



Understanding the Speed of Your Internet

What is Mbps and what does it mean?

Internet speed refers to how fast data—say, a Netflix movie—can travel back and forth across the internet to your home. Because the “bits” of data are very small, speed is usually measured in megabits, or thousands of bits, per second (Mbps). Some super-fast fiber services can send data at a gigabit per second (Gbps).

What you can do with different speeds

Different types of activities require different levels of speed. For example, you may only need 1Mbps to listen to a Spotify song, but 25Mbps to watch a 4K Netflix movie in HDR in its highest quality. And remember that your whole house will share whatever bandwidth is available when several people are online at the same time, so each separate use will subtract from the overall speed.

Until recently, we’ve focused mainly on download speeds, which we need to watch streaming movies or TV shows, or to have our Facebook pages refresh quickly. But upload speeds matter, too, since they can affect everything from Zoom calls with work, video chats with family, or uploading Instagram photos and videos.

What type of bandwidth is right for you?

As noted, different types of activities require different speeds. For most homes, 25Mbps—the current FCC definition of high-speed broadband—is the minimum speed needed to watch movies and make video calls. But homes with multiple users increasingly need faster connections of 50Mbps or more. That’s why some legislators are calling for the Biden administration to establish a “21st century definition” of high-speed broadband of 100Mbps, for both downloads and uploads.

Explain the difference between Cable, DSL and Fiber

Fiber optic connections—which travel via light rather than electricity—are the fastest available, and can reach 1Gbps or more. Cable internet speeds are very fast and can sometimes rival fiber’s download speeds. However, while fiber-optic internet connections are “synchronous,” meaning that download and upload speeds are roughly equivalent, cable upload speeds are typically only about one-tenth of the download speed. DSL connections, which use your telephone lines, are the slowest and usually max out around 35 Mbps to 50 Mbps, although sometimes service can be as slow as 5-10 Mbps, or as fast as 100 Mbps. In rural areas, DSL is often the only internet option.