

## HOW HIGH SPEED SATELLITE INTERNET WORKS?



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### What Is Satellite Internet?

High-speed Internet is increasingly becoming a must have service for today's bandwidth hungry Internet users.

Satellite Internet is a high speed broadband solution for rural or remote areas where DSL or high-speed cable Internet access is not available. Broadband satellite Internet is available just about anywhere in North America with an unobstructed view of the southern sky.

If you want a high speed Internet connection, and cable or DSL are not options then broadband satellite Internet access is the best route to take.

### How Does Satellite Internet Work?

A satellite dish is mounted on the exterior of your home or business.

High speed data is transferred to the ISP's **Network Operations Center "NOC"** through the satellite dish via a satellite modem that connects to your computer.

Internet data requests are sent up to a satellite that relays the request down to the NOC. The satellite Internet provider's NOC provides a very high-speed connection to the Internet. Your data request is processed by the NOC and then sent the up to the orbiting satellite which in turn relays the data down through your satellite dish to your satellite modem. The satellite modem then transmits the data through your computer's **Network Interface Card "NIC"**, and your PC processes the data.

### One-way or two-way Satellite service?

There are two different types of satellite service, one-way and two-way.

With one-way service the satellite can't transmit and only only receives downstream data. This configuration requires you to use a dial-up Internet connection to send internet requests or upload files. Downstream data and file downloads are then processed by your satellite modem.

With two-way service the satellite modem processes both uploads and downloads, and a dial-up connection is unnecessary.

The two-way option is definitely the way to go if your satellite Internet service provider offers it.

## **Why Is Satellite Internet Better Than Dial-Up?**

Satellite Internet is significantly faster than traditional dial-up Internet access.

This increased speed gives you the option of sharing your broadband satellite Internet connection on multiple computers in your home or office. Even if you are only using one computer to access the Internet, downloads that took hours with dial up are now completed in minutes. No more waiting for updates or large files to download. Web pages containing graphic animation, movie clips, or streaming audio will load much faster than dial up. Downloading large files such as photos and video email attachments is much faster.

With two-way satellite Internet service you are always connected to the Internet. There is no need to dial an ISP, so you can surf the Internet without tying up your home phone line.

## **How Fast Is Satellite Internet?**

Broadband satellite Internet service is not as fast as it's DSL or cable counterparts, however it's significantly faster than a traditional dial up Internet connection.

Satellite Internet transmission speeds will vary depending on a number of factors. Type of satellite service, provider package, weather conditions, signal losses and other factors will affect transmission speeds.

Broadband satellite Internet download speeds typically range between one hundred kilo bits per second "Kbps" and several hundred Kbps.

## **How much does Satellite Internet cost?**

Satellite Internet access is generally more costly than DSL, cable, or dial-up and requires more equipment, namely a satellite dish mounted on the outside of your home or office.

In addition to increased service fees, you will also need to purchase a satellite dish and modem and pay to have the dish installed. If you have the skills you can opt to install the dish yourself. Most satellite providers have a self-installation kit available for a small fee.

## **What Equipment Do I Need?**

A satellite network interface commonly called a "satellite modem" connects to a two or three foot satellite dish or base station that is installed on the outside your home or office.

Your computer's network card is then connected to satellite modem using a standard CAT5 network patch cable. Many computers come with the network card installed, otherwise they are relatively cheap and easy to install.

You can also connect your satellite modem to a router to provide broadband satellite Internet access to your entire home network.

## **HughesNet Satellite Provider**

Originally known as Direcway, HughesNet™ is the high-speed Internet solution that's available to everyone in the contiguous U.S. with a clear view of the southern sky.

[HughesNet](#) uses satellite technology to give you a super-fast, always-on Internet connection - so you can enjoy the Internet the way it was meant to be. HughesNet gets you online instantly, lets you surf and open pages faster and download files in a fraction of the time it takes a dial-up modem.

HughesNet is brought to you by HUGHES®, the leading provider of broadband satellite network solutions for consumers, businesses, and government. For over 30 years, Hughes has delivered satellite products and services around the world, with more than 800,000 systems ordered or shipped to customers in 85 countries. Hughes pioneered the development of high-speed satellite Internet services, which it markets globally under the HughesNet brand.

## **Is Satellite Internet For Me?**

Only you can answer this question, since everyone has different needs and expectations.

You can compare **ISP 1** high-speed Internet service providers including HughesNet broadband satellite using our [high-speed broadband](#) comparison page.

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