

# 5G Frequently Asked Questions

# What is 5G and why is everyone talking about it? Will 5G really matter to me?

A: 5G stands for "5th Generation of cellular standards." The eagerly anticipated arrival of the 5G network revolves around its performance enhancements over 4G LTE. With a data speed of 20Gbps peak / 1 Gbps average, 5G will provide fiber-like speed over a cellular connection, lower latency for the real-time response necessary for Al and VR applications, and the connection density to meet the massive demand for the IoT.

# When will I be available to purchase a 5G booster from Wilson Electronics?

**A:** Currently, consumer cell signal boosters are only allowed to operate on certain existing sets of

frequency or bands. Before anyone can introduce a true 5G booster to the market, their products must have IC approval to operate on the new FR1 and FR2 bands specified for 5G service. Starting in 2016, Wilson Electronics led the industry by petitioning the IC for new frequency bands on the 5G spectrum.

Years later, we're still working closely with the IC, network operators, and other industry stakeholders to determine which new bands can be used, complete any necessary impact studies, and finalize specification details. Once the IC gives its approval for a true 5G booster, we will be among the first to offer it to consumers.

## Do your cell signal boosters work with 5G?

**A:** Our boosters support today's carrier aggregation efforts, which others misleadingly refer to as 5G. At Wilson Electronics, we refer to this as enhanced 4G LTE. Once IC approvals are in place, we will be able to offer boosters that work with 5G.

## If 5G isn't defined yet, why are some cell carriers coming out with 5G phones, and why are some of your competitors already claiming to have a 5G booster on the market?

**A:** In a competitive environment, it's only natural for carriers want to be first to market. Some will stretch the boundaries in order to make that claim. Yet, what is often touted as 5G in marketing campaigns is not true 5G as per industry specifications.

Likewise, no other company is able to offer a true 5G booster to consumers. What our competitor's products are actually boosting is signal on the enhanced 4G LTE network.

To improve performance on the existing 4G LTE network, several operators perform what is called "carrier aggregation." This means combining up to three separate bands all at once in an effort to provide faster data rates. Additionally, some are deploying higher capacity antenna arrays on basestations (referred to as massive MIMO) and going to higher orders of modulation (more bits per MHz). Many will claim these service improvements qualify as 5G, but they're just enhancements to existing 4G LTE network.

## Why do competing boosters work with 5G, while yours don't work with 5G?

A: At this time, no consumer boosters work with 5G. Some of our competitors may claim to work with 5G, but they are actually still just boosting enhanced 4G LTE.

#### If I buy one of your boosters today, will it still work in the future?

A: Since mobile carriers are planning to use the existing 4G LTE networks to carry the majority of cell service to consumers well into 2030, our current boosters will continue to work for years to come. The 5G network is being built alongside today's 4G LTE network and will rely on the 4G LTE network as part of its failover or redundancy plan. The first priority of 5G will be for its use as a replacement for fixed wireline service.

### When 5G becomes the standard, will I have to replace all my old Wilson hardware?

A:: Once 5G networks become the standard, then additional hardware will be required. That being said, the 4G LTE network will be in use by the majority of cell users (and will serve as the failover or redundancy plan for the 5G network) well into 2030. The new bands designated for use by 5G are not currently approved by the IC. Once they are, Wilson Electronics will offer a 5G signal booster solution. In the meantime, if your voice and data connectivity is weak on the existing 4G LTE network, our products will continue to provide you with better connectivity for the next several years.



