-Speed Downlink Packet Access)	7.2 Mbps	Not applicable
UMTS (Universal Mobile Telecommunications System)	384 kbps	384 kbps
2G — Second generation wireless. First launched in 1991; introduced wireless digital voice and data services.		
EDGE (Enhanced Data for GSM Evolution)	236 kbps	236 kbps
GPRS (General Packet Radio Service)	114 kbps	114 kbps

- a. Actual speed depends on network conditions  
 b. Sending data to the network  
 c. Receiving data from the network

## Set preferences

To change Watcher preferences, open **AirCard Watcher > Preferences...**

### Open Watcher at Login

When this feature is enabled, Watcher launches automatically when you log into your computer.

To enable (or disable) this option:

1. Select **AirCard Watcher > Preferences... > General**.
2. Select (or clear) the **Open Watcher at Login** check box.

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## Turn radio off on exit

When this option is enabled, the radio transmitter/receiver turns off when you exit Watcher. If you do not need to receive or send data after shutting Watcher down, using this option helps to extend the computer's battery life.

To enable (or disable) this option:

1. Select **AirCard Watcher > Preferences... > General**.
2. Select (or clear) the **Turn radio off on exit** check box.

## Prompt before exiting

If this feature is enabled, when you close Watcher, it displays a warning message.

To enable (or disable) this option:

1. Select **AirCard Watcher > Preferences... > General**.
2. Select (or clear) the **Prompt before exiting** check box.

## Prompt when roaming

If this feature is enabled, when you connect to a network other than that of your carrier, Watcher displays a warning message. It is important to know when you are roaming, as there may be additional charges.

To enable (or disable) this option:

1. Select **AirCard Watcher > Preferences... > General**.
2. Select (or clear) the **Prompt when roaming** check box.

## Manage profiles

You should not have to create or change a profile, but if the need arises, Watcher allows you to:

- Create a profile
- Edit a profile
- Delete a profile
- Select a default profile

Profiles contain account information used to establish data connections. At least one profile must be set up on the modem before you can establish data connections.

Depending on your carrier, you may have more than one profile on your modem. If you have multiple profiles, one of them must be set as the default profile. This profile is used to establish a connection when you click the Connect button without selecting a profile.

To access profile information:

1. Select **AirCard Watcher > Preferences... > Profiles**.

## Create a profile

Watcher includes pre-defined profiles for many different carriers. You should normally use one of these profiles, but if your carrier asks you to create one, follow these instructions.

Your carrier can give you all the information you need to set up the profile(s) you require. Depending on your carrier, you may need to enter some or all of the following information into your profile:

- User name
- Password
- APN (Access Point Name)
- DNS (Domain Name Server) address or addresses

To create a profile:

1. Ensure that you are not connected to the network.
2. Select **AirCard Watcher > Preferences... > Profiles**.
3. Click the add button (+).
4. Select your carrier from the list.
5. If you have been given specific values for any of the following fields, enter them now:
  - Profile Name (any meaningful description of the profile, such as the name of your carrier)
  - User Name, if applicable
  - Password, if applicable
  - APN(Check with your carrier for specific requirements for the user name and password.)
6. Select the connection type:
  - **Manual**—You click the Connect button on the main Watcher window to make a connection (default setting).
  - **Prompt for Password**—When you click the Connect button, you are prompted to enter a password.
  - **Autoconnect**—A connection is established automatically when you insert the modem, provided this is your default profile.
7. If you have a DNS address or addresses, enter the address(es). (In most cases, it is not necessary to enter a DNS address.)
8. If you have more than one profile, in the Default Profile field, select a default profile. The default profile is used if you click **Connect** without selecting a profile.
9. Click **Apply**.

## Edit a profile

To edit a profile:

1. Ensure that you are not connected to the network.
2. Select **AirCard Watcher > Preferences... > Profiles**.

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*Note: If all the entries in the profile are unavailable, the profile is a locked profile that cannot be edited or deleted.*

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3. Select the profile and field you want to edit.
4. Make any necessary changes.
5. Click **Apply**.

