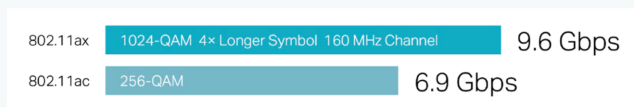


WHAT IS WI-FI 6?

Wi-Fi 6 is the next generation standard in WiFi technology. Wi-Fi 6 also known as "AX WiFi" or "802.11ax WiFi" builds and improves on the current WiFi 5 standard (802.11ac). Wi-Fi 6 was originally built in response to the growing number of devices in the world and designed to improve speed, increase efficiency and reduce congestion in heavy bandwidth usage scenarios. If you have multiple smart home devices, or simply have a large number of devices in your household, then a Wi-Fi 6 set-up might just be the best WiFi set-up for you.

Explosively Fast WiFi up to 9.6 Gbps

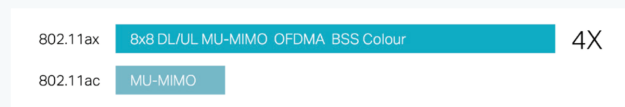
Ultra-Smooth Streaming



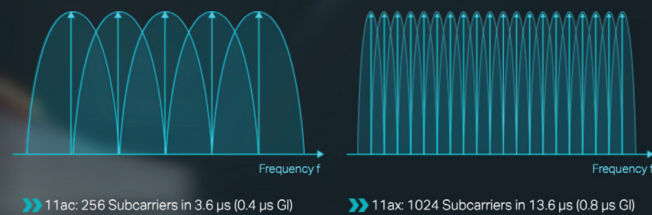
Wi-Fi 6 uses both 1024-QAM to provide a signal packed with more data (giving you more efficiency) and a 160 MHz Channel to provide a wider channel to make your WiFi faster. Experience stutter-free VR or enjoy stunningly vivid 4K and even 8K streaming.

4x More Capacity for More Devices

Ideal for Crowded Networks



Wi-Fi 6 uses 8x8 uplink/downlink, MU-MIMO, OFDMA, and BSS Colour to provide up to 4x larger capacity and to handle more devices. Come home to a virtually flawless smart home experience or throw house parties with a network built to handle all your guests and their devices.



	802.11ac (Wi-Fi 5)	802.11ax (Wi-Fi 6)
Number of Data Subcarriers	234	980
Symbol Duration(μ s)	3.6 (3.2 symbol + 0.4 GI)	13.6 (12.8 symbol + 0.8 GI)
Valid Data Subcarriers Rate	65	72.05882
Improvement		1.108597

* One Symbol, 80 MHz Channel

More Speed and Greater Stability

4x Longer OFDM Symbol

OFDM is a symbol that transmits data. It divides its data among smaller sub carriers for more stability and wider coverage. AX WiFi uses a 4x longer OFDM symbol to create 4x more sub carriers. Because of this, Wi-Fi 6's longer OFDM symbol provides increased coverage and makes it 11% faster. Enjoy rock solid coverage from your garage to the second story and get ultra-fast connections for all your smart home, mobile, gaming and desktop devices in between.

Increased Efficiency with OFDMA - Make Latency A Thing of The Past

The Wi-Fi 6 standard uses OFDMA for increased efficiency. Imagine your WiFi connection as a series of delivery trucks delivering data packets to your devices. With 802.11ac WiFi, each delivery truck or "packet" could only deliver one parcel to one device at a time. But with OFDMA, each truck can deliver multiple parcels to multiple devices simultaneously. This vast improvement in efficiency works for both uploads and downloads.

● Figure below shows the working scenario of only one antenna.



Connect to More Devices Simultaneously - With 8 x 8 MU-MIMO

With traditional MU-MIMO, multiple users can access the router simultaneously without any noticeable decreases in bandwidth quality—up to a point. However, with 8 x 8 MU-MIMO, more than 8 streams are available for users to choose from. And whereas 802.11ac MU-MIMO only works for downloads, 8 x 8 MU-MIMO works with both uploads and downloads. This means that whether you're streaming, downloading, torrenting, playing VR/AR, MMO's or RPG's; with Wi-Fi 6's 8 streams, there's more than enough bandwidth for everyone.

