



What is EVDO

Finally, you can have wireless broadband internet access to your Windows, Mac OS X, or Linux laptop *without the need for a hotspot!* Insert an EVDO Card into your laptop and, seconds later, you are connected to the internet at DSL-like speeds (500K-800K) - - - *you are your own hotspot!*

EVDO or Evolution Data Only/Evolution Data Optimized (often abbreviated as EVDO, EV-DO, EvDO, 1xEV-DO or 1xEvDO) provides fast wireless broadband (3G) internet service directly to your laptop. You take the internet *with you* and surf the web in your car, on the train, in the airport, at a convention, on the road in your RV...

The broadband-speed 1xEVDO is currently available in most metropolitan U.S. cities (Verizon and Sprint are both continually upgrading their service areas to Revision A - the newest development in EVDO that provides dramatically increased upload speeds averaging 300-400kbps). If you are unsure whether you have EVDO coverage in your area, please visit EVDOMaps.com and see the results EVDO users across the country are experiencing in their area.

EVDO is based on the [1xRTT](#) standard, which is available in almost all cell phone coverage areas and provides Internet speeds of about 2-3 times that of dial-up (about 60K-100K). If you go out of the 1xEVDO broadband coverage zone, you will *automatically* be switched onto the 1xRTT standard, which means that you can still access the Internet almost anywhere your travels take you! [learn more](#) about 1xRTT vs. EVDO here!.

Currently, EVDO is available on the Verizon and Sprint networks. Verizon was the first provider to offer EVDO, but Sprint has been rolling out EVDO coverage very rapidly and their coverage is catching up to Verizon's.

What is EVDO? Tell Me More

- EV-DO - Evolution Data Optimized
- Personal broadband wireless service for a wide range of customers, from business people to students
- Always on - - similar to DSL (wherever DO capability is available)
- Rides on CDMA signal- 1x data capability available everywhere CDMA voice service available
- Up to *10 times the peak data rate* of the next best public wireless solution - 300 to 512 Kbps (kilobits per second) \approx comparable to DSL speeds
- Allows the user to be “connected” wherever they are – not only for email, but for downloads, large files, photos, spreadsheets, etc.
- Users can work on a large variety of applications, including the MS Office Suite and

- others, so they can do business anywhere! Access mission-critical documents and information wherever you are.
- Available within the customer's wireless network
 - Gives "plug and play" of business functions, games and Internet access anywhere!
 - Customer voice and data experience should become seamless as ACS' network expands throughout Alaska
 - Advantages over WiFi:
 - Always on – with seamless roaming!
 - Signal can travel on same cell sites as cell phones
 - No 300-ft range from the cell tower or "hot spot"
 - Customers can access their corporate VPN (virtual private network) anywhere they can get a cellular signal via a secure, encrypted signal
 - Can download and run video clips in real time
 - Can provide service to customers outside of cable-modem or DSL areas
 - Relatively low cost with high capacity - allows rich web browsing and application usage
 - 1xRTT 50Kbps - 100Kbps Upload and Download, bursts to 144Kbps.
 - EVDO Rev 0 400kbps-700kbps Download, bursts up to 2.0Mbps, 50kbps-100kbps Upload Speed, bursts to 144Kbps.
 - EVDO Rev A 450Kbps-800Kbps Download, bursts to 3.0Mbps, 300Kbps-400Kbps Upload Speed, bursts to 1.8Mbps.

