# How to Choose Between 2.4G and 5G When Connecting To Your WiFi

Why the Frequency Band, Your Devices and Speed Connection Impact Your Wireles Experience

When logging into your WiFi network, you'll notice two options available. You'll find a 2.4ghz option and a 5.0ghz option. These are two different frequency bands on your home network and have two different benefits for use depending on what you'd like to do on the internet. **Let's break it down:** 

#### 2.4ghz Band

This band is the one that should be used if you need further range when you are not in the same room as the modem or router. Sitting out on your patio or having a fire in the back yard? Buzzing around the house to take care of the kids? You'll want to connect to this band.

Keep in mind, the range and mobility of this connection type does come at a compromise when it comes to speed. On the 2.4ghz connection, you'll be able to pull 70-80mbps max. What does that mean as far as what you can do on your device? Can you shop? Can you send email? Can you stream? Don't worry we'll get there.

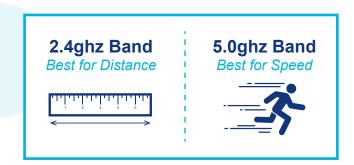
Let's talk about how many devices can connect on this band. On the 2.4ghz band, you can connect up to 11 devices depending on the bandwidth usage of the device. However, each device can use different amounts of bandwidth so we don't advise connecting 11 devices at once as speed and performance can suffer.

### 5.0ghz Band

This is the band for speed. Remember, for what you gain in speed, range is reduced. It is not meant to roam around the house, so stay in the room when connected to this frequency band.

Within this band there are 45 channels in which your wireless devices send and receive data, meaning you could have up to 45 devices on this one band. Again, this is not recommended.

Note that for the 5.0ghz band not all devices will be able to see this band. If your device is over 2-3 years old, you may not be able to utilize this band. Search for your device specifications online to determine if it is capable of identifying the 5.0ghz band.



# **Band and Speed Connection**

These channels also depend upon the speed connection that you have fed into your home. You may have 45 channels on your frequency, however, they are not all going to run at the speed you have purchased.

For example, a device that requires a lot of speed and bandwidth may need to operate on multiple channels. When you have a lot of devices connected on certain bands, they are all competing to use the channels that are available.



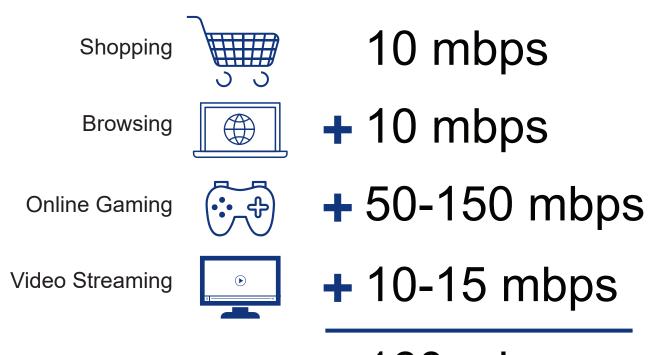


# How Different Wireless Activities Affect Your WiFi Experience



## Here's a Common Scenario That Impacts Wireless Speed:

You have just purchased a 100mbps connection package with Astrea. One evening, you are shopping on your laptop while streaming your favorite show from Netflix on your smart TV. One of your kids is doing homework online and your spouse is playing Xbox. You begin to notice some buffering while watching your favorite show. Here's how that all adds up:



Totaling Around: 160 mbps

Just these four common activities being done at the same time will potentially result in buffering, slow page loading and poor experience for you. If you find this frequently happens in your home, you may need to upgrade your speed package to better suit your needs.

Take a look at our Speed Guide to help you find the speed package that's best for you!

Download the Speed Guide