verizonwireless

BROADBAND**ACCESS** / NATIONAL**ACCESS™**

USB727 MODEM
HARDWARE USER MANUAL

Contents

Welcome

Congratulations on purchasing the Verizon Wireless USB727 Modem for Broadband**Access** and National**Access** service!

Before installing the USB727 Modem **VZ**Access Manager software and drivers, review this manual which outlines the features of the USB727 Modem hardware.

Important: Do not plug the USB727 Modem into the Type A USB port until you have installed **VZ**Access Manager and have activated **BroadbandAccess** and **NationalAccess** service for your USB727 Modem. (See the VZAccess Manager User Guide for detailed instructions on installation and software features, located on the Installation CD.)

This dual-band USB Modem operates over the high-speed Broadband**Access** and National**Access** networks in the 800/1900 MHz bands enabling you to connect at high speeds to the Internet, your corporate Intranet, and your email while you're away from the office.

Wireless communications

Important Notice

Due to the transmission and reception properties of wireless communications, data can occasionally 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 may 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 USB727 Modem, or failure of the USB727 Modem to transmit or receive such data.

Safety hazards

Do not operate the USB727 Modem in an environment that may be susceptible to radio interference resulting in danger specifically;

Areas where prohibited by the law

- o Follow any special rules and regulations and obey all signs and notices. Always turn off the host device and remove the modem from the USB port when instructed to do so, or when you suspect that it may cause interference or danger.

Where explosive atmospheres may be present

- o Do not operate your modem in any area where a potentially explosive atmosphere may exist. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Be aware and comply with all signs and instructions.

- o Users are advised not to operate the modem while at a refueling point or service station. Users are reminded to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

- o Areas with a potentially explosive atmosphere are often but not always clearly marked. Potential locations can include gas stations, below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), 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 vehicle engine.

Near Medical and life support equipment

- o Do not operate your modem in any area where medical equipment, life support equipment, or near any equipment that may be susceptible to any form of radio interference. In such areas, the host communications device must be turned off. The modem may transmit signals that could interfere with this equipment.

On an aircraft, either on the ground or airborne

- o In addition to FAA requirements, many airline regulations state that you must suspend wireless operations before boarding an airplane. Please ensure that the host device is turned off and your modem is removed from the USB port prior to boarding aircraft in order to comply with these regulations. The modem can transmit signals that could interfere with various onboard systems and controls.

While operating a vehicle

- o The driver or operator of any vehicle should not operate a wireless data device while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some countries, operating such communications devices while in control of a vehicle is an offense.

Limitation of liability

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4,901,307	5,490,165	5,056,109	5,504,773	5,101,501
5,506,865	5,109,390	5,511,073	5,228,054	5,535,239
5,267,261	5,544,196	5,267,262	5,568,483	5,337,338
5,600,754	5,414,796	5,657,420	5,416,797	5,659,569
5,710,784	5,778,338			

Software Drivers License

Proprietary Rights Provisions:

The software drivers provided with this product are copyrighted by Verizon Wireless and/or Verizon Wireless' suppliers. And although copyrighted, the software drivers are unpublished and embody valuable trade secrets proprietary to Verizon Wireless and/or Verizon Wireless' suppliers. The disassembly, decompilation, and/or Reverse Engineering of the software drivers for any purpose is strictly prohibited by international law. The copying of the software drivers, except for a reasonable number of back-up copies is strictly prohibited by international law. It is forbidden by international law to provide access to the software drivers to any person for any purpose other than processing the internal data for the intended use of the software drivers.

U.S. Government Restricted Rights Clause:

The software drivers are classified as "Commercial Computing device Software" and the U.S. Government is acquiring only "Restricted Rights" in the software drivers and their Documentation.

U.S. Government Export Administration Act Compliance Clause:

It is forbidden by US law to export, license or otherwise transfer the software drivers or Derivative Works to any country where such transfer is prohibited by the United States Export Administration Act, or any successor legislation, or in violation of the laws of any other country.

