

TECHNOLOGY PRIMER

The Difference Between 4G and 5G Spectrum



The key difference between 4G and 5G spectrum is speed plus capacity.

The faster speed of 5G is possible because 5G networks are built on super-high-frequency airwaves, also known as high-band spectrum which can transmit a lot more data, a lot faster than 4G networks. 5G is akin to instantly adding multiple, high-speed express lanes onto highways for more cars to move much faster and eliminating traffic jams (the dreaded latency and lag time).

The cellular infrastructure that enables wireless communications gets upgraded approximately every ten years. Just as 4G augmented and replaced the now nearly obsolete 3G spectrum, 5G is quickly augmenting and replacing 4G across the United States and around the world. 5G is a global and open standard spectrum to ensure that devices and networks will work together regardless of location or 5G-enabled device.

As 5G-enabled devices become more widely adopted and more 5G spectrum becomes available, people will use a mix of both 4G and 5G. When close to a 5G tower, 5G devices will access the superfast, high-capacity network and when not close, devices will revert to running on 4G.

That's why the rapid expansion of 5G infrastructure is critical so regulators and providers can quickly assign as much contiguous 5G spectrum as possible as the network is built. More spectrum will be needed to maintain the superior 5G speed and capacity to meet the growing demand and ensure a more reliable, more expansive, more unified network to accommodate more users and more robust applications.

This is where SecureAxxess comes in.

SecureAxxess owns, manages, and leases the rights to 3.65 - 3.70 GHz range of the 5G spectrum in the continental United States. We're taking fast, reliable, secure 5G connectivity to urban, rural, and tribal locations nationwide, to help close the digital divide.

From small business networks to the largest nationwide carriers such as Verizon, AT&T, and T-Mobile, we provide high-speed, secure connectivity and reliable high-capacity internet to all users including recreational, academic, business, medical, and first responders.

For more critical data, SecureAxxess provides secure Blockchained Bandwidth as a Service (BBaaS) and authenticated NFTs to increase the privacy, security, and the traceability of data shared across the network — delivering cost savings, enhanced efficiencies, and superior data protection. Faster speeds, higher performance, and greater capacity empower new user experiences and connects new industries. With faster data transfer rates, protected, and more efficient spectrum usage, 5G is already transforming our modern way of life.