Optico Fiber WiFi6 Explaned

OpticoFiber's WiFi is about to get faster. OpticoFiber is introducing WiFi 6, a more capable technology that is ideal for MultiGigabit networks.

Wi-Fi 6 is designed to have higher data rates, increased capacity, enhanced performance in dense environments, and improved power efficiency. Operating on the same 2.4 GHz and 5 GHz band as Wi-Fi 5, Wi-Fi 6 is rated in theory to support transfer speeds of up to 10 Gb/s.

One of the biggest issues with previous generations of Wi-Fi was congestion. The average household has over 20 connected devices, which generate interference with each other. When you include interference from the neighbor's WiFi signals and devices, it leads to poor performance. WiFi 6 is more capable to deal with interference.

How fast is it?
The short but incomplete answer: 9.6 Gbps. That's up from 3.5 Gbps on WiFi 5.

The real answer: both of those speeds are theoretical maximums that you're unlikely to ever reach in real-world Wi-Fi use. And even if you could reach those speeds, it's not clear that you'd need them.

But the fact that Wi-Fi 6 has a much higher theoretical speed limit than its predecessor is still important. That 9.6 Gbps doesn't have to go to a single computer. It can be split up across a whole network of devices. That means more potential speed for each device. Wi-Fi 6 isn't about top speeds, instead of boosting the speed for individual devices, Wi-Fi 6 is all about improving the network when a bunch of devices are connected.

Okay, so how fast is each device?
Unfortunately, there's no easy answer here. Initially, Wi-Fi 6 connections aren't likely to be substantially faster. A single Wi-Fi 6 laptop connected to a Wi-Fi 6 Network Box may only be slightly faster than a single Wi-Fi 5 laptop connected to a Wi-Fi 5 Network Box.

The story starts to change as more and more devices get added onto your network. Where current Access Points might start to get overwhelmed by requests from a multitude of devices, Wi-Fi 6 Access Points are designed to more effectively keep all those devices up to date with the data they need.

Each of those devices' speeds won't necessarily be faster than what they can reach today on a high quality network, but they're more likely to maintain those top speeds even in busier environments. You can imagine this being useful in a home where one person is streaming Netflix, another is playing a game, someone else is video chatting, and a whole bunch of smart gadgets — a door lock, temperature sensors, light switches, and so on — are all checking in at once.

Are there any other benefits to Wi-Fi 6?
Yes, much better security and power consumption. WiFi 6 has introduced WPA3 protocol that makes it harder for hackers to crack your wireless password. Devices with WiFi 6 such as many laptops or tablets can improve their battery life. This is because of a feature called Target Wake Time, which allows Network Boxes to pre-schedule check in times with the devices. Some devices will take more advantage of this new feature than others.