

Only the switch light on the fiber optic switch is on



Overview

This article provides instructions on how to view the Optical Module Status on your switch through the Command Line Interface (CLI).

Key Takeaways

If only the fiber switch light is on, it usually indicates a physical connection is detected, but the link is not fully operational due to SFP, fiber type, or signal alignment issues. Common Causes SFP Module Mismatch The SFP transceivers on each end must be compatible with each other and the fiber type. For example, a single-mode SFP will not work properly with multi-mode fiber, and vice versa.

Even if the link light is on, data may not pass if the SFPs are incompatible or not supported by the switch hardware. Fiber Cabling Issues Fiber requires two cores: one for transmit (TX) and one for receive (RX). If the fibers are not correctly crossed, the link may show a light but fail to transmit data.

Physical damage, bends, or dirty connectors can also cause signal loss.

Hardware or LED Faults Sometimes the LE

D itself may be faulty, giving a false indication of a link. Testing with a loopback patch or swapping the SFP can help verify this. Configuration or Speed Mismatch The switch and SFP must support the same speed and duplex settings.

Mismatched configurations can prevent the link from becoming fully operational even if the light is on.

Recommended Troubleshooting Steps

Verify SFP

Compatibility Check the Cisco Optics-to-Device Compatibility Matrix or use commands like `show idprom interface` to confirm the SFP model and type match the switch and fiber type. Inspect and Clean Fiber Connections Examine the fiber for bends, breaks, or contamination. Clean connectors with lint-free wipes and isopropyl alcohol to ensure proper signal transmission.

Check Fiber Polarity Ensure TX

TX on one end connects to RX on the other. If unsure, try swapping the fiber ends or using a loopback test on the media converter. Test with Known-Good Components Swap SFPs, patch cables, or media converters with known working units to isolate the faulty component.

Monitor Optical Signal Levels Use CL

CLI commands like `show fiber-ports-optical-transceiver` to check transmitted and received optical power. Loss of signal (LOS) indicates a problem with the fiber or transceiver. Restart Devices Reboot switches or media converters to clear temporary glitches that may prevent the link from establishing.

By systematically checking SFP compatibility, fiber integrity, polarity, and signal levels, you can identify why the link light is on but the connection is not functional.

Article Content

View the Optical Module Status on a Switch through the Command

This article provides instructions on how to view the Optical Module Status on your switch through the Command Line Interface (CLI). The Cisco Small Business Series Switches allow you to plug in a

Fiber Network Troubleshooting – Common Issues & Fixes

Learn how to troubleshoot fiber networks. Identify common issues like high loss, dirty connectors, and signal drops, with practical solutions for optical links.

Why Your Fiber Link is Dead: The 2-Minute Fix for Polarity & Tx/Rx ...

Confused why your fiber links between switches won't come up? Learn the dead-simple truth about fiber polarity, Tx/Rx, and why just flipping the cable usually fixes everything. Perfect for

Fibre link only on one side

When I connect the fibre, the 9-port switch shows the fibre link light with the up and down arrows, but the media converter in the other building does not show a fibre link.

Lights on SFP on one side but not the other? : r/networking

Are you saying that the switch/transceiver reports that it is receiving light on the fiber being used for Rx? If light is getting from A to B on one fiber but not the other, it's very possible you have a dirt, dust, or

Fiber Network Troubleshooting Guide: Common Issues and Solutions

Fiber optic networks are celebrated for their speed and reliability, but even the best systems can encounter problems. When issues like signal loss, slow speeds, or intermittent

Troubleshooting Fiber

By comparing the loss of the link to the requirements of the technology, you can determine whether or not the fiber link is the source of a problem. They can also be used to verify, output power from a

Lights on SFP on one side but not the other? : r/networking

Lights on SFP on one side but not the other? I am connecting 2 switches via SMF using SFP transceivers. One switch shows light when I plug in the fiber, but the other side doesn't. This seem to

Blackwire | Audio Video Wholesale Distributor and

Discover premium audio, video, and security products at Blackwire Designs. As a trusted wholesale distributor, we offer rigorously tested, high-quality items

WordHTML

WordHTML - Online Converter, Editor and Cleaner Free online Word to HTML converter with built-in code cleaning features. Open, edit and save Word

Troubleshooting Fiber Cables : r/networking

There is a single mode optical fiber cable in our datacenter going from a Cisco N5K to another N5K across different racks. The link appears to be dead and I'm hoping to fix it, but I have little to no

Fibre link only on one side

I'm experiencing issues with the fibre link between two buildings. On one side, I have a UMC-GA1f2T media converter using an SFP1G-SX-85 module. The other building has a VSETH

What Is Fiber Optic Cable?

A fiber optic cable is a long-distance network telecommunications cable made from strands of glass fibers that uses pulses of light to transfer data.

Fibre link shows "Connected" at one end but "Not connected" at the ...

The SFP on the 2960 has flashing link lights and shows as connected [line protocol is up, and "show interface gi0/1" command shows packets being sent but none received], but the interface

Fibre Broadband Deals: Compare in July 2026

Find fibre broadband deals from BT, Sky, Virgin Media, TalkTalk and more. Enjoy super smooth streaming, gaming and downloading with superfast

10gig fiber link between two switches. one switch shows ...

WS-C2960S-48FPD-L). I ordered brand new SFP-10G-LR-AO SFP+ connectors for the fiber uplinks between these two switches. Switch 2 shows a connection AND is lit green, while switch 1 shows no

Fiber-optic Switches

Going beyond ordinary fiber-optic switches are reconfigurable add/drop multiplexers (ROADM), where only light in specific wavelength regions is switched. For general aspects of optical switching, see the

Can't see other switch via Fiber connection

Coming from the main server rack via Cisco 9300, we have a fiber optic cable going to a building across the parking lot to a rack of Cisco 9300 switches. From there, we have another fiber

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: <https://alfa-pro.co.za>

Technical inquiry: <https://alfa-pro.co.za/contact.html>

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

