



FAQ: Wi-Fi

Devices for Internet and Wi-Fi:

Velocity Broadband will provide a "gateway" device called an **Optical Network Terminal (ONT)**. The ONT connects to the physical fiber line from outside to provide Internet to your home. Because this is a combo device, it also broadcasts Wi-Fi from the front of the device outward.

However, if your home is large or has barriers for Wi-Fi, another device will be placed in the home, a **Mesh unit** - this is a satellite device to the ONT and it is placed in your home where the Wi-Fi signal is weakest to "mesh" the whole home in Wi-Fi coverage. You can have multiple mesh units.

Wi-Fi Traffic - Band Steering:

Imagine a single lane highway that carries all the traffic both in to, and out of, a town. If it's a fair-sized town, that road could get pretty congested at times, and vehicles traveling on it can interfere with each other.

Now imagine if that same road was widened into two lanes. Congestion would be halved, and it would be able to carry twice as much traffic.

Wi-Fi is a lot like that.

In the beginning, there was only one Wi-Fi frequency: 2.4 GHz—a single road. As Wi-Fi became more popular, the 5 GHz band was introduced, doubling the amount of traffic a Wi-Fi network can handle.

Older devices can still only operate on the 2.4 GHz band, but newer ones can operate on both.

Why is a speed test not showing the speed I pay for?

In order to run a speed test against what you are paying for the speed test needs to be run directly from the ONT by connecting your device directly to it with an Ethernet cord and using this speed test:

<http://crowncastle.speedtestcustom.com/>





Why are my speed tests slower when I'm on Wi-Fi? Your testing speeds over Wi-Fi are impacted by many things, consider the following:

- What is the maximum speed the device you're using will support?
- Is there a chance you have a virus or malware on your device?
- Do you have other things running on your device when you're running the speed test?
- And finally - how far are you from the wireless signal? Do you have a full signal?

All of these things may cause slower speed test results over Wi-Fi.

Why can't I get a good signal in different rooms?

The wireless radios in your ONT/gateway push service out from the device. Think about it like a speaker, the further you get away, the softer the sound is. Your Wi-Fi works the same way. The further away you get, the weaker the signal. **The three main causes of Wi-Fi interferences are:**

- Your ONT or mesh unit is located near walls made from concrete or brick, these materials can block some — or all — of your Wi-Fi signal.
- Metal surfaces can also weaken your Wi-Fi signal, so placing your mesh unit in a kitchen or laundry room that has a lot of metal appliances is not a good idea either.
- One of the most obstructive materials for Wi-Fi signal is a mirror. A sizeable mirror near your Wi-Fi router or mesh unit, can negatively impact Wi-Fi performance.
- Interference from other electronic devices, like baby monitors, Bluetooth devices, microwave ovens, and cordless phones — may share the same frequency as your Wi-Fi router.
- Other Wi-Fi routers located nearby. There's a good chance that one or more of your neighbors has a Wi-Fi router that operates on the same frequency as yours. The signal coming from your neighbor's router may be interfering with the signal from your router.