USB727 Modem Hardware: Overview

Thank you for choosing the advanced and compact USB727 Modem with microSD™ by Novatel Wireless! This 2-in-1 device empowers you with high-speed data access on the Verizon Wireless Broadband**Access** wireless data network and it provides removable memory storage options all in one convenient and compact USB package. Along with the many advanced features of Broadband**Access**, such as data speeds up to 1.4Mbps, this device offers:

- **High Speed Wireless Data (BroadbandAccess)**
  Enhanced EV-DO Rev.A technology capable of operating on the Verizon Wireless Broadband**Access** network with typical download speeds of 600 kbps to 1.4 Mbps and typical upload speeds of 500-800 kbps.

- **Optional microSD™ Memory Storage**
  Optional removable memory storage makes life on the go more convenient than ever. Save and transport important files such as documents, music, and pictures on microSD cards up to 4GB.

- **USB (Universal Serial Bus)**
  Universal form factor makes wireless Broadband**Access** and file storage more convenient than ever since it works with virtually all computing devices equipped with a Type-A USB port such as notebooks, desktops, tablet PCs, and personal digital assistants.

- **Supports Different Operating Systems**
  Designed to operate on different computing platforms and operating systems including, Windows Vista, XP, 2000; Mac OS X 10.3.9 or higher; and Linux.

- **Intuitive VZAccess Manager Software**
  VZAccess Manager makes it easy to connect to the Internet or your corporate Intranet, and send email and text messages. Installation is simple the application is easy to navigate.

- **Advanced Antenna System**
  The advanced dual band diversity antenna system design incorporates a flip-up antenna designed to maximize throughput and network connectivity in fringe areas.

- **External Antenna Connector**
  An optional external antenna may be purchased to further improve data throughput and improve network connectivity in fringe areas.

More features of this 2-in-1 device include
- VPN Capability
- Auto Connect at Startup
- 2-Way Text Messaging
- NDIS Capable

Important: The USB727 Modem requires an activated account with Verizon Wireless in order to function. The modem can be activated three ways:

- in a Verizon Wireless store
- by contacting Verizon Wireless Telesales
- self-activated through the Verizon Wireless activation website.

Important: Prior to using the USB727 Modem:

- Install **VZ**Access Manager as provided with your **VZ**Access Manager Installation CD (refer to the comprehensive **VZ**Access Manager User Guide for instruction, located on the **VZ**Access Manager Installation CD).

Customer Service

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

USB727 Modem System Requirements

To install and use the USB727 Modem, your host computer must meet these requirements:

Operating System	Windows® Vista, XP (SP2 or higher), 2000 **NOTE:** Windows XP SP1, Windows 2000 SP3 and SP4 require specific OS patches. For details please go to www.vzam.net. **-** OR - Mac® OS X 10.3.9 or higher Linux
Software	Internet browser software (i.e. Internet Explorer, Netscape, Safari, Firefox, AOL)
Modem Software	**VZ**Access Manager *Included on the **VZ**Access Manager Installation CD*
CPU	166 MHz or higher
Interface	One Type-A USB port
Disk Drive	CD-ROM
Memory (RAM)	32 MB
Hard Disk Space	14 MB

Your Verizon Wireless USB727

The USB727 Modem has been developed for mobile computing and supports the Universal Serial Bus (USB) interface. Almost every notebook, desktop, and handheld computing device has a Type A USB port which opens up the option for you to easily move your Verizon Wireless USB727 Modem from platform to platform (for example, from your personal digital assistant to your notebook) and even use on different operating systems,(for example from Windows to Mac).

Note: VZ Access Manager software is required to be installed on each device to support the modem**.**

❶ **USB Connector**
❷ **microSD Slot**
❸ **Flip-up Antenna**
❹ **External Antenna Connector**
❺ **Protective Cap**
❻ **Lanyard hook** (on bottom of device)
❼ **Service Status Indicator (LED)**

Bottom view, antenna end

1. **USB Connector**: USB form factor plugs into any device with a Type A USB port.