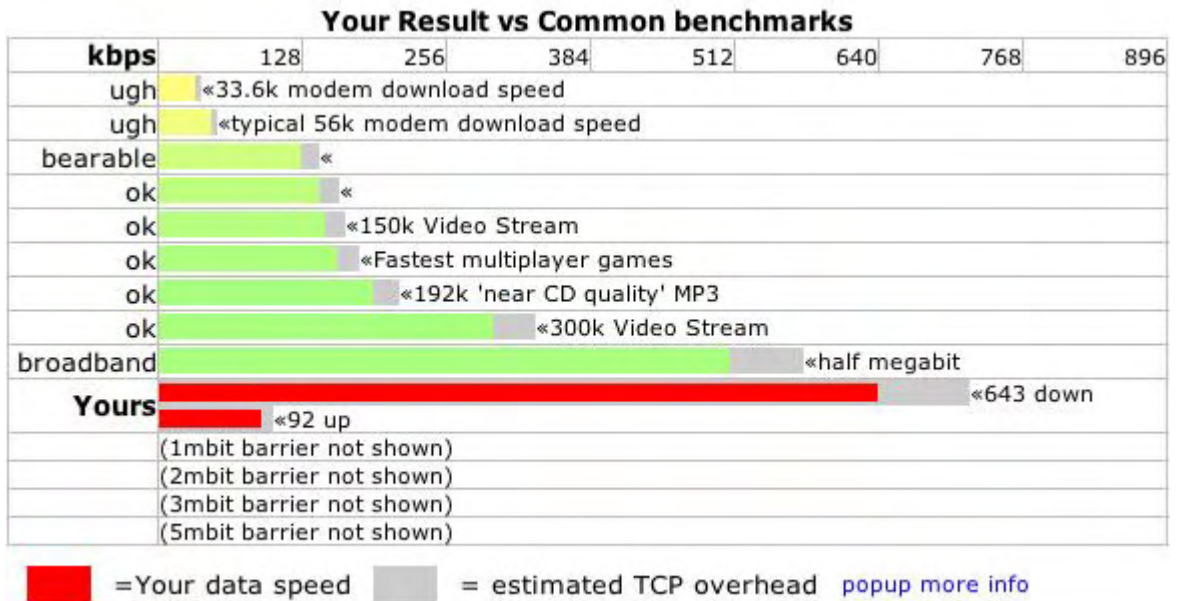
Almost all of Verizon's cards ship with Mac compatibility (the exception being the Sierra Aircard 595). While Sprint has not shipped any of their cards with Mac compatibility, the experts here at EVDOinfo.com have found Mac solutions to make all Sprint cards work on your Mac. All the cards work with Windows.

EVDO service costs \$59.99/month for unlimited access from both Sprint and Verizon (if you have cell phone service through Verizon). There are some promotions available for large corporate customers with multiple lines and for customers with Verizon or Sprint cell phones.

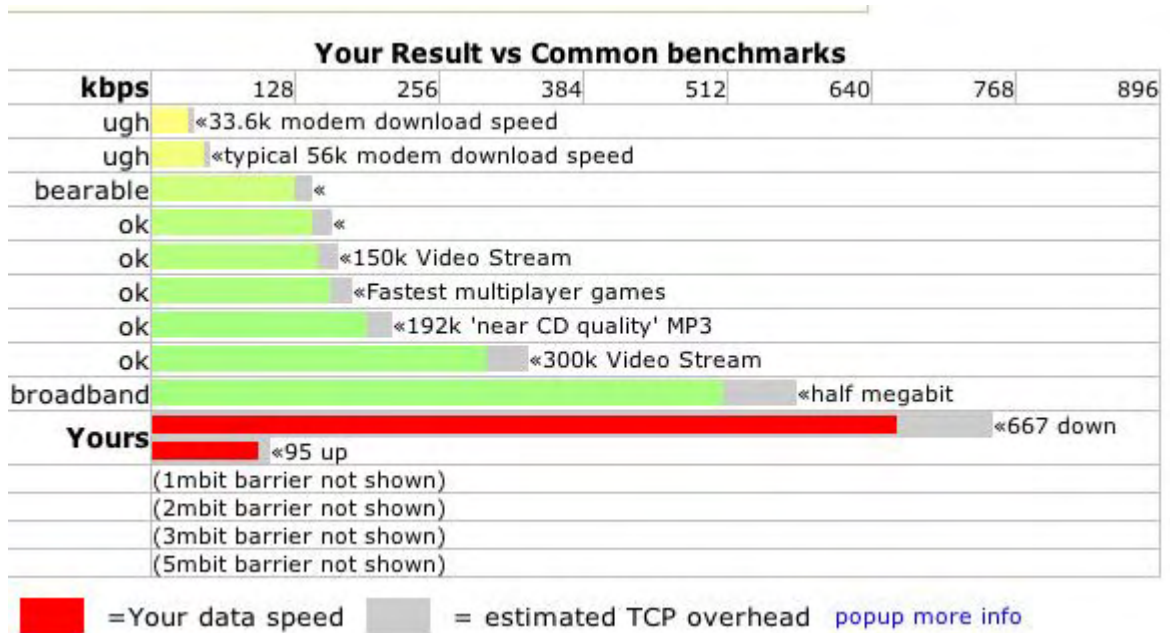
Beginning last year, many new EVDO phones started to become available. These phones hook up to the existing EVDO network to provide new cell phone services such as real-time 3D games, TV (on your cell phone), email access, and lots of other cool features.

