

GPS

Global Positioning System

GPS receivers (handheld devices such as Garmin and others, as well as GPS-enabled PDAs and cell phones) listen for low-frequency radio signals being sent from GPS satellites which orbit the earth. These signals contain numerical information which the receiver captures and calculates into longitude/latitude coordinates. GPS receivers do not transmit any data to the satellites, they only receive.

WiFi

Wireless Fidelity

WiFi is the most common term used to describe a wireless access point which gives a device access to the internet. You probably have a WiFi access point in your home, and a WiFi adapter in your laptop for connecting to the access point.

Bluetooth (BT)

Is used for short-range (about 30-50 feet) wireless communications. BT exists as a way for devices to transmit digital information between themselves. The information can be audio (for a BT headset), data (sharing files between BT devices such as cell phones), as well as many other kinds of digitized information. While BT can be used for connecting to other devices that provide internet access, simply having BT on a device does not mean that it can obtain internet access.

SMS

Simple Messaging System

Text-messaging, picture messaging and other such features available on your cell phone use the SMS system. An SMS message is a stripped down form of an internet e-mail message. SMS messages can be sent between phones or to an e-mail address. Before using check with your cellular provider to determine if messaging is included in your plan and if sending to out-of-network numbers/e-mail addresses have additional fees.

RFID

Radio-Frequency Identification

Already widely used and soon to be prevalent and ubiquitous, RFID systems use a scanner that looks for objects with RFID tags. Similar to radar/sonar systems, the scanner sends out a radio wave in order to look for tags. When this radio wave bounces off an object that has an RFID tag, a new radio wave is created. This new wave carries information which is encoded in the RFID tag, usually just an identifying number. The scanner listens for these returned waves and records any that it finds. The scanner is usually linked to a database system which can then inform the user of which objects have been found.