

User guide.

verizon^v

Global Modem USB730L

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Novatel Wireless Revision History

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Please visit www.verizonwireless.com for the latest information about your device.

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1

Getting Started

Overview
Components
Caring for Your Modem

Overview

Congratulations on purchasing your Modem USB730L from Verizon.

This modem enables you to connect at high speeds to the Internet, your corporate Intranet, and access your email while you're away from the office.

Package Contents

The USB730L package includes:

- USB730L

NOTE The USB730L is not a handheld device.

- Literature Kit containing:
 - Quick Reference Guide
 - Important Customer Safety Information

System Requirements

Supported platforms:

- Windows® 7 or higher
- Mac OS® 10.8 or higher
- Linux OS
- Chrome OS

Compatible browsers:

- Microsoft Internet Explorer 7 or higher
- Mozilla Firefox 3.6 or higher
- Google Chrome 9 or higher
- Apple Safari 5 or higher
- Opera 9 or higher

You will also need the following:

- USB Port 2.0 or higher
- Verizon Wireless data plan

Components



- ➊ **Status LED indicator** — indicates the network and traffic status; it also indicates when there is no SIM or a SIM error, and when a software update is in progress. (See [Package Contents](#) on page 2.)
- ➋ **Data Used LED indicator** — indicates data usage from less than 80% to 100% or greater; it also indicates when data usage information is not available.
- ➌ **USB Connector** — connects to your computer through a type A USB port.
- ➍ **USB Swivel Connector**— allows the USB connector to rotate, making it easier to connect to computers.
- ➎ **USB Folding Hinge** — folds the USB connector into your modem, and allows the USB connector to be extended and plugged into your computer.
- ➏ **Back Panel (removable)** — covers the SIM card slot. Press gently on the cover with your thumb and slide the panel off. The manual reset button can be found under this panel.
- ➐ **SIM Card Slot** — inside under the back panel, the SIM card is pre-installed in the spring-loaded SIM card slot (under the back panel - not shown).

Status & Data Used Indicators

The LED indicates the modem and data usage status.

Status LED	Color	Status	Description
WHEN NOT CONNECTED			
Red		Solid	No network available
White		Solid	No SIM, SIM locked, SIM error
Green		Blinking	Modem starting up
WHEN CONNECTED			
Green		Solid	Modem ready to use Home network No data being transferred
		Blinking	Home network available. Data being transferred.
NOTE While starting up, the Status LED will slowly blink green			
Amber		Solid	Roaming network available. No data being transferred.
		Blinking	Roaming. Data being transferred.
White		Blinking	Software Update in progress.
Data Used LED			
OFF			Data Usage information is not available.
Green		Solid	Data Usage: < 80%.
Amber		Solid	Data Usage: 80-89%.
Red		Solid	Data Usage: 90-99%
		Blinking	Data Usage: 100% or greater

Caring for Your Modem

Like any electronic device, the modem must be handled with care to ensure reliable operation. Verizon Wireless recommends the following guidelines:

- Protect the modem from liquids, dust, and excessive temperatures.
- Do not apply adhesive labels to the modem; they might cause the modem to overheat or alter antenna performance.
- The USB connector should plug easily into your device's standard type A USB port. Forcing the modem into a port might damage the connector.
- Remove the modem from your device before transporting it.
- Store the modem in a safe place when not in use.

Using Modem USB730L

Using USB730L for the First Time
Inserting and Connecting Your Modem
Using the Optional Dashboard Application

Using USB730L for the First Time

IMPORTANT Do not connect the modem to a USB hub, as it might not provide sufficient power.

See the **Quick Reference Guide** included in the box.

To get started, follow these steps.

- 1 Confirm your device meets the minimum system requirements. (See [System Requirements](#) on page 2.)
- 2 Your modem comes with a SIM card pre-installed. Should you need to swap out your SIM, follow the instructions for installing an activated SIM Card.
- 3 Connect the modem to your device. (See [Properly Insert the Modem in Your Device](#) on page 8.)

IMPORTANT The modem requires an activated SIM with Verizon Wireless to function.

Inserting and Connecting Your Modem

Properly Insert the Modem into Your Device

Open the USB connector

- 1 Use your thumb to gently flip open the USB connector on your modem. Be sure to avoid over-extending the USB connector past its resistance point. Avoid opening the USB connector with metal objects as this might damage the pins.



To properly insert the modem

- 2 Hold the modem along the side edges and gently insert it into your device's USB port. On most devices, insert the modem with the label facing up. It should fit easily into the port. Some devices might orient the USB port so the modem label faces down or sideways. Do not force the modem into the port as this might damage both the modem and the port.
- 3 Position the modem as indicated in the following illustrations to maintain SAR compliance and to ensure proper performance. This modem has been designed and tested to meet SAR compliance as outlined by the FCC. If the modem is connected to USB ports other than those shown, ensure that the modem maintains a separation distance of at least 5 mm.

IMPORTANT The modem must be positioned at 120° for optimal functionality. Failure to maintain a position between the normal operating range of 110° - 130° will cause the modem to stop functioning.

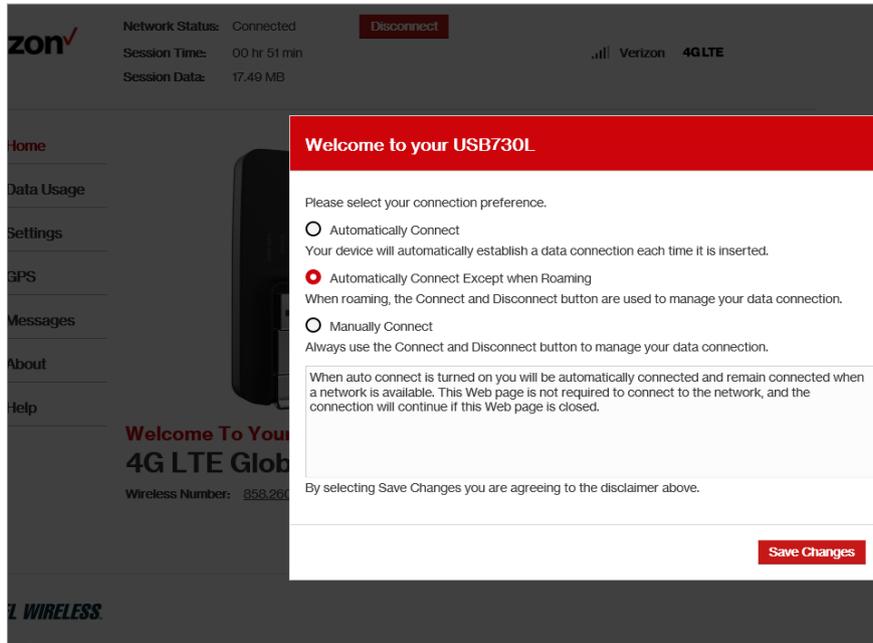


NOTE If you are having difficulty inserting the modem into your device's USB port, verify that you are inserting the modem in the correct orientation and that you are using a Type A USB port. While starting up, the Status LED will blink slowly in green.

Connecting to the Network and the Internet

Getting started with your new wireless USB730L is simple. Insert the modem into the USB Port and wait for the status LED to turn solid green. You are now connected to the Internet.

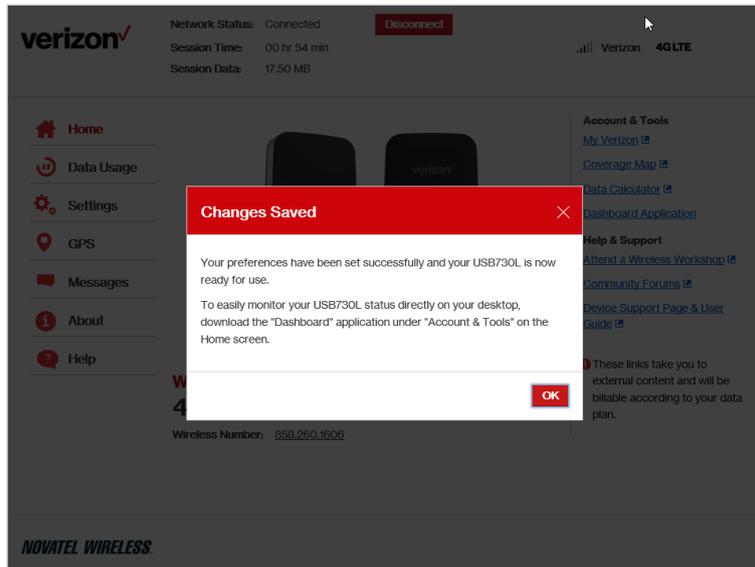
- 1 When you access the USB730L for the first time, you must designate the preferred connection method for your modem:



Welcome to your USB730L - Connection Preferences

- 2 To set your connection preference, select one of the following options:
 - **Auto-connect** - Automatically connect to the network when you insert the modem into your device.
 - **Auto-connect if not roaming** - Automatically connect to the network when you insert the modem into your device only if it is not roaming.
 - **Manual Connection** - Manually connect to the network when you insert the modem into your device. To manually connect to the network, you must use the Connect/Disconnect button.

- 3 Click **Save Changes** to save the connection preference settings.
- 4 Click **OK** to accept and finalize the connection preference settings.



Connection Preferences - Changes Saved

Properly Remove the Modem from your Device

IMPORTANT Be sure to disconnect from the network and close the Web UI before you remove the modem from your device. Disconnecting from the network and closing browser, email, VPN, and other communication apps avoids potential problems such as automatic shutdown or screen freezing.

Windows

The USB730L Modem's USB technology allows you to safely remove the modem at any time when you are not connected to the network.

- 1 End your data session by selecting **Disconnect** from the **Web UI**.
- 2 Exit and close the Web UI.
- 3 Gently grip the modem on both sides and pull straight out to avoid damaging the USB connectors.

Mac OS X

- 1 End your data session by clicking **Disconnect** in the Web UI. home page
- 2 Exit and close the Web UI.
- 3 Click the eject icon to the right of the modem icon in the left column of the Finder window to eject the modem.
- 4 Gently grip the modem on both sides and pull straight out to avoid damaging the USB connectors.

