

Can the router's fiber optic interface be used



Overview

With the launch of the new Wi-Fi 7 products BE800, BE900 or Deco BE85, our home router products now support the high-speed SFP+ interface.

Key Takeaways

Yes, a router can be used with a fiber optic internet connection, but it typically requires an intermediary device like an ONT or a fiber-compatible SFP port.

How It Works

A standard home router cannot directly accept a fiber optic cable because fiber transmits data as light pulses, while routers are designed to handle electrical signals over Ethernet. To bridge this gap, an Optical Network Terminal (ONT) is used.

The ONT

It converts the fiber optic signal into a standard Ethernet signal that your router can process. You then connect the ONT to your router's WAN port using an Ethernet cable, allowing the router to manage your home network just like it would with DSL or cable internet.

Fiber-



Ready Routers

Some modern routers come with SFP or SFP+ ports, which can directly accept fiber modules. These routers can connect to the fiber network without a separate ONT, but the module must be compatible with your ISP's fiber service. SFP+ modules are often hot-swappable and support high-speed connections, making them suitable for multi-gigabit fiber setups.

Practical Considerations

Existing Routers: Most existing routers with a standard WAN Ethernet port can work with fiber if connected to an ONT provided by your ISP. **Performance:** To fully utilize fiber speeds, ensure your router supports gigabit or multi-gigabit throughput. Using an older router may limit your connection speed.

Setup Steps: Connect the fiber cable to the ONT, power it on, then link the ONT to your router via Ethernet. Configure your router with any ISP credentials if required. **Placement and Security:** Position the router centrally for optimal Wi-Fi coverage and enable WPA3 encryption for secure connections.

In summary, while a standard router cannot directly interface with a fiber optic cable, it can be used effectively with fiber internet through an ONT or a fiber-compatible SFP port, allowing you to enjoy high-speed fiber connectivity with your existing or upgraded router.

Article Content

Common Application Scenarios of SFP+ Interface

With the launch of the new Wi-Fi 7 products BE800, BE900 or Deco BE85, our home router products now support the high-speed SFP+ interface.

Common Applications of SFP+ Interface

The SFP+ port is a high-speed optical-to-optical signal conversion port, mainly used for 10G Ethernet and Fiber Channel network applications. A

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Setting up a home fiber network requires an Optical Network Terminal (ONT), provided and installed by your ISP, which converts the fiber-optic light signal into a data signal your router can

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