2. **microSD Slot**: Utilize memory storage up to 4GB with a microSD card (sold separately)

3. **Flip-up Antenna**: The advanced dual band diversity antenna system design incorporates a flip-up antenna, maximizing data speed performance and allowing for stronger network signal reception. (When connected to the network, always have the antenna in the raised position.)

4. **External Antenna Connector**: Connect an optional external antenna to the USB727 Modem for improved performance in fringe areas

5. **Protective Cap**: Protects USB Connector from debris/damage when not in use.

6. **Lanyard hook**: Permits use of lanyard accessory for wearable portability of the USB727.

7. **Service Status Indicator (LED)**: Visual simple service status LED indicator that shows you service and data modes. The LED lights are green, red, and amber and operate as follows:

LED not lit	**No Power to Modem**
LED GREEN - Solid	**Modem is powered but not transmitting or receiving**
LED GREEN – slow blinking	**Modem searching for a CDMA network**

LED GREEN – intermittent blinking	Modem transmitting/receiving data; blinking rate proportional to data speed
LED RED	No Service
LED AMBER	Error, reset modem

Care of Your USB727 Modem

As with any electronic device, the USB727 Modem must be handled with care to ensure reliable operation. Verizon Wireless recommends the following handling guidelines:

- Do not apply adhesive labels to the USB727 Modem; they may cause the device to potentially overheat and they may alter the performance of the antenna
- The USB connector should plug easily into your computer's Type A USB port. Forcing the device into a port may damage the connector.
- Protect the USB727 Modem from liquids, dust, and excessive heat.
- Store the USB727 Modem in a safe place, when not in use.

The USB727 Modem Package

The Verizon Wireless USB727 Modem package includes:
- Verizon Wireless USB727 Modem
- **VZ**Access Manager CD ROM (includes detailed user guides)
- Quick Reference Guide
- Lanyard

Important: Do not plug the USB727 Modem into the USB port until you have installed **VZ**Access Manager. (See the **VZ**Access Manager User Guide for detailed instructions on installation, activation, and software features, located on the Installation CD.)

Ways to Access

The Verizon Wireless USB727 Modem supports Verizon Wireless Broadband**Access** and National**Access** service for a superior wireless data connection.

BroadbandAccess/NationalAccess

BroadbandAccess — Take broadband with you while you're on the go! With Verizon Wireless Broadband**Access** you can stay connected at broadband speeds wherever you are. With access to America's most reliable broadband network, you can download large files and view email attachments at typical speeds of 600 to 1400 Kbps (download) and 500 to 800 Kbps (upload).*

*Speed claim based on our network tests with 5 MB FTP data files without compression. Verizon Wireless is rapidly adding Rev. A capability to your Broadband**Access** service area. Your Broadband**Access** Rev. A-enabled device will indicate coverage when you are in a Broadband**Access** Rev. A service area. When outside the Rev. A service area, your wireless device will revert to Broadband**Access** Rev. 0 (typical download speeds will be 400–700 Kbps and upload speeds will be 60–80 Kbps) or National**Access** coverage areas, where available. Actual throughput speed and coverage may vary. Speed claims not applicable when roaming.

NationalAccess — National**Access** is the Verizon Wireless national wireless Internet service. With the power of Verizon Wireless, users can browse the Internet and view email attachments and business applications from a notebook computer at typical speeds of 60 to 80 Kbps and bursts up to 144 Kbps.* National**Access** is available in thousands of cities and towns across the nation.

*Speed claim based on our network tests with 101 kilobyte FTP data files. Actual throughput speed and coverage may vary. Speed claim not applicable when roaming.

Installation and Configuration

This section guides you through the hardware installation and setup process for the USB727 Modem. Before you begin using your device, read through this Hardware Manual to become familiar with the documentation that came with your USB727 Modem.