Web User Interface (UI)

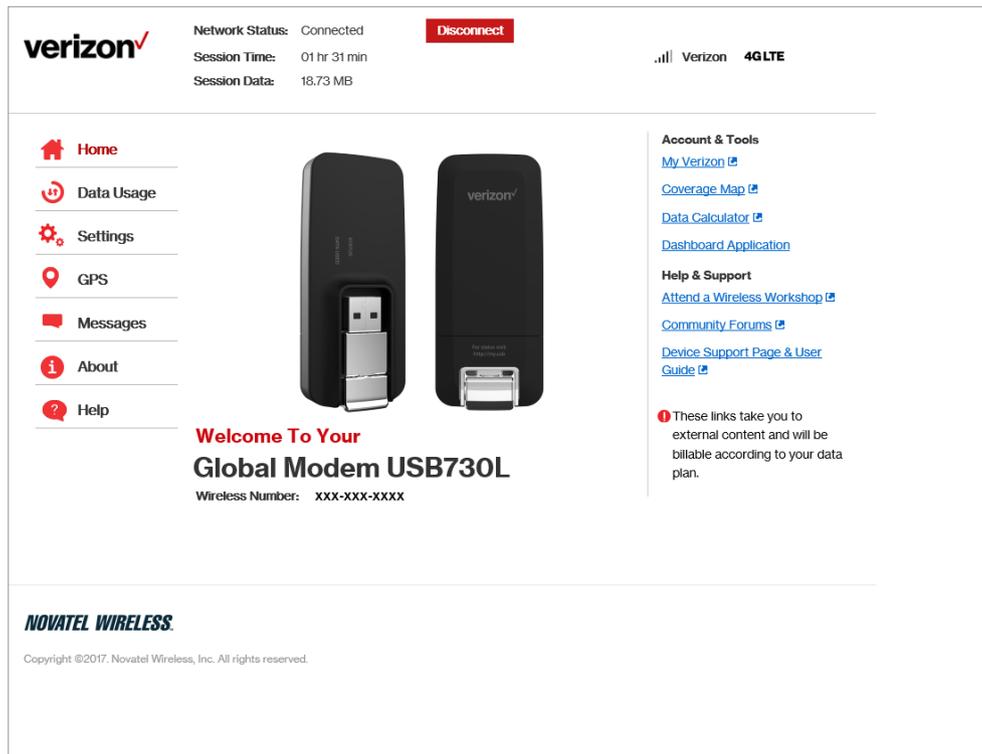
The Web User Interface allows you to manage, monitor and customize your wireless network activity through an easy-to-use web interface. You'll also be able to:

- Time your network sessions
- View your usage history
- Update your software to the latest version
- Connect to Verizon Wireless for product and account information, and to receive additional help and support.

Home

USB730L Home allows you to quickly access commonly used links and all available menu options for your modem. It contains the following quick link menu options:

- **Navigation Panel**
- **Account & Tools**
- **Help & Support**



USB730L Web UI Home

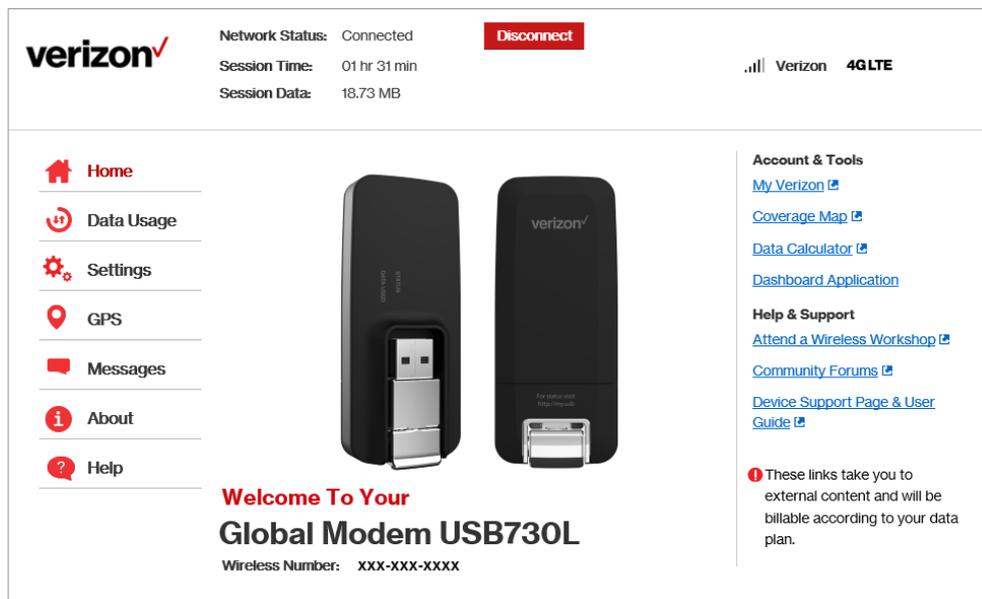
USB730L Home displays the following session connection information:

- **Network status** — Indicates your current network connection status (Connected, Disconnect). Click **Disconnect** if you are currently connected to the network and wish to disconnect.
- **Session Time** — The total amount of time connected to the network during the current session.
- **Session Data** — The total amount of data received from, and transmitted to the network during the current session.
- **You have a new message** - This notification displays when you have a new message. To view messages, click **View Message** to access the Messages page. (See [Messages](#) on page 26.)

Navigation Panel

The Navigation Panel allows you to quickly access commonly used links for your modem. It contains the following quick link menu options:

- **Data Usage**
- **Settings**
- **GPS**
- **Messages**
- **About**
- **Help**



USB730L Web UI Home - Navigation Panel

Data Usage

The Data Usage page allows you to obtain your current estimated data usage, and to access Account & Tools. Click **Data Usage** on the Menu panel to display the Data Usage page and access information specific to your particular plan.

verizon Network Status: Connected **Disconnect**
Session Time: 01 hr 36 min
Session Data: 18.81 MB

Home **Data Usage** ⓘ
Data Usage Estimated Data Usage as of
Settings 100 GB Shared Data Plan 26.582 GB used of 100 GB Refresh
GPS 0.000 GB used on this device (858,260,1606) Usage Cycle ends 05/06/2017
Messages
About My Account & Tools
About My Verizon ⓘ
Data Calculator ⓘ
Help Trip Planner ⓘ

About My Usage Estimate
Roaming charges may not be included in your estimate. Credits and adjustments to your account may not appear until your next billing statement, and may not be reflected in your current balance. Payments are applied to your account on the same day they are made.

ⓘ Data usage is not available while roaming.

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USB730L Data Usage

NOTE Roaming charges or roaming minutes may not be included in your estimate. Credits and adjustments to your account may not appear until your next billing statement, and may not be reflected in your current balance. Payments are applied to your account on the same day they are made.

Settings

The USB730L Settings page allows you to make administration password and preference changes; obtain software update information; backup and restore APN and default settings; and set GPS preferences. The USB730L Settings page contains the following sections:

- **Networks**
- **SIM**
- **Software Update**
- **Advanced**

verizon

Network Status: Connected **Disconnect**

Session Time: 01 hr 37 min

Session Data: 18.83 MB

Verizon 4G LTE

Home

Data Usage

Settings

GPS

Messages

About

Help

Settings

Networks SIM Software Update Advanced

IP Passthrough is always used. The network IP address is assigned to your computer, not to your USB730L.

Mobile Data **ON**

Network Settings

Connection Preference: Auto-connect if not roaming **▼** If "Manual", you must use the Connect/Disconnect button.

Preferred Network Technology: Global **▼**

Manual Network Selection: Not available With the LTE/GSM/UMTS setting, you can use this feature to specify the network to use.

Select Network

[Show Advanced Settings](#)

Save Changes

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USB730L Settings

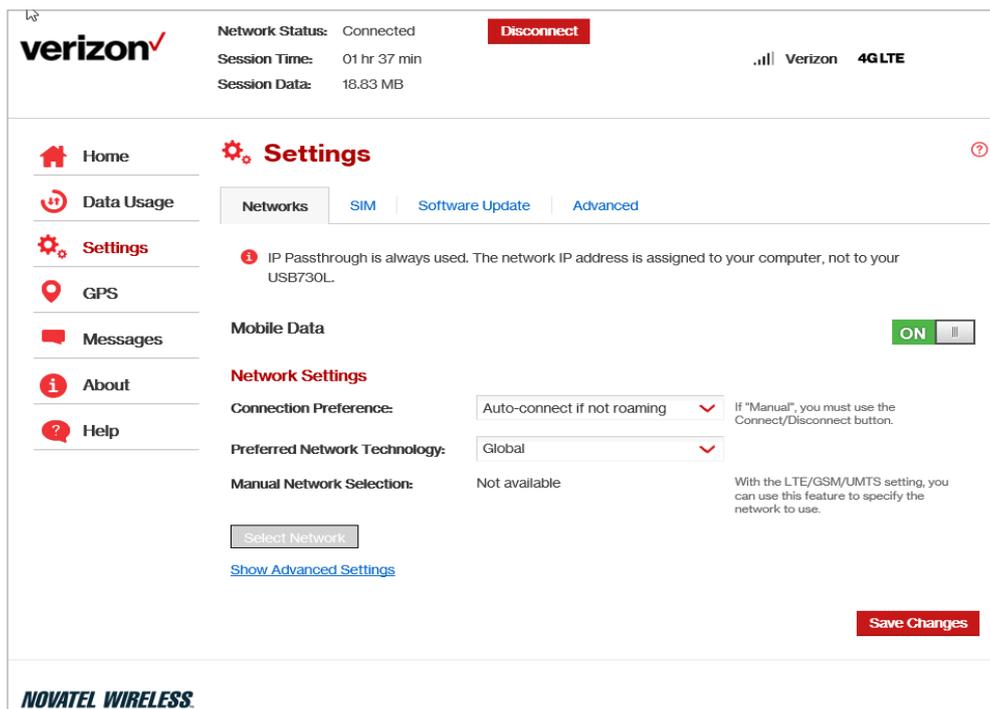
Networks

The Networks page contains the following sections:

- **Mobile Data** — Allows you to turn off cellular data to prevent all internet traffic from using the modem's data connection.
- **Connection Preference** — Allows you to select your connection preference. Choose from Auto-connect, Auto connect if not roaming, or Manual Connection.
- **Preferred Network Technology** — Allows you to select the network technology from: Global, LTE/CDMA, LTE/GSM/UMTS.
- **Manual Network Selection** — On LTE/GSM/UMTS networks, use this feature to specify the network to use.

NOTE This option is not available on other types of networks.

- **Show Advanced Settings** — Click to display or change the following:
 - **4G LTE APN** — Displays the network carrier APN
 - **LTE/GSM/UMTS APN** — Use only when a non-Verizon SIM is inserted.
- **Save Changes** — Use to activate and save new settings.