## Delete a profile

To delete a profile:

1. Ensure that you are not connected to the network.
2. Select **AirCard Watcher > Preferences... > Profiles**.
3. Select a profile and click the delete button (–).
4. Click **Apply**.

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*Note: If the delete button is unavailable, the profile you have selected is a locked profile that cannot be edited or deleted.*

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## Change the default profile

To change which profile is the default:

1. Select **AirCard Watcher > Preferences... > Profiles**.
2. In the Default Profile list, select the profile you want to use as the default.
3. Click **Apply**.

## Network settings

The Network tab in the Preferences window is used to set:

- **Frequency Band** — You can specify the frequency band you want the modem to use or set it to automatically select the band.
- **Selection Mode** — You can specify the network you want the modem to use or set it to automatically select the network.

## Select the frequency band

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*Note: By default, the modem will automatically select the frequency band. Unless your carrier specifies otherwise, it is recommended that you use the **Automatic** setting.*

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If advised to do so, follow these steps to change the frequency band:

1. Select **AirCard Watcher > Preferences... > Network**.
2. In the Frequency Band field, select the desired frequency band from the list. (Only bands available on your model of modem are displayed.)

## Select networks manually and automatically

Depending on your location, you may be within the coverage area of several networks. By default, the modem automatically selects a network based on your account and network availability. If you prefer, you can set Watcher to display a list of detected networks, from which you can select the network you want to use. Your ability to obtain service on any network is dependent on your account.

To change the network selection mode:

1. Select **AirCard Watcher > Preferences... > Network**.
2. Beside Selection Mode, select one of these options:
  - **Automatic** — The modem selects the network to use.
  - **Manual** — The modem scans the area and displays a list of carriers (networks) in your area. After a few minutes, if the modem does not find any networks, it switches to Automatic. If there is an exclamation mark (!) after the network name, you may not be able to connect to that network.

## SIM Security

The SIM (Subscriber Identity Module), USIM (Universal Subscriber Identity Module), or MegaSIM card contains information used by the network to identify your device. It also allows you to access your subscribed services. Generally, when you obtain an account, your carrier gives you a SIM card.

In addition to other data, your unique International Mobile Subscriber Identity (IMSI) is stored in your SIM. The IMSI, sometimes called your phone number, identifies your account to your carrier. Depending on your carrier, you may be able to use the same SIM card in other devices, such as mobile phones.

## Insert and remove the SIM card

For instructions on how to insert and remove the SIM card, refer to the documentation that came with your modem.

## PIN assigned to the SIM

When you obtain your SIM, you should be given a PIN (Personal Identification Number). The PIN is used to enable SIM security, which prevents others from using your account should the SIM be lost or stolen.

If SIM security is enabled, you are asked to enter your PIN before you can access Watcher.

To enable SIM security:

1. Select **AirCard Watcher > Preferences... > SIM**.
2. Select **Enable SIM Security**.
3. Click **OK**.
4. Enter the PIN.
5. Click **OK**.



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*Note: If SIM security is enabled and you fail to enter the correct PIN number within the designated number of attempts, your SIM card will be disabled and become unusable. If that happens, contact your carrier.*

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## Change your PIN

To change the PIN assigned to your SIM:

1. Select **AirCard Watcher > Preferences... > SIM**.
2. Click **Change PIN**.
3. In the Old PIN field, enter your PIN.
4. Enter a new PIN in the New PIN and Verify New PIN fields.
5. Click **OK**.

If you enter the wrong PIN, the fields are cleared and the remaining attempts field is reduced by 1. If you fail to enter the correct PIN within the designated number of attempts, the SIM card becomes blocked. If this happens, see [Unblock the SIM](#) on page 13.