Basics:

Before you begin using your USB727 Modem, you must first install **VZ**Access Manager. The comprehensive Quick Reference Guide that was included in the box when you purchased your product and the **VZ**Access Manager Software User Guides (for Windows and Mac) detail the installation and configuration of your USB727 Modem. Below is an overview of the installation and configuration process:

1. Turn on your computing device and close all applications.

2. Insert the **VZ**Access Manager CD-ROM into your computer's CD drive.

3. If the **VZ**Access Manager CD does not automatically launch, manually launch the VZAccess Manager CD following the guidelines outlined for manual CD launch per the operating system of your computing device. (Instructions for manual CD launch may be found in the User Guide or Help features of your computing device.)

4. Follow the onscreen instructions for installing **VZ**Access Manager.

5. When prompted by **VZ**Access Manager, insert the USB727 Modem to install the necessary drivers.

6. Launch **VZ**Access Manager, and click on the **Connect** button. Follow the on-screen instructions to complete activation. Refer to the **VZ**Access Manager User Guide, located on the Installation CD for more detailed instructions.

Important: Installation must be performed within a Broadband**Access** and/or National**Access** coverage area.

Important: Before installing your new software, delete or uninstall any previously existing modem or dialer software from your computing system.

Important: **VZ**Access Manager must be installed before you plug the USB727 Modem into the computing device for the first time. Only after the software has been installed can the operating system successfully install and configure the USB727 Modem.

Inserting and Removing the USB727 Modem

Inserting and Connecting the USB727 Modem to your Computer

Before you connect the USB727 Modem to your computer, you must first install **VZ**Access Manager (see the **VZ**Access Manager User Guide located on the Installation CD).

When you connect the USB727 Modem, the following should occur once VZAccess Manager has been installed:

- The USB727 Modem is powered as soon as you connect it to the Type A USB port of your computing device. Although the modem is powered, it does not automatically connect to the Internet.
- The LED indicator on the device lights up.
- If sound effects are enabled, the computing device may beep, notifying you that new hardware has been detected.
- The **VZ**Access Manager Software starts (unless the auto-launch feature has been disabled).

To properly insert the USB727 Modem:

1. Remove the protective cap from the device.

2. Hold the device along the side edges and gently insert the device into your computer's Type A USB port. The USB727 should fit easily into the USB port. Do not force the USB727 into the USB port as this may damage both the device and the USB port.

3. Fully extend the antenna for optimum performance.

4. The Hardware Icon appears in the system tray (Windows) or on the Desktop (Mac).

   NOTE: If you are experiencing trouble inserting the device into you computer's USB port:

   1. Verify that you are inserting the device the proper way.

   2. Verify that you are using a Type-A USB port.

The USB727 Flip-Up Antenna

The USB727 Modem contains a flip-up antenna that helps maximize the RF signal; this is an integral part of the modem. To raise the antenna, flip-up the antenna by gently gripping the top right side of the external cover with your forefinger.

Removing the USB727 Modem

WINDOWS and MAC

The USB727 Modem's USB technology allows you to safely remove the USB727 Modem from a Windows computer at any time when you are not connected to the network.

IMPORTANT: Verify that all file transfers to the microSD card are complete before removing the device, otherwise you are at risk of losing data.

1. End your Broadband**Access** session by selecting Disconnect from **VZ**Access Manager.
2. Exit **VZ**Access Manager.
3. Simply grip the USB727 Modem on both sides and pull straight out to avoid damaging the USB connectors.

USB727 Accessories

There are optional accessories available for your device that are sold separately through Verizon Wireless and there are three easy ways to purchase them:

- Shop online anytime at www.verizonwireless.com
- Call us at **1866 VZ GOT IT** (894 6848)
- Visit one of the Verizon Wireless Communication Stores

microSD Memory Card up to 4 GB

Lanyard (included)

External Antenna option

How to Insert and Use the microSD Memory Card

The USB727 is equipped with removable, hot-swappable, memory storage. The convenience of this feature enables you to connect to high-speed Broadband**Access** for Internet and VPN accessibility on the fly and store precious data simultaneously to an external drive without the need of another flash drive.

A microSD card (sold separately) is required to take advantage of the memory storage feature and is available in capacity sizes up to 4GB.