USB730L Settings - Networks

To change your connection preference:

- 1 Select one of the following options:
 - **Auto-connect** - Automatically connect to the network when you insert the USB730L into your modem.
 - **Auto-connect if not roaming** - Automatically connect to the network when you insert the modem into your modem only if it is not roaming.
 - **Manual Connection** - Manually connect to the network when you insert the modem into your modem. To manually connect to the network, you must use the Connect/Disconnect button on the modem Web User Interface.
- 2 Click **Confirm** on the Confirm warning pop-up window.

NOTE All internet connections will be immediately terminated when you click **Confirm**.

- 3 Click **Save Changes** to accept and finalize the new Connection Preference settings.

To change your preferred network technology:

- 1 Select the desired network technology from the dropdown menu. Choose from Global, LTE/CDMA, and LTE/GSM/UMTS.
- 2 Click **Save Changes** to accept and finalize the revised preferred network setting.

The modem automatically selects the best network to use when using Global. To manually select another network:

- 1 Click **Select Network**
- 2 Click **Scan for Networks** when the Manual Network Selection page appears.
- 3 Click **Confirm** on the Confirm warning pop-up window.

NOTE Any existing network connections will be terminated when you click **Confirm** after the network scanning process completes.

- 4 When the Available Networks display, click **Select** to make your manual network selection.

To display or change the Networks Advanced Settings:

- 1 Click **Show Advanced Settings**. The 4G LTE APN displays the pre-configured APN and should not be changed unless you have a corporate account with your own APN.
- 2 If you are using a non-Verizon SIM, enter the APN in the **LTE/GSM/UMTS APN** field.
- 3 Click **Save Changes** to accept and finalize all settings.

SIM

The SIM page provides settings and information about the modem's Subscriber Identity Module (SIM) card. The SIM card inside your modem can be locked with a PIN code for additional security. If locked, the PIN code must be entered before the modem can connect to the Internet. The SIM page has the following sections:

- **SIM PIN Lock feature** — Indicates whether or not the PIN lock feature is in use. If ON, the PIN lock has been turned on, and the SIM PIN must be entered in order to connect to the mobile network. If OFF, the PIN lock feature is not turned on, and the SIM PIN is not required.
- **SIM Status** — Indicates the current status of the SIM card. Possible values include:
 - **Ready** — This is the normal state. The SIM PIN is not used.
 - **PIN Locked** — The SIM PIN must be entered before you can use the mobile network.
 - **PUK Locked** — The PUK for the SIM must be entered in order to continue. The PUK can be obtained from your service provider.
 - **Unlocked** — The SIM PIN is needed, but has already been entered.
 - **No SIM** — No SIM was detected. If you do have a SIM, check that it is inserted correctly.
 - **SIM Error** — A SIM was detected, but it did not respond as expected, and cannot be used.
- **Desired Action** — Allows you to turn the PIN lock feature ON/OFF.
- **Enter current PIN** — Type the desired PIN in the Enter current PIN field. The default PIN is 1111.
- **Save Changes** — Use to activate and save new settings.

verizon Network Status: Connected **Disconnect**
Session Time: 00 hr 07 min
Session Data: 82.47 KB

Home Settings
Data Usage Networks SIM Software Update Advanced
Settings
GPS
Messages
About
Help

For added security, you can lock your SIM card with a PIN. When locked, the PIN must be entered each time this device is powered on before you can connect to the internet, even when Auto Connect is enabled.

SIM PIN Lock: Off
SIM Status: Ready
Desired Action: Turn on PIN Lock
Current PIN: Default PIN is 1111

3 attempts remain until your SIM is permanently locked.

⚠ Entering an incorrect PIN too often will permanently lock your SIM and you will be unable to use this device. You will need to contact customer support to unlock the SIM.

Save Changes

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USB730L Settings - SIM

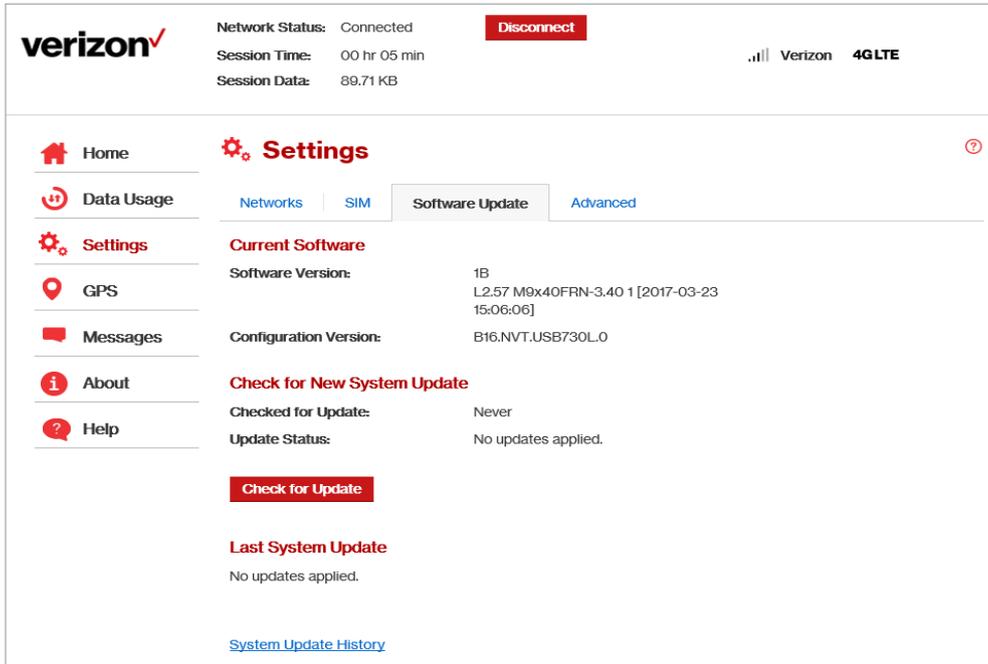
IMPORTANT Entering an incorrect PIN will lock the SIM. **The default PIN is 1111.**

Software Update

The Software Update page contains the following sections:

- **Current software version**— Displays information for the current software version, date of last check for updates and the number of updates currently available.
- **Checked for update** — Displays the date of the last software update. Never is listed if you have never checked for an update.
- **Update status** — Displays the software update history.

To check for software updates, click **Check for Update**.

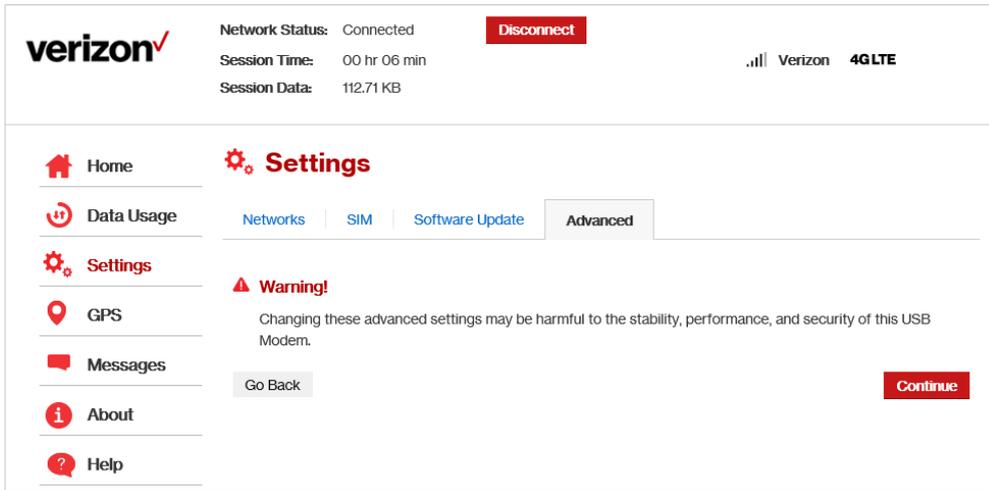


USB730L Settings - Software Update

Advanced

The Advanced page allows you to change the modem's advanced settings. The Advanced page provides Admin Password and Preferences settings, as well as an option to restore your modem to factory default settings.

IMPORTANT! Changing the modem's Advanced settings can adversely affect stability, performance and security of the modem.



USB730L Settings - Advanced Settings Warning

Click **Continue** on the Advanced page to access Advanced page options.

Change USB730L Web UI Admin Password

Clicking on **Turn on password protection** enables password protection in the modem. Use the remainder of the Admin Password section of the Advanced page to change the Admin Password. This is the password you use to Sign In to Settings.

To change the Admin Password used to sign In to your modem:

- 1 Select **Set new Admin Password** checkbox.
- 1 Enter your current Admin password in the **Current Admin Password** box. The default Admin password is **admin**.

The screenshot shows the Verizon USB730L Web UI Admin Password settings page. The page is titled "Admin Password" and is part of the "Advanced" settings section. The "Turn on password protection" checkbox is unchecked. The "Set new Admin Password" checkbox is checked. The "Current Admin Password" field contains the text "TYPE CURRENT PASSWORD". The "New Admin Password" and "Confirm new Admin Password" fields are empty. The "Select security question" dropdown menu is set to "What is your date of birth? (m...". The "Answer security question" field is empty. The "Preferences" section includes checkboxes for "Include all Settings pages in password protection", "Include GPS page in password protection", "Turn off LEDs", and "Turn off hardware reset button". The "Local IP address" field contains the value "192.168.1.1". A "Restore Factory Defaults" button is located at the bottom left, and a "Save Changes" button is at the bottom right.

USB730L Settings - Set New Admin Password

- 2 Enter your new password in the **New Admin Password** box.
- 3 Re-enter your new password in the **Confirm new Admin password** box.
- 4 Select a security question from the **Select security question** drop down menu.
- 5 Enter the answer to the selected security question in the **Answer Security Question** field.
- 6 Click **Save Changes** to accept, then click **Confirm** on the warning pop-up window.

NOTE The USB730L will restart when you click **Confirm**.

- 7 A message displays confirming that your password has been changed.

Set Preferences

Use the Preferences section of the Advanced page to set password protection, hardware and local IP address preferences for your modem.

