

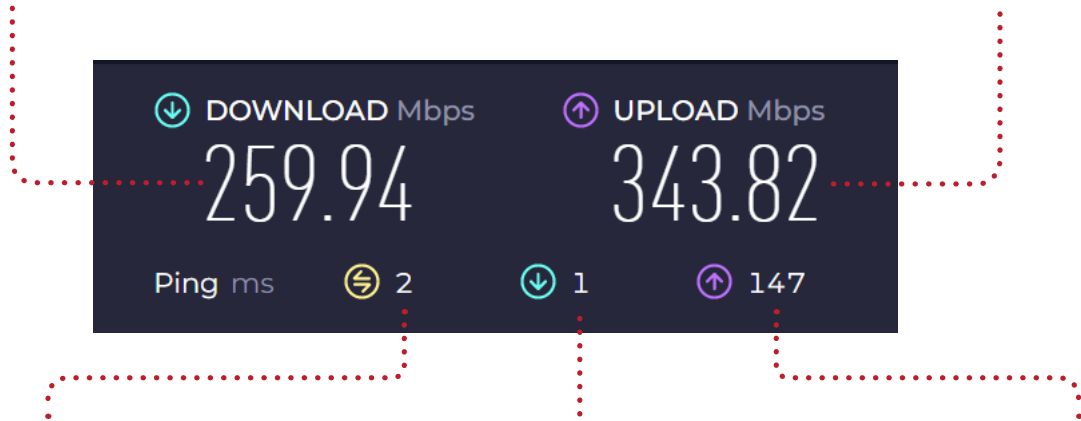
Ookla Speed Test

The speed test is most useful as a quick indicator of your internet connection's current performance but can also be used to help identify any network issues you may be having.

What do these numbers mean:

Download speed: The rate that data is transferred from the internet to your device. Megabits per second (Mbps).

Upload speed: The rate that data is transferred from your device to the internet. Megabits per second (Mbps)



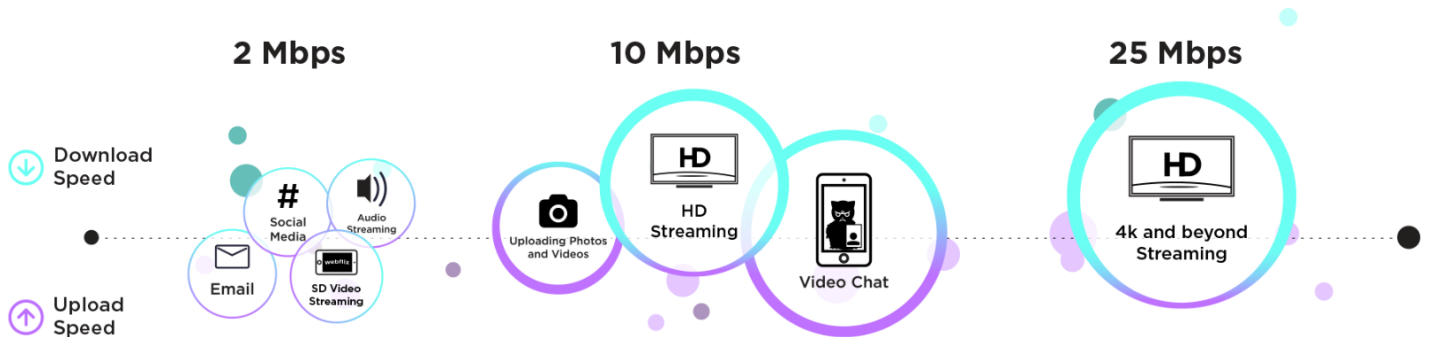
Idle Ping (or Latency): This test at the beginning of your Speedtest measures the response of a request on your network as if it is not in use. This is measured in milliseconds (ms).

Download Latency: is measured while the download test is in progress to see how it is affected by download activity on your network. **Example:** like a household member downloading a large file while you're trying to work. This is measured in milliseconds (ms).

Upload Latency: Latency is also measured while the upload test is in progress to see how it is affected by upload activity on your network, **Example:** like someone on your home network uploading a year's worth of photos while you're trying to work. This is measured in milliseconds (ms).

What is a good speed in ?:

Depending on what you are doing, you generally want to download speeds at least as fast as the following: .



What speeds do I need for large files?:

You can transfer large files at any speed; it's more a question of how long that transfer will take. Here are a couple of tables to help you out:

Data transferred per hour

Transfer speed (Mbps)	Megabytes	Gigabytes
1.5	675	0.675
5	2,250	2.25
10	4,500	4.5
20	9,000	9
50	22,500	22.5
100	45,000	45
250	112,500	112.5
500	225,000	225
1,000	450,000	450

Time to transfer 1GB file

Transfer speed (Mbps)	Theoretical time (Seconds)
1.5	5,333
5	1,600
10	800
20	400
50	160
100	80
250	32
500	16
1,000	8

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What speeds do I need for videoconferencing?:

The following are recommended bandwidth requirements for zoom and microsoft teams:



For 1:1 video calling:

For 720p HD video: 1.2Mbps (up/down)

For 1080p HD video: 3.8Mbps/3.0Mbps (up/down)

For group video calling:

For 720p HD video: 2.6Mbps/1.8Mbps (up/down)

For 1080p HD video: 3.8Mbps/3.0Mbps (up/down)



Microsoft Teams

For 1:1 video calling:

For 1080p HD video: 4.0Mbps/4.0Mbps (up/down)

For group video calling:

For 1080p HD video: 4.0Mbps/4.0Mbps (up/down)

Factors that impact your speed test results:

Please note: Your maximum internet connection speed can be affected by several factors, including, but not limited to:

- The age and specifications of your devices, such as your phone, laptop, and any adapters and dongles you might be using
- The type of connection between your device and the router (e.g., Ethernet, Wi-Fi) you are using
- The processing abilities of your devices (PC/laptop, tablet, smartphones, etc.)
- The number of devices on your network and what they're using the internet for, as internet speeds are shared among all devices.
- The Internet service plan to which you are subscribed

These are only a few of the many reasons why one's Internet connection often does not achieve the theoretical maximum speed. Generally, Ethernet connections are faster and more reliable than Wi-Fi connections so, if possible, use that method of connection and a device supporting the maximum performance of your Internet service plan for the best results. Remember, too, that some websites you visit may have slowness issues on their end, unrelated to your internet speed.