## Blocked SIM

In any operation that requires you to enter the PIN, you are allowed a certain number of attempts to enter the PIN correctly. If you fail to enter the PIN correctly within that number of attempts, the SIM becomes blocked.

If the SIM becomes blocked, your SIM card is unusable until it is unblocked. Watcher displays the message “Blocked SIM”. If your modem is configured to do so, you are prompted to enter a PUK code, obtained from your carrier, to unblock the SIM. See [Unblock the SIM](#) on page 13.

## Send and receive SMS messages

SMS (Short Messaging Service) allows you to send and receive short messages (usually not more than 160 characters) through the network. Check with your service provider to determine if you have access to this service.

If you have access to this service, you can receive messages by any methods supported by your service provider.

## Ways to receive SMS messages

Depending on your service provider, others can send SMS messages to you in one or more of these ways:

- Some wireless service providers have web pages from which anyone can enter a message and direct it to your phone number. In this case, anyone who has access to the Internet can send you a message, provided he or she knows your phone number.
- Some service providers allow SMS messages to be sent through Internet e-mail applications. Your phone number is then used as an e-mail address (for example, 6045553993@serviceprovider.com or 1414960101@serviceprovider.co.uk).
- Some products, such as the modem and many mobile phones, have software that allows you to send messages to other subscribers, using their phone numbers to direct the message.

Check with your service provider to determine which of these methods are offered.

## Using the SMS Inbox

You can read messages, send new messages, reply to messages or delete messages from the SMS Inbox.

To view the SMS Inbox, select **SMS > Inbox**.

To send new SMS messages, click **New Message** in the SMS Inbox, or select **SMS > New Message**.

## Setting SMS Preferences

To set SMS preferences:

1. Select **AirCard Watcher > Preferences... > SMS**.

The SMS preferences you can change are:

- **Service Center Number.** The Service Center Number should only be changed on the advice of your service provider.
- **Remember the last 10 SMS destinations.** When selected, you can choose one of the last 10 SMS numbers or addresses from a list in the To: field of new SMS message.

## Usage History

To view usage history for your account(s), select **Window > Usage History**.

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*Note: This information is not intended for billing purposes.*

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In the Usage History window, you can select the account for which you want to view the usage history.

For each account, you can view the:

- Date and duration of each session
- Amount of data received and sent during each session
- Total amount of data sent and received for that account

You can also clear the usage history.

## GPS Monitor

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*Note: Not all devices support GPS. You can confirm that you have GPS by looking for the menu option **Window > GPS Monitor**. If that menu item does not appear, your modem does not support GPS.*

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To open the GPS Monitor:

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1. Select **Window > GPS Monitor**.

To start a GPS session:

1. In the GPS Monitor window, click the **Start tracking** button to begin tracking the current location, or click the **Get Current Location** button to get a single fix.
2. To view a map of the current location, click the **Map** button. You can set which online mapping web site is used. (See [Setting GPS Preferences](#).)

The GPS display shows your:

- Latitude
- Longitude
- Direction
- Speed
- Altitude

It also shows the accuracy of the fix (HEPE), the number of satellites being tracked, and the time the fix was updated.

## Setting GPS Preferences

To set GPS Preferences, select **AirCard Watcher > Preferences... > GPS**.

The most commonly used preferences are:

- [Map web site](#)
- [Measurement System](#)

You can also set the [Fix rate](#) and enable [Auto-track](#).

### Map web site

You can choose which web site you want to use to display the map of your current position when you click the Map button.

### Measurement System

You can choose the system of measurement you want the GPS display to use — metric or imperial.

### Fix rate

You can specify the rate at which GPS fixes are taken.

To set the fix rate, in the **Fix Rate** field, enter the desired rate (in seconds).

### Auto-track

If Auto-track is enabled, a GPS tracking session begins (if one is not already running). In addition, the next time you insert or power-up the modem, a GPS tracking session begins.

