

# Understanding Your WiFi Speeds and How They're Used

Ever wonder about the capability of your home WiFi network? How much speed do you need? Are you getting the speed you're paying for? These are all important questions to ask, and we're here to help answer your questions. Many factors contribute to WiFi speeds and how your devices utilize WiFi.

## Understanding Bandwidth (Home Network Speeds vs. Wireless Speeds)

Your internet speed over WiFi will not be identical to the speed you subscribe to. The speed you subscribe to is also known as your home network speed. In reality, the internet speed over WiFi will rarely match the subscribed home network speed, due to the nature of WiFi technology. If you want to determine if you are receiving your subscribed internet speed, you must perform the speed test while the device is hard-wired to your home network.



**When you are testing your WiFi speeds, you are really testing the MAXIMUM speed that the device running the test can attain, not the maximum that your home network provides.**

## Understanding WiFi Usage on a Wireless Device

The Internet speed any particular device connected to your home network achieves is limited by that device's capability; it is not a reflection of the speed of your entire home network. For example, customers with 500 Mbps or 1 Gig service will only achieve this speed if the device they are using has the ability to attain those speeds. In fact, most devices in one's home – laptops, smartphones, smart TV's, gaming consoles, etc. are designed to only use a portion of that speed. And... that's OK! Internet speed is not about what one device does on its own; it is about the power that internet speed has to drive optimal performance on the multiple devices that are connected to your home network.

## What is the advantage of getting speeds like 500 Mbps, 600Mbps or 1 Gig?

Imagine your internet service is like a generator, powering all your connected devices in home. In this case, the "generator" is your 1 Gig internet service. Every device and user utilizing your home network takes a piece of the generator's bandwidth. The number of devices and users, and the activities they do online factor into how much bandwidth is needed to run your connected devices optimally. Although a single device may not be able to use the whole 1 Gig internet service provided, the entirety of the home network can.

This is similar to how a small generator may only be able to power a refrigerator, while a large generator may be able to power the refrigerator, an air conditioner unit, and lighting throughout a home. Similar to power and generators, the higher the home network speed, the more the connected devices within the home are optimally supported.



## Testing Your True WiFi Speeds & Usage

Although a speed test is a great resource, we encourage you to take advantage of our HomePass App to truly understand the speeds and bandwidth your devices are using. This will provide an accurate representation of your WiFi usage and help you optimize your network. For more information, visit [bluestreamfiber.com/managed-wifi](https://bluestreamfiber.com/managed-wifi).