



Quick definitions

Wi-Fi:

Wireless Fidelity, the standard used to connect laptops to a network or Internet without using cables.

Also known as Wireless LAN 802.11b or 802.11g.

802.11b vs. 802.11g

802.11g Wi-Fi technology is newer and slightly more expensive than 802.11b, but it is also faster and backwards-compatible with the older 802.11b.

AirPort:

Macintosh version of wireless networking

Wireless Networks

What is a wireless network? It is a network that uses radio waves instead of cables to relay information to and from your computer. In simpler terms, you do not need to plug a cable into your computer to connect to the Internet. It's also relatively recent technology.

Wireless networks take advantage of unlicensed airwaves to transmit data at the 2.4 GHz frequency. The most common application of wireless networks is to remotely connect to the Internet from your laptop, but you can also use wireless networks to send print jobs to remote printers or, eventually, to connect all of your wireless devices (cell phones, PDA's, etc) together.

Just one use of wireless technology today is UPS delivery confirmation. After you sign for delivery package, the UPS tablet uploads your signature to a main server and stores the information online as proof of delivery.

Advantages/Disadvantages

- **ADVANTAGE:** When properly set up, you can connect to the Internet from any location in your apartment or house within 300 meter radius (or 30 foot radius for Bluetooth devices) from the transceiver.
- **ADVANTAGE:** There are public access points all over New York City (see: Bryant Park in links) that let you use their Internet connection for free. If you have a wireless card installed in your laptop, you can bring it to Bryant Park, modify a few settings, and be able to check e-mail & surf the web under the trees. Laptop batteries generally last 2-3 hours, depending on use.
- **ADVANTAGE:** There are also public access points where you can pay an hourly charge to access the Internet with your laptop. Starbucks uses T-Mobile: <http://www.starbucks.com/retail/wireless.asp> and even McDonalds is going wireless in New York: <http://www.mcdwireless.com>
- **DISADVANTAGE:** Because wireless transmissions can pass through walls, security is an issue. You will need to secure your private wireless network, generally by password-restricting the network and by using a firewall to prevent unwelcome visitors.
- **DISADVANTAGE:** Wireless reception varies from area to area, even within your own apartment. It's not always guaranteed that you'll have a connection to the Internet.



Infrared Port:

Your computer or laptop may come equipped with an Infrared port (IR), used for wireless transmission using frequencies immediately above that of visible red light.

The Infrared port can be used for connecting your laptop to other devices with Infrared ports, such as printers or cell phones (to use for dial-up internet access).

This is an alternative to the Wi-Fi connections described here.

CONTACT US

The System Department of the New York Society Library selects, upgrades, and maintains computer resources for the Library staff and patrons. If you have a question or problem with any Library-related computer resource, please contact us.

What you'll need:



If you are only interested in connecting to other networks (i.e. Bryant Park, Starbucks or McDonalds), skip the first two items. They are for home/business networks only.

1. A high-speed Internet connection (either DSL or cable modem). Wireless connections won't work with dial-up service.
2. A wireless base station. Wired magazine recommends the Linksys WRT54G 802.11g (\$130 at MicroWarehouse.com) for the PC, and AirPort Extreme (\$200) for the Mac.
3. A recent computer or laptop with a newer operating system. For the PC, you should ideally be running Microsoft Windows 2000 or XP. For the Mac, you should be running OS 9.x or 10.x. For both computers, make sure your web browser is either Microsoft Internet Explorer 5.1 (or higher) or Netscape Navigator 4.7 (or higher).
4. A wireless card. Wired magazine recommends Linksys's 802.11g card (\$75) for the PC and the AirPort Extreme (high end) or AirPort 802.11b (low end).

To find wireless networks that are open to the public, check NYCwireless.com. Microsoft Windows XP and Mac OS X have built-in network detectors, or you can download software to detect available networks: NetStumbler.com and MacStumbler.com. Finally, there's also a hardware option: iDetect's Wi-Fi Sniffer (<http://www.idetect.com.sg/WiFi.htm>) will detect wireless networks.

Links:

Free:

Bryant Park Wireless Network: <http://www.bryantpark.org/amenities/wireless.php>

New York City Wireless: <http://www.nycwireless.net/>

Warchalking: <http://www.warchalking.org/>

Commercial:

McDonalds Wireless: <http://www.mcdwireless.com>

Starbucks Wireless: <http://www.starbucks.com/retail/wireless.asp>