SPEEDTEST FAQ

This is a secure third-party speed test for measuring data transfer rates and latency of your internet connection from the nearest testing server to your computer or mobile device. You can select different testing locations to compare your results.

What factors affect my download and upload speeds?

Your speed results may vary based on many factors, including but not limited to:
- Device or connection type (wired or Wi-Fi)
- Number of connected devices
- Network congestion

What is download speed?

Download speed is the speed at which your device can receive data from the internet. It's calculated by dividing the total throughput of data in a time frame by its duration. Its unit is denoted by units of data over time. Most often, download speed is denoted in megabits per second (Mbps or Mb/s) or gigabits per second (Gbps or Gb/s).

What is upload speed?

As opposed to download speed, upload speed characterizes the amount of data your device can send to the internet. It's calculated the same way and is therefore denoted in the same units.

What is a ping (latency)?

The ping or latency describes the delay of a signal due to the time it takes that signal to travel to its destination. It represents the time it takes a data package to complete its roundtrip over the network and the acknowledgment from the server that it was received. As a value of time, it is denoted in milliseconds (ms).

High ping times, or latency, can cause delays similar to jitter issues with VoIP calls or video calls.

Average ping test results higher than 100 ms may be an indication of a network or ISP connection issue.

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What is Jitter?

Jitter is a term used to describe the difference in latency between packet flows from one client to another. Jitter results from network congestion, timing drift, and route changes.
The longer data packets take to arrive, the more jitter can negatively impact video and audio quality.
VoIP calls that lose quality for a period or cut in and out could be experiencing jitter.

Causes of jitter include the following:
- Poor hardware performance. Using an outdated network with older equipment, such as an outdated switch, cable, or router, can cause network jitter.
- Not enough bandwidth. Networks overcrowded with traffic will perform poorly because too many active devices are using bandwidth.
- Wireless network jitter. One of the drawbacks of using a wireless network is an inferior network connection. Using a wired connection helps ensure that video and voice systems provide a better user experience.
- Not implementing packet prioritization. For voice over IP (VoIP) systems in particular, jitter occurs when audio data is not prioritized to be delivered before other types of traffic.

Average jitter test results higher than 30 ms may be an indication of a network or ISP connection issue.

How are Wi-Fi coverage and internet speed related?

Good coverage means your device is getting a strong Wi-Fi signal. That strong signal will also deliver as much speed as your device can handle. As you move away from your Wi-Fi source, signal strength diminishes, slowing upload and download speeds and reducing coverage. The placement of your Wi-Fi source is the key to ensuring both coverage and speed for your devices. For the best test results, make sure you test from multiple locations.