To set password protection, hardware and local IP address preferences for your modem:

- ① Click **Include all Settings pages in password protection** if you wish to enable password protection for all Settings pages.
- ② Click **Include GPS page in password protection** if you wish to enable password protection for the GPS page (See [GPS](#) on page 24.)
- ③ Click **Turn off LEDs** if you wish to turn off all LED indicators on your modem.
- ④ Click **Turn off hardware reset button** if you wish to turn off the hardware reset button on your modem.
- ⑤ Click **Save Changes** to accept and finalize all settings.
- ⑥ Click **Confirm** on the Confirm warning pop-up window.

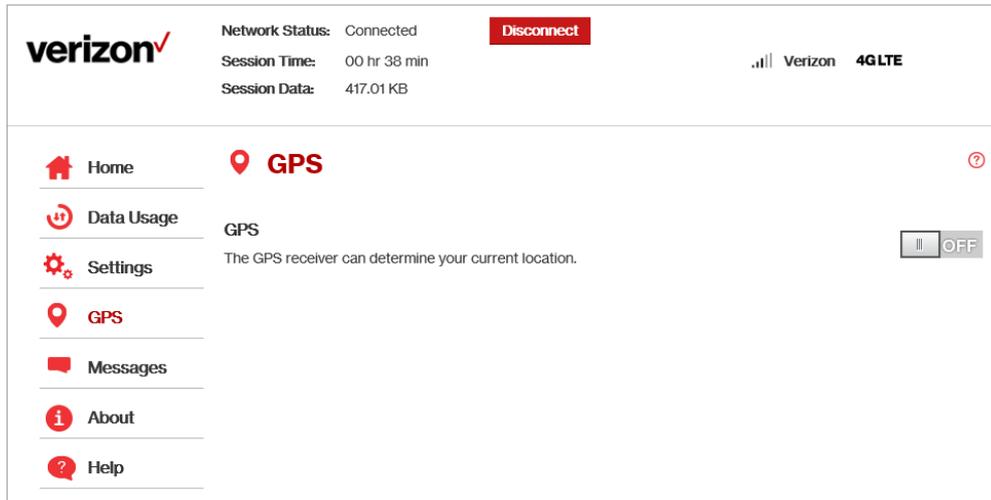
NOTE The modem will restart when you click **Confirm**.

GPS

Clicking on **GPS** will take you to the GPS page where you can configure the GPS settings for your modem.

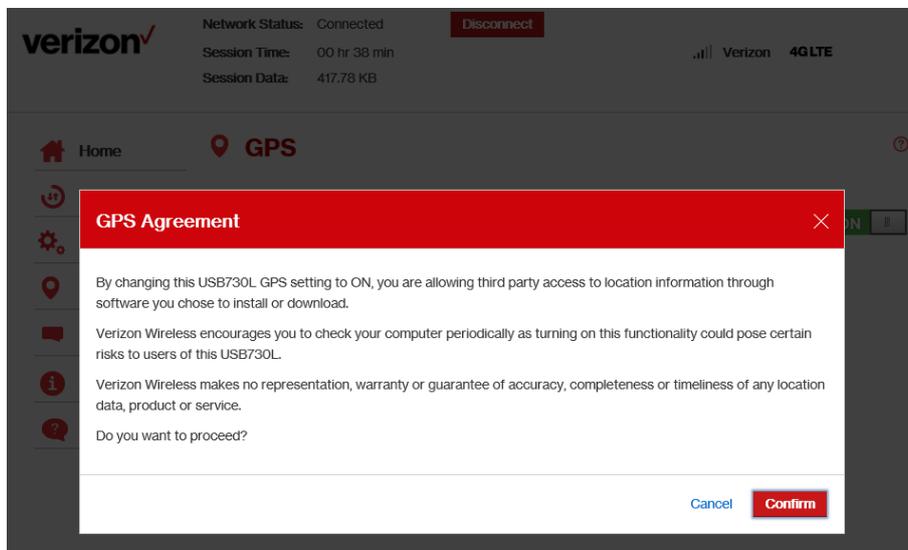
To configure your modem GPS settings:

- 1 Slide the ON/OFF button to ON to activate the USB730L location services and display the GPS Agreement.



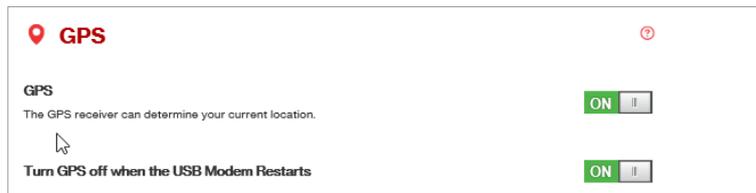
USB730L Settings - GPS

- 2 To proceed, click **Confirm** after reading and agreeing to the GPS Agreement.

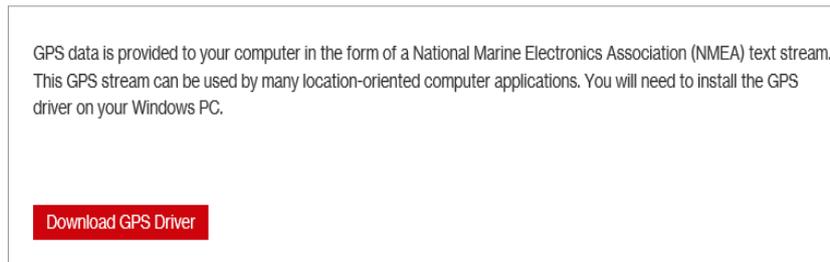


USB730L Settings - GPS Agreement

- 3 To turn GPS OFF when the modem restarts, set the ON/OFF button ON.



- 3 NMEA is a standard method of providing a GPS data stream in Windows and other computing platforms. If this check box is selected, when connected via a USB cable, a NMEA (serial) port is available to applications that can use a NMEA stream. To use GPS over Wi-Fi (NMEA), click **Download GPS Driver** at the bottom of the page to download and install the drivers.

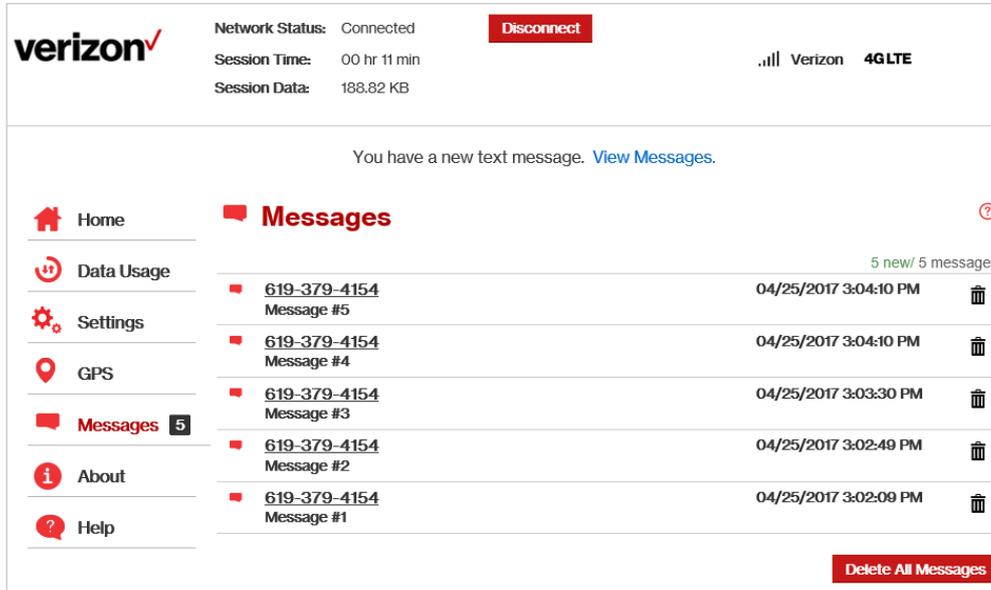


GPS - Download GPS Over Wi-Fi Driver

- 4 Click **Save Changes**.

Messages

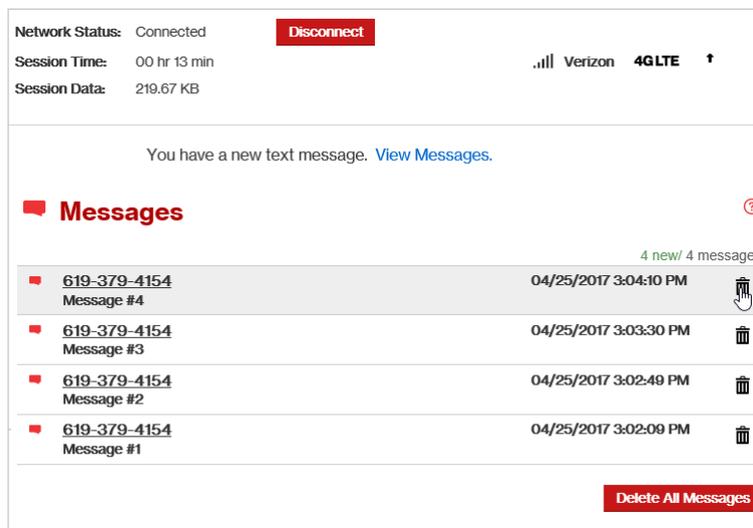
The Messages page displays all existing Verizon system messages, and allows you to delete messages individually or all messages at one time.



USB730L Messages

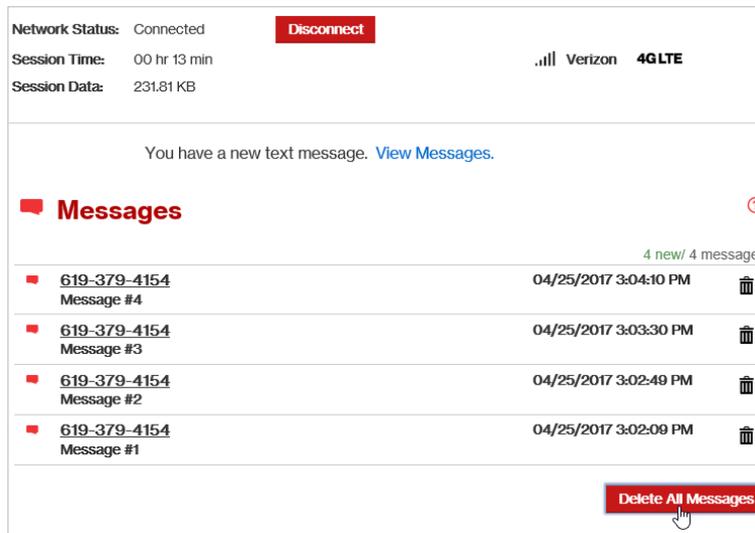
To delete existing messages:

- 1 To delete one message at a time, click the trash can icon  for each message you want to delete.



