

# TECH LINK

## What Affects Your Wi-Fi Connection?

Getting fast, reliable Wi-Fi in our home networks is essential. We connect more devices than ever to Wi-Fi and use them 24/7 for everything from video streaming and social media sharing to home automation and monitoring. But sometimes it seems like we're not getting the speeds we should be, such as when it takes forever to upload our holiday photos to a photo sharing site, or when Netflix freezes just when we're getting to the best part of the movie. And while it's possible that there's something wrong with your Wi-Fi setup or your Internet connection, there are other factors you should consider first before calling your service provider.

1. The first thing to understand about Internet speeds is that certain minimum speeds are needed to enjoy different types of online activities. Video streaming is the best example of this. The better the video quality, the faster your Internet speed needs to be to enjoy it. Streaming companies typically publish minimum speeds for the different levels of video quality: standard definition (SD), high definition (HD) and ultra-high-definition/4K. Netflix suggests a 3 Mbps service for standard streaming, 5 Mbps for HD and 25 Mbps for 4K.

If you're concerned about your Internet service or speeds, make sure you purchased an Internet package that's fast enough to meet your needs. MVlink users can easily increase their speeds with a simple request - call 800-927-6068 to learn more.



2. Next, make sure the device you're using is capable of supporting the speeds being provided by your service provider. For example, Apple and Android-based smart phones and tablets have maximum Wi-Fi speeds they are capable of supporting. If you connect using a smart phone that's more than three years old, you may not experience the speeds you expect. There are too many devices to provide a comprehensive list here, but the first thing you should do is determine which Wi-Fi standard your device supports. See the list below to compare your device standards with maximum speeds.

3. Another factor that could affect your speed is your router, especially if it is three or more years old. The Wi-Fi industry is constantly updating its technology to provide users with better performance. According to Juniper Networks, below is a list of maximum speeds supported by current Wi-Fi standards, assuming ideal network conditions:

- 802.11b – 11 Mbps
- 802.11a/g – 54 Mbps
- 802.11n – 150 Mbps
- 802.11ac – 866.7 Mbps
- 802.11ax (Wi-Fi 6) – 2+ Gbps

4. Lastly, Wi-Fi signals are also affected by a device's distance from the Wi-Fi router as well as any obstacles in your home (e.g., cabinets, large mirrors and concrete walls). Signals cannot go around objects. Your connection quality may also be impacted by other devices in your home that transmit wireless signals (e.g., baby monitors, cordless phones, etc.). Every home is unique and members have different devices connecting, so no situation is exactly the same.

