Can a 100Mbps router be used with a 100Mbps fiber optic cable



Overview

A router with a 100Mbps WAN port cannot deliver more than 100Mbps of internet speed, regardless of its wireless signal rate.

Key Takeaways

Yes, a 100Mbps router can be connected to a 100Mbps fiber optic connection, but it will limit your network to Fast Ethernet speeds.

Compatibility Overview

A 100Mbps router is fully compatible with a 100Mbps fiber optic service because both operate at the same Fast Ethernet speed (100Mbps) using standard Ethernet connections. Fiber optic internet typically terminates at an Optical Network Terminal (ONT), which converts light signals from the fiber into electrical Ethernet signals.

From the ON

T, an Ethernet cable connects to your router's WAN port, allowing the router to distribute the connection to your devices.

Performance Considerations



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While the connection will work, a 100Mbps router cannot exceed 100Mbps, even if your fiber service is capable of higher speeds. This means: If your ISP provides speeds above 100Mbps, the router will bottleneck the connection, preventing you from taking full advantage of faster fiber plans. For typical 100Mbps fiber service, the router will deliver the full speed to your devices, assuming proper cabling and minimal network congestion.

Fiber connections offer low latency and high reliability, but the router's speed rating determines the maximum throughput for your home network.

When to Consider Upgrading

If you plan to upgrade your fiber service to Gigabit speeds (1Gbps or higher), a 100Mbps router will no longer be sufficient. In that case, a Gigabit router or a router with SFP ports supporting higher-speed fiber transceivers would be necessary to fully utilize the faster connection.

Summary

A 100Mbps router can be used with a 100Mbps fiber optic connection without compatibility issues. The router will limit the network to 100Mbps, which matches the fiber speed in this scenario. For future-proofing or higher-speed fiber plans, consider upgrading to a Gigabit-capable router.

Using a 100Mbps router is suitable for current 100Mbps fiber service, but any speed upgrades beyond this will require a faster router to avoid bottlenecks.

Article Content

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

A router with a 100Mbps WAN port cannot deliver more than 100Mbps of internet speed, regardless of its wireless signal rate. The difference between Mbps and MBps matters: 1 MBps = 8

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Can I use my existing router with fiber?

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Do you need a special router for fiber optic internet?

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What if my Router Speed is capped at 100 Mbps?

If it''s still connected at 100 Mbps, try with another Cat5e/6 cable or change the port of your ISP device, where you''re connecting the TP-Link router (if possible).

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