

Why can't a 300Mbps fiber optic connection reach its full speed even with a gigabit router



Overview

The most overlooked cause of broadband speed loss is sitting right between your router and your device: the Ethernet cable. If you're using an old CAT5 cable (not CAT5e), it physically maxes out at 100 Mbps. This is a hard hardware limit — no amount of router upgrading. Signal rate (the Mbps figure advertised on the router) refers to the maximum wireless link speed between the router and a connected device — not the internet speed delivered by your ISP. Internet speed is limited by the slowest point in the network path, including the ISP connection, WAN port. For a complete overview of routers that won't bottleneck your connection, check COMFAST's router lineup. CAT5 Cable Bottleneck — Your Ethernet Cable Is the Silent Throttle 2. ISP Throttling Issue — Is Your Provider Limiting Your Speed?

Many factors beyond the fiber optic cable itself can impact speeds, making troubleshooting essential to unlocking the true potential of your internet connection. But what. If you use a router that's capable of more speed than your Internet connection and you still aren't getting the full speed that your ISP provides, you might have one of the following problems: WiFi (wireless) and Ethernet (wired) connection standards evolve over time to support faster data transfer. In 2025, advertised speeds for fiber plans commonly range from 100 Mbps to over 2 Gbps (Gigabits per second), with symmetrical upload and download speeds being a significant advantage. However, the speed you experience at your device can be influenced by numerous factors, and advertised speeds are. Users pay high in exchange for high speed fiber internet, but many still face issues, including bufferin...

Article Content

Why do I only get 300-400 Mbit/s on my 1000 Mbit/s network?

My setup is like this: Laptop <--> Router <--> Desktop They all support gigabit Ethernet. I'm using the "iperf" TCP/IP

Gigabit Internet only going to 200 -300 mbps. : r/Spectrum

Hello, I recently purchased the gigabit plan through spectrum and I have been getting nowhere near the advertised speed of 940

Why is my fiber internet so slow?

Several factors can contribute to your fiber internet not performing at its peak. Identifying the root cause is the first

Why Is My Fiber Internet Slow?

By understanding the various factors that can impact your fiber internet speed and following the troubleshooting steps

1 Gigabit internet only getting 300-400 down and 800+ upload speed ...

So I have recently got fiber internet 1 Gigabit. The problem is that even after setting up Duplexing in the device drivers

Why Am I Not Getting My Full Internet Speed on Fiber?

Despite the fact that fiber is amazingly fast, it's not necessarily delivering the Internet speed it promises. Check out the

Paying for 1000mbps, but getting 300mbps

Hello! Recently I posted a thread wondering why my download speed only goes to like 30mbps with 1gbit internet. I

New gigabit internet

This is also very inconsistent, sometimes it hits 300, sometimes 50. I've already tried a different modem, router (both

Why Is My Gigabit Internet Only Running at 300Mbps?

Why Is My Gigabit Internet Only Running at 300Mbps? You signed up for gigabit internet. You pay for 1000 Mbps.

Why am I not getting the maximum speed that my router is capable of ...

Even if your router supports faster speeds over Ethernet or WiFi, it can't exceed your Internet speed. However,

Even the very fastest router cpu will still have issues even keeping up with your "slow" 300mbps connection. To solve

You Have a 500Mbps Fibre Connection, So Why Does a Laptop with a ...

Learn why your Gigabit laptop only gets 300Mbps on a 500Mbps fibre connection. Uncover Wi-Fi, cable, router, and

Troubleshooting Slow Fiber Speeds Over Ethernet – Sonic

This article will help you troubleshoot slow speeds over Ethernet and provide additional information about the benefits of using

Why Am I Not Getting the Advertised Speed?

Fiber internet slow? Learn common causes of speed issues, like Wi-Fi setup, devices, or equipment, and how to fix

Why Is My 1 Gbps Internet Only 200–300 Mbps on Ethernet?

On a 1 Gbps plan but only getting 200–300 Mbps over Ethernet? Learn the real bottlenecks—cables, ports, settings,

TP-Link Router Internet Speed: Mbps and Wi-Fi FAQs

This page covers the most common questions about TP-Link router speed, including how signal rate and link speed

Why Your High Speed Fiber Internet Still Feels Slow at Home

Paying for high speed fiber internet but still buffering? Learn why your WiFi lags, what affects real speeds, and how to fix it for a

Why Does My Internet Speed Fluctuate? Causes & Fixes

Learn why your internet speed fluctuates and how to fix it. Tips on routers, ISPs, and troubleshooting for a stable

Have AT& T Fiber 1000, but only getting around 300 down. Any ...

Your router might be doing some sort of port based QOS without you even being able to change settings for it. If you get full speeds

Why is my Ethernet limited to 100Mbps while my Wi-Fi is 300Mbps?

I just switched Internet Service Providers from one that offered 300Mbps fiber to another, and I'm facing an issue.

How fast should I expect my wifi to be with gig internet? Is gig speed ...

I can get 300mbps or for just ten dollars more get the full gig. I do not use wired internet and only use it through wifi. In short, I am an

Question

Here is the information: Internet Provider: Optimum System: PC Connection: Wi-Fi
Network Card: Intel(R) Wi-Fi 6

Why Your 1 Gbps Internet Plan Doesn't Deliver 1 Gbps:

Learn why your gigabit internet plan rarely delivers the full promised speed.
Understand oversubscription, peak hours,

What's a Good Internet Speed? Find Out How Many Mbps You Need

In this guide, we explain how much internet speed you need for your favorite online tasks, like streaming and gaming.

Why Is My Gigabit Internet Only Running at 300Mbps?

Gigabit internet running at 300 Mbps is almost always caused by one of five issues:
an old Ethernet cable, a router

I pay for gigabit speed, but have been getting 300mbps. I was ...

39 votes, 64 comments. true Gig speeds can't be done over WiFi, you'll see 600-650
max. Hardline is the best option. If you have a

300+mbps internet, only getting ~100 with ethernet adapter

I've been having some problems as of late regarding my internet connection only
allowing me to use ~100mbps when

Contact Us

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