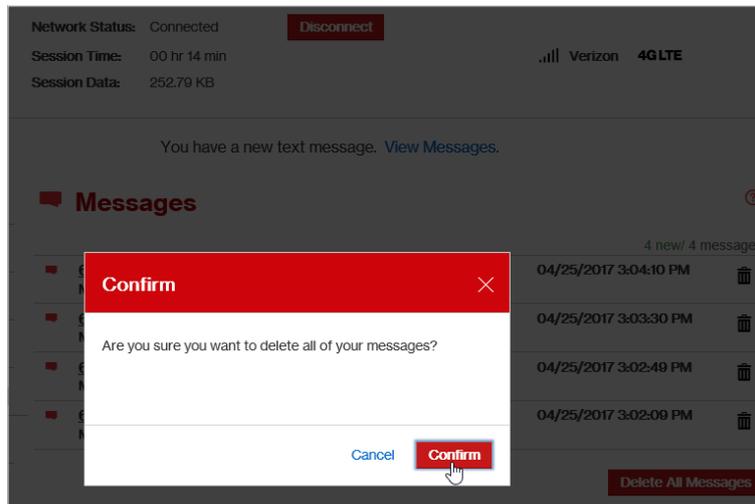
USB730L Messages - Delete

- 2 To delete all messages at one time, click **Delete All Messages** at the bottom of the page.



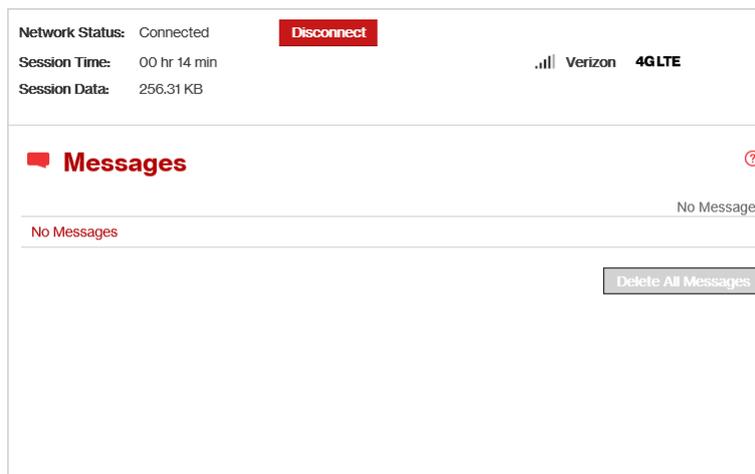
USB730L Messages - Delete All

- 3 To delete all messages, click **Confirm** when the confirmation dialog displays:



USB730L Messages - Deletion Confirmation

- 4 After clicking **Confirm**, the previously displayed messages no longer display in the Messages page.



USB730L Messages - After Mass Deletion

About

The About page allows you to view detailed information about the modem internet status, modem specific information, diagnostics and troubleshooting logs. The About page contains the following sections:

- **Internet Status**
- **Modem Info**
- **Diagnostics**
- **Troubleshooting Logs**

Internet Status

The Internet Status page shows modem settings and status and contains the following sections:

- **Status**
- **IPv4**
- **IPv6**
- **View Internet Sessions**

The screenshot displays the Verizon modem's 'About' page. At the top, it shows the Verizon logo, network status (Connected), session time (00 hr 41 min), session data (475.01 KB), and a 'Disconnect' button. The page is divided into a sidebar with navigation options (Home, Data Usage, Settings, GPS, Messages, About, Help) and a main content area. The 'About' section is active, showing 'Internet Status' with sub-tabs for 'Device Info', 'Diagnostics', and 'Troubleshooting Logs'. The 'Internet Status' section displays the following information:

Status:	Connected
Network Name:	Verizon
Technology:	4G LTE
Roaming:	No
Time Connected (Session Time):	00:00:41:24 (dd:hh:mm:ss)
Received:	224.58 KB
Transmitted:	250.42 KB
Total Data:	475.01 KB

Below this, the 'IPv4' section shows:

IP Address:	100.82.195.14
Mask:	255.255.255.252
Gateway:	100.82.195.13
DNS:	198.224.171.135

The 'IPv6' section shows:

IP Address:	2600:1012:b168:11f4:cd88:6a31:616e:9633
DNS:	2001:4888:05:ff00:02e:d::

At the bottom, there is a 'View Internet Sessions' button.

About USB730L - Internet Status

Status

The Status section has the following settings:

- **Status** — The status of the Internet connection, usually Connected or Disconnected.
- **Network name** — The name of the network to which the modem is currently connected.
- **Technology** — The type of technology used to connect to the Internet.
- **Roaming** - Indicates if the USB730L is currently using a roaming network.
- **Time connected** — How long the modem has been connected to the network.
- **Received** — The amount of data received from the network.
- **Transmitted** — The total amount of data received from and sent to the network.

IPv4

The IPv4 section has the following settings:

- **IP Address** — The IP address for the modem.
- **Mask** — The subnet mask network setting for the modem. The default value 255.255.255.0 is standard for small (class "C") networks. If you change the LAN IP Address, ensure you use the correct Subnet Mask for the IP address range containing the LAN IP address.
- **Gateway** — The address of the server used to access the Internet.
- **DNS** — The address of the Domain Name Server (DNS).

IPv6

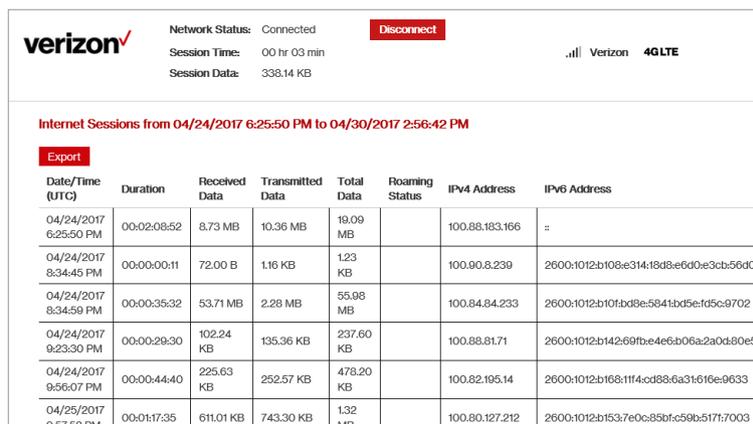
The IPv6 section has the following setting:

- **IP address** — The IP address for the modem.

View Internet Sessions

To view Internet session connection history for the modem:

- Click View Internet Sessions; the following message displays:



The screenshot shows the Verizon USB730L status page. At the top, it displays the Verizon logo, Network Status (Connected), Session Time (00 hr 03 min), and Session Data (338.14 KB). There is a red 'Disconnect' button and signal strength indicators. Below this, a section titled 'Internet Sessions from 04/24/2017 6:25:50 PM to 04/30/2017 2:56:42 PM' contains an 'Export' button and a table of session data.

Date/Time (UTC)	Duration	Received Data	Transmitted Data	Total Data	Roaming Status	IPv4 Address	IPv6 Address
04/24/2017 6:25:50 PM	00:02:08:52	8.73 MB	10.36 MB	19.09 MB		100.88.163.166	=
04/24/2017 8:34:45 PM	00:00:00:11	72.00 B	1.16 KB	1.23 KB		100.90.8.239	2600:1012:b108:e314:18d8:e6d0:e3cb:56d0
04/24/2017 8:34:59 PM	00:00:35:32	53.71 MB	2.28 MB	55.98 MB		100.84.84.233	2600:1012:b10f:bd3e:5841:bd5e:fd5c:9702
04/24/2017 9:23:30 PM	00:00:29:30	102.24 KB	135.36 KB	237.60 KB		100.88.81.71	2600:1012:b142:69fb:e4e6:b06a:2a0d:80e5
04/24/2017 9:56:07 PM	00:00:44:40	225.63 KB	252.57 KB	478.20 KB		100.82.195.14	2600:1012:b168:11f4:cd88:6a31:616e:9633
04/25/2017 9:57:52 PM	00:01:17:35	611.01 KB	743.30 KB	1.32 MB		100.80.127.212	2600:1012:b153:7e0c:850f:c59b:5171:7003

Modem Info

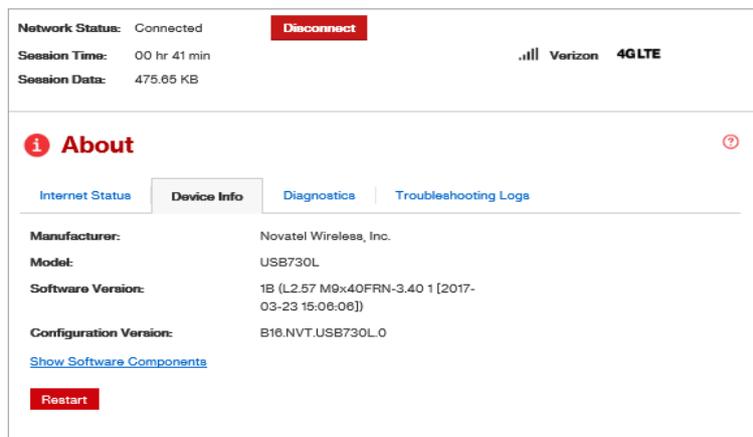
The Modem Info page contains detailed information about the modem. The Info page contains the following sections:

- **Manufacturer** — The manufacturer of the USB730L.
- **Model** — The model number or name of the USB730L.
- **Software version** — The current USB730L software version.
- **Configuration version** — The USB730L operating system (OS), including its components, version.

Click **Show Software Components** to display the following modem information:

- **Modem FW version** — The current modem firmware version.
- **Web UI version** — The web user interface version.
- **PRI version** — The configuration version currently applied to the USB730L.

Click **Hide Software Components** to hide modem information:



The screenshot displays the 'About' section of the modem's web interface. At the top, it shows network status: 'Connected' with a 'Disconnect' button, session time of '00 hr 41 min', and session data of '475.85 KB'. The carrier is 'Verizon 4G LTE'. Below this, the 'About' section has tabs for 'Internet Status', 'Device Info' (selected), 'Diagnostics', and 'Troubleshooting Logs'. The 'Device Info' tab shows the following details:

Manufacturer:	Novatel Wireless, Inc.
Model:	USB730L
Software Version:	1B (L2.57 M9x40FRN-3.40 1 [2017-03-23 15:06:06])
Configuration Version:	B18.NVT.USB730L.0

Below the table, there is a link for 'Show Software Components' and a 'Restart' button.