OK, I understand What EVDO is. So how fast is EVDO?

Your signal strength determines how fast EVDO will be. Like your cell phone, you can have from zero bars of service (no service at all) to 4 bars (excellent, zippy service). Here is a speed test done while having 4 bars. The location was Schaumburg, IL

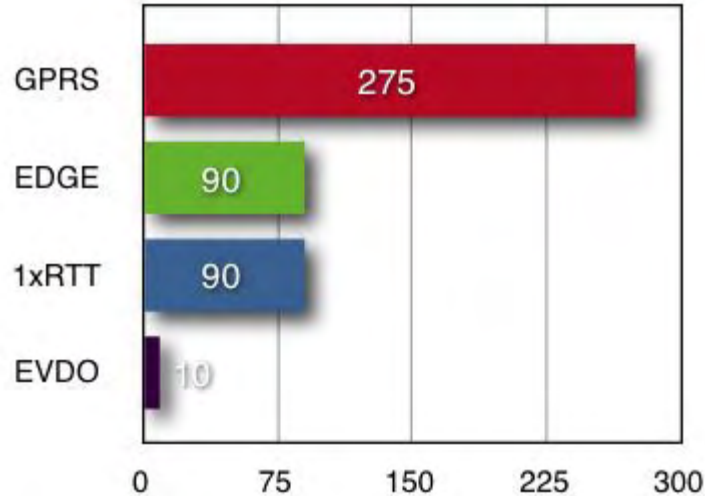


An antenna can greatly improve your signal strength, and thus your speed.
 Without moving, we plugged in the Booster Antenna and saw a improvement in the upload *and* download speed:



How does EVDO compare to other technologies?

Download a 1MB file (seconds)



How does EVDO compare to other 3G Technologies?

Peak Data Rate by Technology:

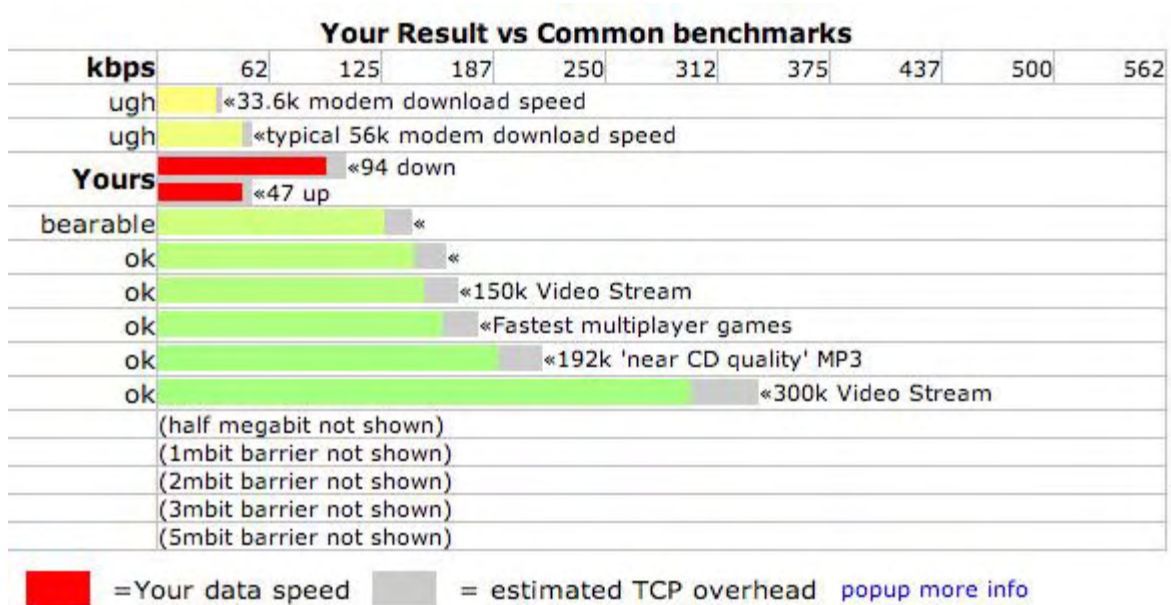
- CDMA Rev A 3,000 kbps
- CDMA 2000-1x EVDO 2,400 kbps
- W-CDMA 2,000 kbps
- EDGE 384 kbps
- CDMA 2000-1x 144 kbps
- GPRS 115 kbps
- GSM 14.4 kbps