To Insert a microSD Card
1. Locate the microSD port as depicted in the figure to the right.
2. Line up the microSD card with the port as shown here.
3. Gently push in the microSD card one time until it clicks into place.

To Eject a microSD Card
The USB727 removable memory storage feature is hot-swappable, meaning the microSD card may be removed at any time, whether the USB727 is inserted in the computing device or not.

1. Gently push in the microSD card and it will pop out half way of the slot.
2. Once partially visible, you may pull the microSD card out of the slot and store in dry, safe place.

To Save Information on the microSD Card
Saving files to the microSD Memory Card on the USB727 follow the same principles as saving files to any external flash drive per your specific operating system.

WINDOWS
- Insert the USB727 into your computer's USB port (see page XX: Inserting and Removing the USB727).
- The computer detects new hardware and the Unplug/Eject icon appears in the taskbar.

You may save files to the USB727 two ways:

Save download files directly to the USB727
1. In the **Save to**: box, click the down arrow to view the contents of the pull down menu.

2. Select the USB727 which appears as a drive letter (i.e. **E:, F:, G:**, etc) **Mass Storage or Removable Storage**.

3. Type a name for the file you are saving to the USB727 and click **Save**.

Save files from an Application
1. When saving files directly from an application to the USB727, go to **File > Save As**.

2. In the **Save in**: box, click the down arrow to view the contents of the pull down menu.

3. Select the USB727 which appears as a drive letter (i.e. **E:, F:, G:**, etc) **Mass Storage or Removable Storage**.

4. Type a name for the file you are saving to the USB727 and click **Save**.

Drag/Drop – Copy/Paste

1. Go to **My Computer** and locate the USB727 as **Mass Storage** or **Removable Storage** with a letter assigned to it (i.e. **E:, F:, G:**, etc). Double-click to open the window and view the contents.

2. You may drag or copy/paste files into the Mass Storage or Removable Storage folder.

MAC OS X

Save download files directly to the USB727

1. In the **Save to**: box, click the down arrow to view the contents of the pull down menu.

2. Select the USB727 which typically appears as **No Name** in the Finder sidebar.

3. Type a name for the file you are saving to the USB727 and click **Save**.

Save files from an Application

1. When saving files directly from an application to the USB727, go to **File > Save (or Save As...)**.

2. In the **Save in**: box, click the down arrow to view the contents of the pull down menu.

3. Select the USB727 which typically appears as **No Name** In the Finder sidebar.

4. Type a name for the file you are saving to the USB727 in the **Save As** and click **Save**.

Drag/Drop – Copy/Paste

1. Go to **Finder** and locate the USB727 as **No Name**. Double-click to open the window and view the contents.

2. You may drag or copy/paste files into the **No Name** folder.

To Open Files from the microSD Card

WINDOWS

1. Ensure the USB727 is properly inserted in the computing device (see page 9, Inserting and Removing the USB727 Modem).

2. Go to **My Computer** and locate the USB727 as **Mass Storage** or **Removable Storage** with a letter assigned to it (i.e. **E:, F:, G:**, etc). Double-click to open the window and view the contents.

3. Select the file you wish to open.

MAC OS X

1. Ensure the USB727 is properly inserted in the computing device (see page 9, Inserting and Removing the USB727 Modem).

2. Open the USB727 Modem's No Name hardware icon from the desktop or from the Finder Window to view the contents.

3. Select the file you wish to open.

How to Use the Lanyard Accessory

A lanyard is included in the USB727 package. The lanyard is a convenient accessory that enables you to wear the USB727 around your neck while on the go.

IMPORTANT: DO NOT WEAR THE LANYARD AND THE USB727 AROUND ROTATING OR MACHINERY OR DURING SLEEP. AN EMERGENCY RELEASE CLIP IS CONSTRUCTED IN THE DESIGN, HOWEVER YOU MAY ALSO CUT THROUGH THE MATERIAL.

