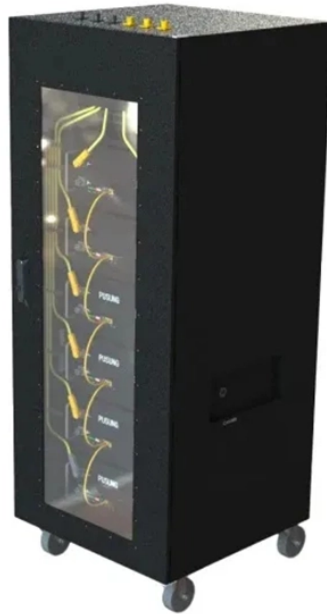


# Data transmission failure on the optical port of the core switch



## Overview

If optical attenuation is normal but the link still fails, check the switch port settings:

- Some switches use combo SFP/RJ45 ports, which require manual optical port configuration.
- Some ports are multi-rate multiplexed (e. In data centers and fiber optic communication networks, the optical links between switches serve as the core channels for data transmission, and their stable connectivity directly determines the operational efficiency and reliability of the entire network. ) Check the configuration, such as auto-negotiation, of the remote port. Take corresponding troubleshooting measures based on.

This document describes how to troubleshoot fiber optic interfaces by addressing some of the fiber optic module and cabling specifications. The information in this document is based on all Catalyst 9000 Series switches. Despite their robust design, these modules can experience failures due to environmental stress, contamination, or incompatibility.

## Data transmission failure on the optical port of the core switch



If the optical power is too low, it will cause the receiving end to receive a weaker signal and affect data transmission. Therefore, adjusting the optical power within a specific range is necessary.



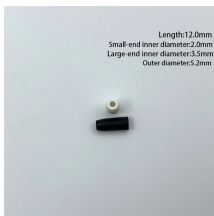
Even when the switch can notify about the violation of these thresholds, this is not always the case, making the problem harder to detect. To circumvent this, creating an Embedded Event ...



In this article, we will focus on teaching you how to troubleshoot and solve the common three categories of optical module failure. First, the transmission class of the optical module fault ...



As an illustration, connect the two 10G SFP+ ports on the switch using a 10G SFP+ DAC cable (or utilize two 10G SFP+ optical modules and a fiber patch cable). If activity is detected in the ...



Based on typical issues encountered with optical modules in daily switch applications, this document summarizes basic troubleshooting steps for resolving common faults:



Form a loop on the port using an optical fiber, and check whether the port can go Up (if optical modules with a long transmission distance are used, use optical attenuators.) Check the configuration, such ...



Learn how to check SFP module health on Cisco switches. This guide covers essential CLI commands (show inventory, DOM), fixes for "unsupported ...



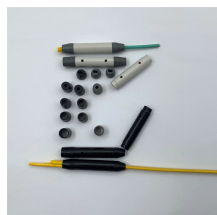
A comprehensive switch troubleshooting from the physical layer to the data link layer to the network layer to find out why your network switch is not working.



Discover the most frequent optical transceiver failures and learn how to diagnose, test, and solve them using proven techniques. Includes expert insights and testing methods for fiber optic ...



Learn how to check SFP module health on Cisco switches. This guide covers essential CLI commands (show inventory, DOM), fixes for "unsupported transceiver" errors, and interpreting optical power levels.



This article will elaborate on the core influencing factors, common causes, and targeted troubleshooting steps of optical link failures between switches, providing practical guidance for operation and ...

## Contact Us

For more information, pricing, or custom data center solutions, please contact us:

Website: <https://www.yoahorroenergia.es>

Email: [hello@yoahorroenergia.es](mailto:hello@yoahorroenergia.es)

Phone: +233 54 318 7269

Address: Plot 28, Spintex Road, Accra, Greater Accra, Ghana

This document is for informational purposes only. Specifications subject to change without notice.