About USB730L - Modem Info

Diagnostics

The Diagnostics page shows information about the USB730L firmware and other system-level information. You can also view the system log. This page is used mostly for troubleshooting and is not required for normal operation. The Diagnostics page contains the following sections:

- **Modem**
- **4G LTE Network**
- **GSM/UMTS/HSPA Network**
- **3G Network (eHRPD/EVDO/1xRTT)**

The screenshot displays the Diagnostics page for a USB730L device. At the top, it shows the network status as 'Connected' with a 'Disconnect' button. Below this, session information is provided: 'Session Time: 00 hr 43 min' and 'Session Data: 477.13 KB'. The network type is identified as 'Verizon 4G LTE'. The main content area is titled 'About' and includes tabs for 'Internet Status', 'Device Info', 'Diagnostics', and 'Troubleshooting Logs'. A warning icon indicates that the following information is for troubleshooting purposes. The 'Modem' section lists various identifiers and versions, including MDN, IMEI, IMEISV, FW Version, SIM Status, ICCID, MIN (MSID), Home SID, ERI Version, and PRL Version. The '4G LTE Network' section shows the status as 'Available', network operator as 'Verizon', signal strength as -95 dBm, SNR as 14 dB, band as 2, and roaming as 'No'. The 'GSM/UMTS/HSPA Network' section shows the status as 'Not Available'.

Network Status:	Connected	Disconnect
Session Time:	00 hr 43 min	
Session Data:	477.13 KB	
Verizon 4G LTE		
About		
Internet Status Device Info Diagnostics Troubleshooting Logs		
ⓘ This detailed information is used only for troubleshooting and technical support.		
Modem		
Phone Number (MDN):	858-260-1808	
IMEI:	9900 0929 0002 834	
IMEISV:	9900 0929 0002 8300	
FW Version:	9x40FRN-3.40 1 [2017-03-23 15:06:06]	
SIM Status:	Ready	
ICCID:	8914800003026438613	
MIN (MSID):	8582558555	
Home SID:	4	
ERI Version:	6	
PRL Version:	15504	
4G LTE Network		
Status:	Available	
Network Operator:	Verizon	
Signal Strength (RSRP):	-95 dBm	
SNR:	14 dB	
Band:	2	
Roaming:	No	
GSM/UMTS/HSPA Network		
Status:	Not Available	
Network Operator:		
Technology:		

About USB730L - Diagnostics

Modem

The Modem section has the following options:

- **Phone number (MDN)** — The Phone Number or Mobile Directory Number (MDN) is used by the mobile data network to identify this particular data service.
- **MEID** — The Mobile Equipment Identifier (MEID) is used by the mobile data network to identify this particular modem.
- **IMEI** — The International Mobile Equipment Identity (IMEI) number for the USB730L.
- **IMEISV** — The International Mobile Equipment Identity (IMEI) combined with an approval number for the USB730L.
- **FW version** — The modem firmware version.
- **SIM status** — Status of the SIM card. If the SIM card is missing, or this field indicates some form of SIM error, the USB730L will not be able to connect to the mobile network.
- **ICCID** — The ID number assigned to the SIM Card.
- **MIN (MSID)** — The Mobile Identification Number (MIN) or Mobile Station ID (MSID) is the number associated with the home service provider and the wireless phone number.
- **ESN** — The Electronic Serial Number, which is either blank or a pseudo-ESN which is not guaranteed to be unique for modems that use an MEID.
- **Home SID** — System identifier for the home network.
- **ERI version** — The Enhanced Roaming Indicator version that is currently installed.
- **PRL version** — The version of the Preferred Roaming List (PRL), which tells the modem which non-home carrier towers should provide roaming coverage.

 This detailed information is used only for troubleshooting and technical support.

Modem	
Phone Number (MDN):	858-260-1606
IMEI:	9900 0929 0002 834
IMEISV:	9900 0929 0002 8300
FW Version:	9x40FRN-3.40 1 [2017-03-23 15:06:06]
SIM Status:	Ready
ICCID:	89148000003026436613
MIN (MSID):	8582558555
Home SID:	4
ERI Version:	6
PRL Version:	15504

About USB730L Diagnostics - Modem

4G LTE Network

The 4G LTE Network section has the following options:

- **Status** — Status of the network (Disabled, Not available, or Available).
- **Network operator** — The vendor that currently provides wireless access.
- **Signal strength** — Indicates the signal strength for LTE.
- **SNR** — A measure of signal quality; the higher the number the better the signal.
- **Band** — Band number being used in the 4G LTE network.
- **Roaming** — Indicates if roaming is currently being used.

4G LTE Network	
Status:	Available
Network Operator:	Verizon
Signal Strength (RSRP):	-95 dBm
SNR:	14 dB
Band:	2
Roaming:	No

About USB730L Diagnostics - 4G LTE Network

GSM/UMTS/HSPA Network

The GSM/UMTS/HSPA Network section has the following options:

- **Status** — Status of the network (Disabled, Not available, or Available).
- **Network operator** — The vendor that currently provides wireless access.
- **Technology** — The current technology in use for the GSM/WCDMA/HSPA network. Possible values, from slowest to fastest are GPRS, EDGE, UMTS, HSDPA, HSUPA, HSPA+, and HSPA+ DC.
- **PLMN ID** — The name and/or ID of the Public Land Mobile Network.
- **Cell ID** — The value identifies the cell tower currently in use.
- **RSSI** — Indicates the RSSI for the GSM/UMTS/HSPA signal. RSSI is a measure of signal strength in decibels, relative to one milliwatt.
- **Roaming** — Indicates if the current connection is a roaming connection.

3G Network (eHRPD/EVDO/1xRTT)

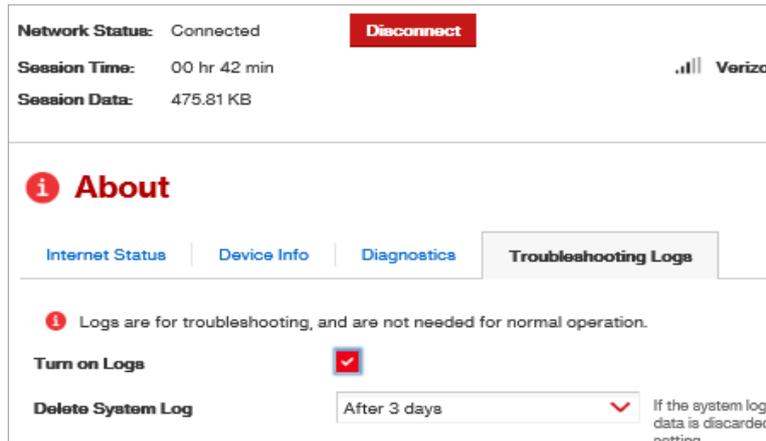
The 3G Network (eHRPD/EVDO/1xRTT) section has the following options:

- **Status** — Status of the network (Disabled, Not available, or Available).
- **Field Test** — This function is not available for the modem.
- **Network operator** — The vendor that currently provides wireless access.
- **RSSI (1x)** — Indicates the RSSI for the 1xRTT signal.
- **RSSI (EVDO)** — Indicates the signal strength for the EVDO/eHRPD signal.
- **Technology** — The type of technology used to connect to the Internet.
- **Ec/Io** — A measure of how clean the signal is, and is a type of signal-to-noise ratio.
- **SID** — System identifier for the network.
- **Roaming** — Indicates if the current connection is a roaming connection.

Troubleshooting Logs

The Troubleshooting Logs page allows you to turn logs ON/OFF, and to delete system logs.

NOTE Logs record various operations and are used for troubleshooting and are not needed for normal modem operation.



About USB730L Troubleshooting Logs

Turn on Logs

To turn on system logs:

- 1 Select the checkbox next to **Turn on logs**.
- 2 Click **Save Changes**.

Turn Off Logs

To turn off system logs:

- 1 Clear the checkbox next to **Turn on logs**.
- 2 Click **Save Changes**.

Delete System Log

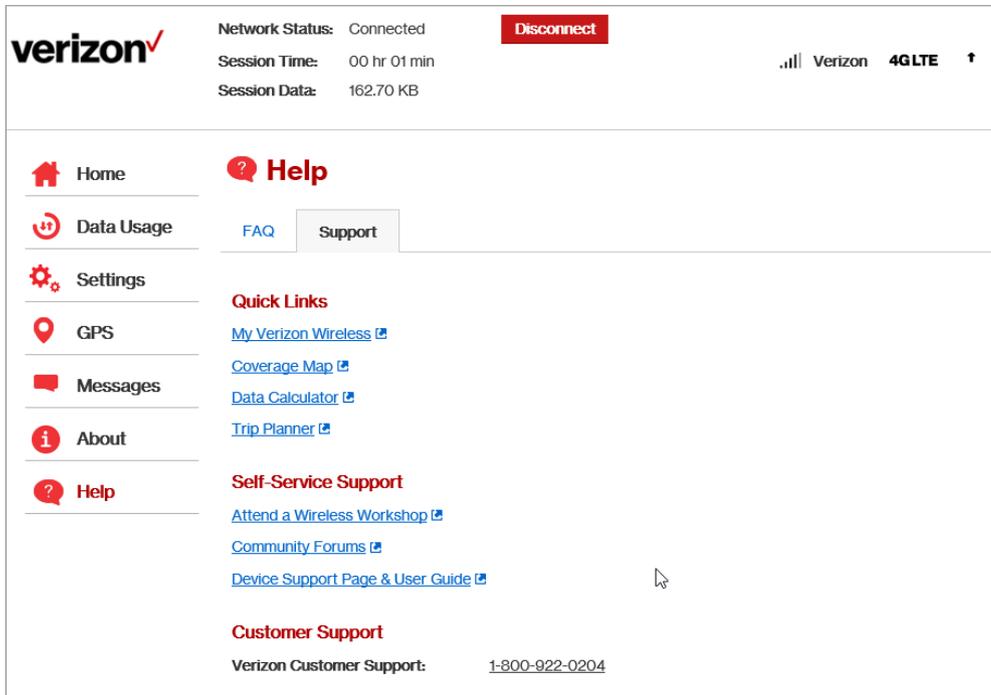
To set the time interval used to delete a system log:

- 1 Select the checkbox next to **Turn on logs**.
- 2 Select the appropriate time period for the deletion of system logs from the dropdown menu next to **Delete system log**. The choices are after 1 - 4 days. If the system log is full, then the oldest data is discarded, regardless of this setting.
- 3 Click **Save Changes**.