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*Note: Some devices do not support Auto-track.*

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## Troubleshooting tips

If you experience a problem with your modem or the Watcher software, check the status of the LEDs. Refer to the documentation that came with your modem to interpret the meaning of the LEDs.

You can also check the [Sierra Wireless Support web site](http://www.sierrawireless.com/support) for information on your modem. Go to [www.sierrawireless.com/support](http://www.sierrawireless.com/support).

### Insufficient signal strength

Insufficient signal strength may be because:

- You are outside the network coverage area.
- You are in or near a structure that is blocking the signal.
- You are near a device that is causing radio signal interference.
- A network or account problem is preventing you from obtaining service.

### Searching...

If Watcher displays “Searching...” continuously:

- You may be outside the coverage area.  
Move to a location with better signal strength and restart Watcher.
- The incorrect frequency band may be set.  
Unless your service provider specifies which band to use, ensure that the Frequency Band field is set to Automatic. See [Select the frequency band](#) on page 7.

### Initialization Failed...

This message may be displayed if:

- The modem is not properly inserted. Try removing and re-inserting the modem. You can also try using a different slot.
- There may be a resource conflict. If another card is inserted, you may be able to resolve the problem by removing the other card. Otherwise, you may need to disable the other device.

### Failed to communicate with device

If this message appears when you try to establish a connection:

1. Close Watcher.
2. Remove and then re-insert the modem.
3. Restart Watcher.
4. If the problem persists, you may need to update the firmware.
  - a. Go to **AirCard Watcher > Preferences... > General**.
  - b. Click **Check for Updates Now**.
  - c. Check [www.sierrawireless.com/support](http://www.sierrawireless.com/support) for additional updates.

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## Incorrect SIM

Watcher displays this message if the modem and SIM are incompatible. The most likely reason for this is that the modem was purchased from one carrier and the SIM was purchased from another carrier. (Your modem may be configured to work only with the SIM of a specific carrier.)

Contact your carrier if this message appears.

## New and confirmation PIN are different

When you change a PIN, you must enter the new PIN number twice. Watcher displays the message, “The new PIN and confirmation PIN are different. Please try again.” if the PINs you enter are not the same.

## Please ask your carrier about PUK code

A SIM becomes blocked when SIM security is enabled and the wrong PIN is entered three times. To unblock the SIM, you must obtain the unblocking code or command from your carrier. See [Unblock the SIM](#) on page 13.

## Unable to connect to the Internet

If you are unable to connect to the Internet the first time you use the modem see [Mac OS X 10.5 and later](#) or [Mac OS X 10.4.11](#) under [Install Watcher](#) on page 1.

## Unblock the SIM

When the SIM is blocked, Watcher displays the message “SIM Blocked” in the main window.

Depending on your modem configuration, Watcher may also display the prompt, “Please enter UNBLOCKING code: Remaining attempts = x”. If you see this prompt, follow the instructions below to unblock the SIM. If you do not see this prompt, contact your carrier.

To unblock the SIM:

1. Obtain the unblocking (PUK) code from your carrier.
2. Enter the unblocking code in the top field.
3. Enter a new value for the PIN in the New PIN and Verify New PIN fields and click **OK**.

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*Note: You must enter the unblocking code within a specific number of attempts. If you fail to do so, your SIM becomes permanently blocked and you will not be able to use it again.*

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## Collecting System and Application Logs

When troubleshooting an issue in consultation with technical support, you may be asked to collect a system or application log. This section describes how to collect logs using Watcher.

1. On the AirCard Watcher menu select **Logging > Turn Logging On**.
2. Wait for the events or problems to be captured in the Watcher log.
3. Click the AirCard Watcher menu again and select **Logging > Collect Logs...**
4. When the Collect Logs tool appears, click **Proceed**.
5. When requested, enter your admin password.
6. When the Collect Logs tool indicates that the log file is ready, click **Quit**.  
A compressed file containing the log files appears on your Desktop.
7. Attach the compressed file to an email message and send it to your technical support provider.