**To affix the lanyard to the USB727**

1. Locate the Lanyard Hook on the device.

2. Pinch the looped thread on the lanyard and insert into the Lanyard Hook hole.

3. Continue to push the lanyard until it exits through the other side.

4. Insert the end of the Lanyard through the loop and pull to tighten.

Using the External Antenna with Adapter Cable

An optional external antenna and External Antenna with Adapter Cable may be purchased (sold separately) for use with the USB727 Modem. An external antenna is useful when traveling in select fringe coverage areas where the network signal may be weak.

1. Locate the External Antenna Connector on the side of the device.

2. Remove the rubber protector to expose the External Antenna Connector. (Keep the rubber protector in a safe place for future use in order to protect the External Antenna Connector from debris when not in use).

3. Connect the External Antenna Adapter Cable to the USB727 Modem's External Antenna Connector.

4. Connect the External Antenna Adapter Cable's receiving end into the external antenna of your choice

External Antenna Connector

External Antenna Adapter Cable
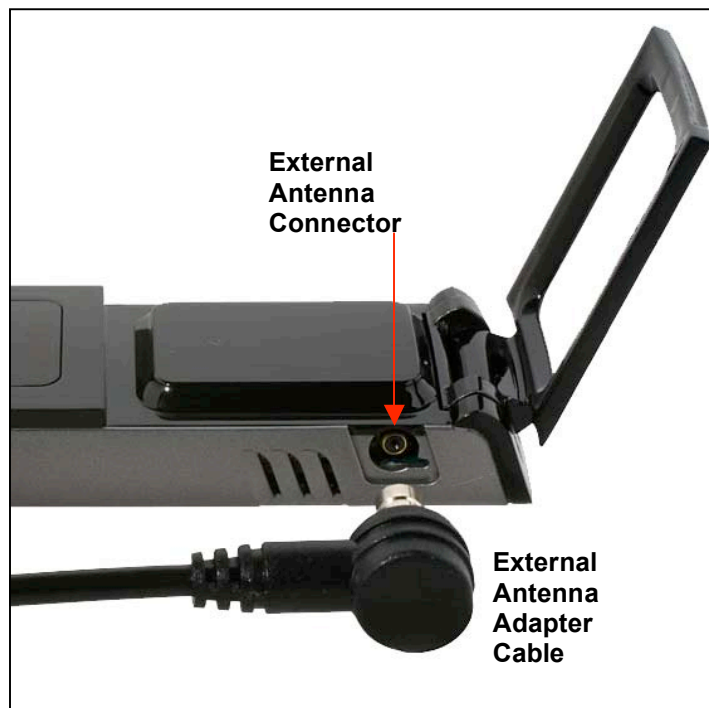
Technical Support

Data Technical Support

For additional information and technical support for VZAccess Manager and Verizon wireless devices, you can visit the Verizon Wireless Data Technical Support page at: http://www.verizonwireless.com/b2c/support/data.jsp.

Troubleshooting

USB727 Modem

The following tips will help solve many common problems encountered while using the USB727 Modem:

- Make sure you are using the USB727 in the correct geographic region: a Broadband**Access** and National**Access** USB727 in the US.
- Ensure that the wireless network's coverage extends to your current location.

When properly installed, the USB727 Modem is a highly reliable product. Most problems are caused by one of these issues:

- The wrong driver has been installed.
- System resources required by the USB727 Modem are being used by other devices.
- Network coverage is not available (either because you are outside the Broadband**Access** and National**Access** coverage area or because of an account or network problem).

For issues related to the VZAccess Manager consult the VZAccess Manager User Guide, located on the Installation CD.