Help

The Help page has the following options:

- **FAQ** — Contains links to answers for Frequently Asked Questions, as well as directions about the operation and use of the modem.
- **Support** — Contains Quick Links and Self Service Support sections with links to the same options available in Account & Tools.



USB730L - Help Page

Account & Tools

The Account & Tools menu contains the following options:

- **My Verizon**
- **Coverage Map**(See [Coverage Map](#) on page 38.)
- **Data Calculator**
- **Dashboard Application**

The screenshot displays the Verizon USB730L web UI home page. At the top left is the Verizon logo. To its right, network status is shown as 'Connected' with a 'Disconnect' button. Below this, session information is provided: 'Session Time: 01 hr 31 min' and 'Session Data: 18.73 MB'. On the far right, signal strength and network type are indicated as 'Verizon 4GLTE'. A left-hand navigation menu includes links for Home, Data Usage, Settings, GPS, Messages, About, and Help. The main content area features two images of the USB730L device, a 'Welcome To Your 4G LTE Global Modem USB730L' message, and the user's wireless number: 858.260.1606. A right-hand menu lists 'Account & Tools' options: My Verizon, Coverage Map, Data Calculator, and Dashboard Application, along with 'Help & Support' options: Attend a Wireless Workshop, Community Forums, and Device Support Page & User Guide. A disclaimer at the bottom right states: 'These links take you to external content and will be billable according to your data plan.' The footer includes the Novatel Wireless logo and copyright information: 'Copyright ©2017. Novatel Wireless, Inc. All rights reserved.'

USB730L Web UI Home - Account & Tools

My Verizon

Clicking on **My Verizon** takes you to the Verizon Wireless website where you can manage your wireless service, sign in to your account or watch videos to learn more about your modem.

Coverage Map

Clicking on **Coverage Map** takes you to the Coverage Locator on the Verizon Wireless website where you can view a detailed coverage map, including Data, Push to Talk, 4G LTE Data, Prepaid, and Voice & Messaging.

Data Calculator

Clicking on **Data Calculator** takes you to the Data Usage Calculator on the Verizon Wireless website where you can calculate your modem usage to determine which plan will best meet your needs.

Dashboard Application

Clicking on **Dashboard Application** takes you to the Download Links to allow you to install the optional Dashboard application. Once installed, the application will open and show status information relating to the USB730L and its network connection.

USB730L is not responding, please check, remove and reinsert it if necessary.

Dashboard Application

Overview

This application will allow you to monitor your USB730L. Once installed, the Dashboard application will minimize to the system tray. When a USB730L is inserted, the Dashboard application will open and show status information relating to the USB730L and its network connection.

Note that data usage within your data plan will be incurred for this driver download.

Download Links

[Windows](#) 

[Mac](#) 

4G LTE Global Modem USB730L

Install a SIM Card

Your USB730L comes with a SIM card pre-installed. Should you need to swap out your SIM, follow these instructions:

To open the case and install the 4G SIM Card

- 1 Open the protective cover on the back of the modem by pressing gently on the cover with your thumb and sliding the door off.



Insert the SIM Card with the contact points (typically gold-colored) facing toward the USB modem. Position the card with the notched corner as circled below and slide the card into the SIM slot.



- 3 Gently push the SIM Card forward until the spring catches and the card remains securely in the slot.

- 4 Replace the back cover and snap into place.



The SIM Card must remain in the wireless modem when in use.

NOTE Should your SIM Card be lost or damaged, visit verizonwireless.com/myverizon to order a replacement SIM Card. You can also call 1-800-922-0204 to speak with a Customer Service Representative. For toll-free support outside of the U.S. call +1-908-559-4899 for 24/7 global support. For additional information about 4G SIM Cards, visit verizonwireless.com/4GSIM.

A Subscriber Identity Module (SIM Card) is a “smartcard” that houses personal information, such as your mobile phone number, calling plan, account information, and content, such as contacts, text messages, and call history.

The Verizon Wireless SIM Card is compatible with any Verizon Wireless certified modem. You can move the SIM Card from one modem to another and your wireless service will work seamlessly as long as you have a compatible modem and service plan. To see which modems are compatible with the Verizon Wireless SIM Card, visit verizonwireless.com/certifiedmodem.

Troubleshooting

Overview
Common Problems and Solutions
Technical Support

Overview

When properly installed, the USB730L is a highly reliable product. Most problems are caused by one of these issues:

- System resources required by the modem are being used by other devices.
- Network coverage is unavailable due to coverage area, an account problem, or a network problem.

The following tips can help solve many common problems encountered while using the USB730L.

First Steps

- Make sure you are using the device in the correct geographic region. Be sure you have 4G Mobile Broadband and service with the USB730L in the U.S.
- Ensure that your wireless coverage extends to your current location.
- Ensure you have an active subscription plan.
- Restarting your device and your modem can resolve many issues.

IMPORTANT Before contacting support, be sure to restart your device, and remove and reconnect your device.

Common Problems and Solutions

The following are some common problems and solutions.

My device does not start when the device is inserted. I experience an error or a blank screen.

- When this happens, remove the device and restart the device.

Technical Support

Customer Service

For Customer Service while in the U.S. or Canada, call 1-800-922-0204.

Data Technical Support

For additional information and technical support for Verizon Wireless devices, you can visit the Verizon Wireless Data Technical Support page at:

<http://www.verizonwireless.com/support/verizon-USB730L>.

Product Specifications and Regulatory Information

Product Specifications
Regulatory Statements
Wireless Communications
Limited Warranty and Liability
Safety Hazards

Product Specifications

General

Name:	Modem USB730L
Model:	USB730
Approvals:	FCC (North America); ISED (Canada); GCF; UL2853
Weight:	59 g (2.08 oz)
Dimensions (with USB folded out):	83 mm x 35 mm x 11.4 mm (3.27 in x 1.38 in x 0.45 in)
Chip Set:	QUALCOMM® MDM9640
Interface Type:	Fold-away, rotating USB

Technology/Bands

Technology:	CAT 6 LTE w/CA; CDMA EV-DO rA
Band Designation:	US LTE Bands: B2/B4/B5/B13 Global LTE Bands: B3/B4 LTE-U Carrier Aggregation: 13+4, 13+2 CDMA EV-DO rA: BC0/BC1 Quad band: UMTS/HSPA B1/B2/B5/B8 Quad band: GPRS/EDGE B2/B3/B5/B8 sGPS/XTRA Capable

Environmental

Operating Temperature:	0° C to +45° C (32° F to 113° F)
Storage Temperature:	-20° C to +65° C (-4° F to 149° F)
Relative Humidity:	5% to 90% over operating temperature
Drop:	1 meter drop, no damage – fully operational
Vibration Stability:	5 Hz to 500 Hz, 0.1 octave/second

Regulatory Statements

Federal Communications Commission Notice (FCC – United States)

Electronic devices, including computers and wireless modems, generate RF energy incidental to their intended function and are therefore subject to FCC rules and regulations.

This equipment has been tested to, and found to be within the acceptable limits for a Class B digital device, pursuant to part 15 of the FCC Rules and Industry Canada ICES-003: CAN ICES-3(B)/NMB-3(B). These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment.

This equipment generates radio frequency energy and is designed for use in accordance with the manufacturer's user manual. However, there is no guarantee that interference will not occur in any particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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/television technician for help.

This device complies with Part 15 of the Federal Communications Commission (FCC) Rules. Operation is subject to the following two conditions.

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE USB730L IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT VERIZON WIRELESS TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

FCC CAUTION: Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

MODIFICATIONS: The FCC requires that you be notified that any changes or modifications made to this device that are not expressly approved by Verizon Wireless, Inc. may void your authority to operate the equipment.

Avis de la commission fédérale des communications (FCC – États-Unis)

Les appareils électroniques, y compris les ordinateurs et les modems sans fil, génèrent de l'énergie RF en lien avec leur fonction prévue et sont donc soumis aux règlements de la FCC.

L'équipement a été testé et s'est qualifié à l'intérieur des limites acceptables d'un appareil digital de Classe B conformément à l'article 15 du règlement de la FCC et la NMB-003 d'Industrie Canada: CAN ICES-3(B)/NMB-3(B). Ces limites sont conçues pour fournir une protection raisonnable contre le brouillage préjudiciable lorsque l'équipement est utilisé dans un environnement résidentiel.

L'équipement génère de l'énergie des fréquences radio et est conçu pour être utilisé conformément au guide de l'utilisateur du fabricant. Toutefois, rien ne garantit qu'il n'y aura aucune interférence dans un endroit donné. Si l'équipement est la cause de brouillage préjudiciable de la réception d'une radio ou d'une

télévision, ce qui peut être déterminé en allumant et en éteignant l'appareil, essayez de corriger le brouillage à l'aide de l'une des mesures suivantes :

- Changer l'orientation ou la position de l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Contacter le détaillant ou un technicien radio ou de télévision.

Cet appareil est conforme à l'article 15 du règlement de la commission fédérale des communications (FCC). L'utilisation est soumise aux deux conditions suivantes :

Cet appareil ne doit pas causer de brouillage préjudiciable.

- Cet appareil doit accepter l'interférence reçue, y compris l'interférence qui pourrait causer une opération indésirée.

MISE EN GARDE : NE PAS TENTER D'EFFECTUER L'ENTRETIEN DU DISPOSITIF DE COMMUNICATION SANS FIL VOUS-MÊME. UNE TELLE ACTION POURRAIT ANNULER LA GARANTIE. LE DISPOSITIF EST RÉGLÉ À L'USINE. LE CLIENT N'A PAS À LE CALIBRER OU LE RÉGLER. CONTACTER LE SOUTIEN TECHNIQUE DE NOVATEL WIRELESS TECHNICAL SUPPORT POUR DES RENSEIGNEMENTS SUR L'ENTRETIEN DU DISPOSITIF DE COMMUNICATION SANS FIL.

MISE EN GARDE DE LA FCC : Les modifications qui ne sont pas approuvées expressément par la partie responsable de la conformité pourraient annuler le droit que l'utilisateur a d'exploiter cet équipement. **MODIFICATIONS :** La FCC exige que l'utilisateur soit averti que toute modification faite à cet appareil, sans l'approbation expresse de Novatel Wireless, Inc., pourrait annuler son droit d'utiliser cet équipement. Renseignements sur l'exposition aux fréquences radio et le débit d'absorption spécifique (DAS)

Le DAS de ce produit a été évalué et il respecte les directives de la FCC concernant l'exposition aux ondes radioélectriques.