1xRTT (Verizon's NationalAccess)

1xRTT has been out a lot longer than EVDO and is available (almost) wherever cell phone coverage is for Verizon or Sprint. 1xRTT has a maximum of 144K upload and download, but the typical speeds are 50K - 80K. When EVDO is not available, your EVDO card or phone will automatically drop down to 1XRTT. Recently I was in the middle of Illinois (farm land), going 70mph in my car, and did a benchmark test to see how the 1xRTT held up. The test confirmed that I had 94K download speeds (see below), which is actually not too bad for email or web browsing. So, even though EVDO may not yet be available *everywhere* you want to use it, 1xRTT probably is.

Do EVDO Cards work with PowerBooks?

Yes, we have set up a [Mac EVDO page](#) discussing this in more detail.



Can I use EVDO overseas?

Currently, most of Europe uses GSM, which is not compatible with EVDO, so EVDO will NOT work overseas. Verizon has roaming agreements with Canada and Puerto Rico so that your cards *will work there* (additional roaming charges may apply).

EVDO for Mobile Hotspots and WWAN (Wireless Wide Area Network)

[MDG](#) provides consulting services to help your company to convert EVDO to WIFI. That is right, you can create a mobile hotspot with your EVDO card! This opens up new opportunities (see below). Did you hear about "Google's Magic Bus"? Google has shuttle buses with this technology. They shuttle employees to and from work and the employees can connect to the internet for increased productivity during the commute. Using an EVDO router ([Kyocera KR1 Router](#), [Linksys WRT54G3G](#), Top Global [MB6000](#) or [MB8000](#)) anyone can do this!

portable

mobile work teams
 events, trade shows,
 conferences
 visitor "mobile hotspot"
 incident response
 vacation

mobile

cars, trucks, RV's
 commercial service/fleet vehicles
 shuttles, carpool/vanpool
 transit (busses, trains, ferries)
 taxis/limos
 private/commercial vessels

temporary

interim (waiting for landline)
 seasonal hotspots
 trial hotspots
 kiosks

fixed

wireline data service back-up
 wireline voice service back-up
 broadband alternative (w/3G
 service)
 dial-up alternative
 when only data service option
 telemetry

EVDO Booster Antenna

If you are in the fringe area of EVDO and coverage is spotty, or if you are in a weaker signal area, consider an [EVDO external booster antenna](#). These antennas plug directly into your EVDO Card (note that it does **not** work with the 5740 card, as that card does not have an external antenna port) and improve performance **dramatically**. They will increase your signal strength, which will give you a much faster throughput. The booster antenna is very small and portable - about twice the size of the PC Card, while the external antennas are a bit bulkier. We *do not recommend* buying a Booster Antenna that clips on to the current antenna - - get one that plugs directly into the external antenna port that is built-into the EVDO cards. When you plug in an external antenna through the antenna port, the built-in antenna is disabled and you only use the external and get much better performance.



EVDO Phones

EVDO phones allow your cell phones to hook up to this high speed network. If your phone can send email or browse the web, it will be VERY fast. On Verizon's network, they offer something called [VCAST](#). VCAST allows you to play multiple 3D media games, Entertainment video clips, Sports clips, news videos, weather videos. Here is a list of phones that have EVDO:

- Sprint's PPC-6700 ([see our review](#))
- BlackBerry 7130e (introduced Dec 2005)
- [Audiovox XV6600](#)
- [Samsung A890](#)
- [LG VX8000](#)
- [Motorola E815](#)
- [Audiovox CDM8940](#)

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