Product Specification

Technical Specifications

TABLE 1

Name:	Verizon Wireless USB727 Modem
Model:	USB727 Modem
Approvals:	FCC (North America);CDG,
Weight	32 g / 1.13 oz
Dimensions:	70 mm x 25 mm x 12 mm 2.76 in x 0.98 in x 0.47 in
Wireless Network – Dual Mode:	CDMA 1X/EV-DO
Chip Set	QUALCOMM™ MSM6800-1
Interface Type:	Type A USB Port

TABLE 2

Technology:	CDMA Rev A, Rev 0, 1XRTT
Band Designation:	800/1900 MHz
Transmit Band:	824.7-848.31MHz/1851.25-1908.75MHz
Receive Band:	869.7-893.31MHz/1931.25-1988.75MHz

TABLE 3

Operating Temperature	0° C to +45° C (32°F to 131° 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 Notices

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

In order to comply with FCC RF Exposure requirements, this device must be installed so that a minimum separation distance of 1.5cm (0.60") is maintained between the antenna and all persons during ordinary operating conditions contingent upon the following:
1.   The laptop or PC is placed on a desktop, table or flat surface
2.   The device is placed on a flat surface

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THE USB727 MODEM 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.

RF Exposure/Specific Absorption Rate (SAR) Information

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

FCC Equipment Authorization ID: PKRNVWMC727

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 or 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 (for example, at the ear or worn on the body) as required by the FCC for each model.

THE FCC HAS GRANTED AN EQUIPMENT AUTHORIZATION FOR THIS WIRELESS MODEM WITH ALL REPORTED SAR LEVELS EVALUATED AS IN COMPLIANCE WITH THE FCC RF EXPOSURE GUIDELINES. THE HIGHEST SAR VALUE FOR THIS MODEM WHEN TESTED FOR COMPLIANCE AGAINST FCC STANDARDS WAS 0.775 W/KG USER-LAP POSITION.

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

1xRTT

Short for single carrier (1x) Radio Transmission Technology. A high speed wireless technology based on the CDMA platform. 1xRTT has the capability of providing broadband-like speeds of up to 144 Kbps. 1xRTT is also referred to as CDMA2000.

1xEVDO

Part of a family of CDMA2000 1x digital wireless standards. 1xEVDO is a "3G" standard. EVDO stands for "EVolution, Data-Optimized." 1xEVDO is based on a technology initially known as "HDR" (High Data Rate) or "HRPD" (High Rate Packet Data), developed by Qualcomm. The international standard is known as IS-856. 1xEVDO has the capability of providing broadband-like speeds of average speeds of 400-700 kbps.

bps

Bits per second – rate of data flow.

Broadband

High-capacity high-speed, transmission channel with a wider bandwidth than conventional modem lines. Broadband channels can carry video, voice, and data simultaneously.

Computing Device

Personal Computing device (notebook, desktop computer, tablet PC, PDA, etc).

Hot-Swappable

The ability to remove and replace the microSD Card from the USB727 while it is still connected to the computer and online without damaging the device.

Kbps

Kilobits per second – rate of data flow

LAN

Local Area Network. A data network confined to limited area with moderate to high data rates. Does not use common carrier circuits, although may have gateways or bridges to other public or private networks.

Mbps

Megabits per second

MicroSD

Additional external memory for your device.

MicroSD Card
A small, removable flash memory card available in various storage sizes up to 4GB. This accessory is sold separately.

MicroSD Slot

A built-in slot on your device that is designed specifically for a microSD Card.

PDA

Personal Digital Assistant. A handheld device used for organization, notes, address books, etc.

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.

SMS

Short Messaging Service. Short text messages of generally no more than 140-160 characters sent and received by wireless devices.

Type A USB

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.

USB

Universal Serial Bus. A connection type for computing device peripherals such as a printer, mobile USB727 Modem, etc.

VPN

Virtual Private Network. A way to communicate through a dedicated server securely to a corporate network over the Internet.

WAN / WWAN

Wide Area Network (WAN). A computer network covering a broad geographical area. WANs are used to connect local area networks (LANs) together, so that users and computers in one location can communicate with users and computers in other locations.

WWAN

Wireless Wide Area Network (WWAN). Also called "wireless broadband" or "broadband wireless," wireless WANs (WWANs) use cellular towers to transmit a wireless signal over a range of several miles to a mobile device compared to wireless Wi-Fi LANs (WLANs), which span only a few hundred feet and generally to only stationary devices.

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