RF Exposure/Specific Absorption Rate (SAR) Information

This product has been evaluated for SAR and meets the FCC Guidelines for exposure to radio waves.

Equipment Authorization FCC ID: PKRNVWMC730, ISED IC ID: 3229A-MC730 PN: USB730L

Your wireless modem is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless devices including mobile USB Modems and wireless modems uses a unit of measurement known as the Specific Absorption Rate, or SAR. Tests for SAR are conducted using standard operating positions reviewed by the FCC with the device under test transmitting at its highest certified power level in all frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the USB modem while operating can be well below the maximum value. This is because the USB modem is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before this device is made available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations as required by the FCC for each model.

CAUTION

This USB modem is approved for use in normal-size laptop computers only. To comply with FCC RF exposure requirements, this modem should not be used in configurations that cannot maintain at least 5 mm from users and bystanders. For example, this modem should not be used in certain laptop and tablet computers and configurations where the USB connectors are unable to provide or ensure the necessary separation is available between the modem and its users to satisfy compliance.



Please ensure that the modem is positioned as indicated in the illustrations to maintain SAR compliance and for proper performance. This modem has been designed and tested to meet SAR compliance as outlined by the FCC. If the modem is connected to USB ports other than those shown above please ensure the device maintains a separation distance of at least 5 mm.

NOTE: The Modem USB730L is not a handheld device.

D d'autorisation du matériel de la FCC ID: PKRNVWMC730, ISED IC ID : 3229A-MC730 PN : USB730L

Le modem sans fil est un émetteur et receveur radio. Il est conçu et fabriqué pour ne pas dépasser les limites d'expositions à l'énergie des fréquences radio (RF) émises par la commission fédérale des communications (FCC) du gouvernement des États-Unis. Ces limites font partie de directives complètes et constituent les niveaux d'énergie RF permis pour l'ensemble de la population. Les directives sont fondées sur des normes mises au point par des organisations scientifiques indépendantes à l'aide de périodiques et de l'évaluation rigoureuse d'études scientifiques. Les normes comprennent une marge de sécurité substantielle conçue pour assurer la sécurité de la population, peu importe l'âge et l'état de santé.

Les normes sur l'exposition des appareils sans fil, comprenant les modems USB mobiles et les modems sans fil, utilisent une unité de mesure appelée « débit d'absorption spécifique » ou « DAS ». Les tests pour le DAS sont faits à l'aide de positions d'utilisation habituelles étudiées par la FCC quand l'appareil testé émet

à sa puissance certifiée maximale sur toutes les bandes de fréquence. Même si le DAS est déterminé à la puissance certifiée maximale, le niveau du DAS du modem USB en marche peut être largement inférieur à la valeur maximale. Une telle chose se produit parce que le modem USB est conçu pour fonctionner à

différentes puissances afin de n'utiliser que la puissance nécessaire pour rejoindre le réseau. En général, plus l'utilisateur est près de la station de base sans fil, moins la puissance est grande.

Avant que l'appareil soit rendu disponible pour le grand public, il doit être testé et la FCC doit recevoir une certification attestant qu'il ne dépasse pas la limite établie par la prescription sur l'exposition sans danger adoptée par le gouvernement. Les tests sont conduits aux positions et aux endroits requis par la FCC pour chaque modèle.

MISE EN GARDE : Ce modem USB est approuvé pour une utilisation avec un ordinateur portable de taille normale seulement. Pour être conforme aux exigences sur l'exposition aux fréquences radio de la FCC, ce modem ne devrait pas être utilisé si sa position ne lui permet pas de le maintenir à au moins 5 mm des utilisateurs ou des passants. Par exemple, ce modem ne devrait pas être utilisé avec certains ordinateurs portables et tablettes électroniques dont les connecteurs USB ne peuvent fournir la distance nécessaire entre le modem et son utilisateur pour assurer la conformité.

Bien vouloir s'assurer que le modem est positionné comme indiqué dans les photos pour maintenir la conformité au DAS et pour jouir de l'efficacité maximale. Ce modem a été conçu et testé conformément au DAS indiqué dans les directives de la FCC. Si le modem est connecté à un port USB différent de ceux décrits ci-dessus, bien vouloir s'assurer que l'appareil demeure à une distance d'au moins 5 mm.

Wireless Communications

IMPORTANT Due to the transmission and reception properties of wireless communications, data occasionally can be lost or delayed.

This can be due to the variation in radio signal strength that results from changes in the characteristics of the radio transmission path. Although data loss is rare, the environment where you operate the modem might adversely affect communications.

Variations in radio signal strength are referred to as fading. Fading is caused by several different factors including signal reflection, the ionosphere, and interference from other radio channels.

Verizon Wireless or its partners will not be held responsible for damages of any kind resulting from the delays or errors in data transmitted or received with the USB730L, or failure of the USB730L to transmit or receive such data.

Limited Warranty and Liability

Novatel Wireless, Inc. warrants for the 12-month period immediately following receipt of the Product by Purchaser that the Product will be free from defects in material and workmanship under normal use. THESE WARRANTIES ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The exclusive remedy for a claim under this warranty shall be limited to the repair or replacement, at Novatel Wireless' option, of defective or non-conforming materials, parts or components. The foregoing warranties do not extend to (I) non conformities, defects or errors in the Products due to accident, abuse, misuse or negligent use of the Products or use in other than a normal and customary manner, environmental conditions not conforming to Novatel Wireless' specification, of failure to follow prescribed installation, operating and maintenance procedures, (II) defects, errors or nonconformity's in the Product due to modifications, alterations, additions or changes not made in accordance with Novatel Wireless' specifications or authorized by Novatel Wireless, (III) normal wear and tear, (IV) damage caused by force of nature or act of any third person, (V) shipping damage, (VI) service or repair of Product by the purchaser without prior written consent from Novatel Wireless, (VII) products designated by Novatel Wireless as beta site test samples, experimental, developmental, reproduction, sample, incomplete or out of specification Products, or (VIII) returned products if the original identification marks have been removed or altered.

Glossary

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- **3G** — Third Generation. 3G refers to the third generation of mobile telephony technology.
- **4G LTE** — One of several competing 4G standards. LTE (Long-Term Evolution) is a standard of wireless communication of high-speed data for mobile phones and data terminals:
- **APN** — Access Point Name. The APN is an alphanumeric string that identifies the particular network service that is being accessed. These are used by GPRS and UMTS networks.
- **Broadband** — High-capacity high-speed, transmission channel with a wider bandwidth than conventional modem lines. Broadband channels can carry video, voice, and data simultaneously.
- **CDMA** — Code Division Multiple Access. It is the underlying channel access method used by some mobile phone standards.
- **DNS** — Domain Name System. A system for converting host names and domain names into IP addresses on the Internet or on local networks that use the TCP/IP protocol.
- **ESN** — Electronic Serial Number. A unique 32-bit number embedded in a wireless device that identifies the device.
- **Firewall** — A hardware or software boundary that protects a network or single computer from unwanted outside traffic.
- **Firmware** — A computer program embedded in an electronic device. Firmware usually contains operating code for the device.
- **Gateway** — A network point that acts as an entrance to another network that uses a different protocol.
- **GPRS** — General Packet Radio Services. A system used by GSM mobile phones for transmitting IP packets. It also provides support for WCDMA based 3G networks.
- **GPS** — Global Positioning System. A radio-based navigation system that allows users to determine their location. The device uses satellite data to calculate its position. Commonly used in mapping and navigation systems.
- **HTTP** — Hypertext Transfer Protocol. An application-level protocol for accessing the World Wide Web over the Internet.
- **ICCID** — Integrated Circuit Card IDentification. A serial number stored in and engraved or printed on a SIM card that internationally identifies the card.
- **IP** — Internet Protocol. The mechanism by which packets are routed between computers on a network.
- **IP address** — Internet Protocol address. The address of a device attached to an IP network (TCP/IP network).
- **LAN** — Local Area Network. A type of network that lets a group of computers, all in close proximity (such as inside an office building), communicate with one another. It does not use common carrier circuits though it can have gateways or bridges to other public or private networks.

- **LTE** — Long Term Evolution. A set of enhancements to UMTS (moving toward 4G) that will provide high throughput, low latency, plug and play and seamless connection to existing networks such as GSM, cdmaOne, etc.
- **MEID** — Mobile Equipment IDentifier. A globally unique number for a physical piece of mobile station equipment.
- **MSID** — Mobile Station IDentifier. A number for a mobile phone that identifies that phone to the network. These numbers are carrier specific.
- **Network Technology** — The technology on which a particular network provider's system is built; such as GSM, HSPA, CDMA, EDGE, and EVDO.
- **Port** — A virtual data connection used by programs to exchange data. It is the endpoint in a logical connection. The port is specified by the port number.
- **PUK code** (Pin Unlock Key) — A PUK is required when you enter an incorrect PIN 3 times. After entering the wrong PIN 3 times, the SIM card is disabled.
- **Rev A** — CDMA EV-DO Rev. A is a leading-edge wireless technology with higher data rates and higher system capacity. It is a fully backward compatible standard and remains interoperable with deployed EV-DO networks and devices around the world. The increased data rates on Rev. A's physical layer enable richer applications and services. For more information, visit www.cdg.org.
- **SIM** — Subscriber Identification Module. A SIM is a card containing identification information for the subscriber and their account. The SIM card can be moved to different devices.
- **SMS** — Short Message Service. A service for sending short messages of up to 160 (224 in 5-bit mode) characters to mobile devices. SMS is also known as text messaging.
- **UI** — User Interface. The part of a software application or hardware device that a user sees and interacts with.
- **USB** — Universal Serial Bus. A connection type for computing device peripherals such as a printer, mobile modem, etc. USB connectors may be used for data transfer or charging.
- **USB Port Types** — The USB ports on computers and hubs have a rectangular Type A socket, and peripheral devices have a cable with a Type A plug. Peripherals that do not have an attached cable have a square Type B socket on the device and a separate cable with a Type A and Type B plug. Ports and connectors are available in different sizes (for example, standard, mini, and micro).
- **WCDMA** — Wideband Code-Division Multiple Access. A 3G mobile wireless technology that promises much higher data speeds to mobile and portable wireless devices. Another name for UMTS.