

Check the optical power of a switch port



Overview

How to Check SFP Optical Power Levels on Cisco Switches Learn how to monitor SFP optical power on Cisco switches, interpret Tx/Rx levels, and troubleshoot.

Key Takeaways

You can check the optical power of SFP ports on a switch using CLI commands to view TX (transmit) and RX (receive) power, typically via Digital Optical Monitoring (DOM) or DDM. Step 1: Verify SFP Recognition

Before checking optical power, ensure the SFP module is recognized by the switch:

- Run show inventory to confirm the SFP is detected, including part number, serial number, and vendor information .
- Check link status with show interfaces status to ensure the port is up and the correct media type is used .

Step 2: Check Optical Power

For Cisco switches, the commands vary by platform: Catalyst / Enterprise Switches:

- Use show interfaces transceiver detail or show interface transceiver detail to display TX and RX power in dBm, along with temperature, voltage, and bias current .
- Example output includes:
 - TX Power: Light leaving the switch (indicates laser health)
 - RX Power: Light received from the remote device (common cause of link issues if low)

- Use `show fiber-ports optical-transceiver` to view optical module status, including transmitted and received power, temperature, voltage, and loss-of-signal (LOS) indicators . Other Platforms (IOS-XR, NX-OS):
 - Commands like `show hw-module subslot transceiver status` or filtering with `| include dB` can display TX/RX power for troubleshooting .
- Step 3: Interpret the Values
- Compare TX and RX readings against the SFP's Low Warn and High Warn thresholds. Deviations may indicate:
 - Misaligned fiber
 - Dirty connectors
 - Failing SFP module
- Typical TX/RX ranges depend on the SFP type (e.g., 1G, 10G) and fiber distance .
- Step 4: Additional Checks
- If the port is err-disabled due to unsupported transceivers, use `no errdisable detect cause gbic-invalid` (with caution) to allow third-party modules .
 - For detailed SFP info, including EEPROM data, run `show idprom interface` or `show idprom transceiver extended` . By following these steps, you can monitor optical power, detect signal degradation early, and troubleshoot fiber link issues without unnecessary hardware replacement.

Article Content

How to Check SFP Optical Power Levels on Cisco Switches

Learn how to monitor SFP optical power on Cisco switches, interpret Tx/Rx levels, and troubleshoot fiber link issues. Step-by-step

How can I see the optical power in a gigabitethernet interface of the ...

Check the SFP you are using. I tried GLC-SX-MMD and I am also unable to see any details when using `show int g0/1`

Checking TX / RX optical power for Cisco IOS, IOS-XR, NX-OS

For checking transmission links, it is good to know how to find out the optical power for troubleshooting and making sure the desired

Mastering Cisco Optics: Understanding TX/RX Light Levels

In this guide, we will explain what optical signal strength is, how to check it on Cisco IOS using the command line, and

How To View Port Status And Optical Module Information On Cisco ...

By reading internal parameters of optical transceivers on switches, users can monitor link status, real-time

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

Cisco Command to Check SFP Module Details

You can review available optical transceiver options, then ask the technical team to verify the switch model, software

How To View Port Status And Optical Module Information On Extreme ...

When optical modules are installed on switches, it is necessary to read internal module parameters to monitor

View the Optical Module Status on a Switch through the

Once the transceiver and fiber optic cable are plugged in properly in the switch optical module, you should be able to view the current

How To View Port Status And Optical Transceiver Information

Run command: get switch modules status It shows real-time DDM values and alarm thresholds. Check TX/RX optical

How to View Optical Module Status on a Cisco Switch via CLI ...

In this Cisco Tech Talk, learn how to view the optical module status on a Cisco switch using the Command Line

How Do I Query the Optical Power of an Interface?

How Do I Query the Optical Power of an Interface? You can run the display interface [interface-type interface-number

How To Check Port Status And Optical Transceiver Information On

When optical transceivers operate on switches, reading internal module parameters helps monitor link status, real

How to Know Optical Power SFP-Detail Link-Details & Port ...

Hello friends,Welcome to Technical HakimIn this tutorial, we will learn how to verify port

Tech Talk - View the Optical Module Status on a Switch with CLI

In this edition of Cisco Tech Talk, I'll show you how to view the optical module status on a switch through the

Solved: Testing fibre cables from a switch

Obtain or borrow a power meter (or second option if available an optical tracer) You can test the fiber by looping it at

Fiber optic cable check command

I know that "show cable-diag tdr int [slot/port]" command can check 10/100/1000 ethernet link. For example WS-X6748

Optical Transceiver Manufacturer,How To Check Optical Module ...

Finally, the networking of Cisco switch needs DAC direct attach cable, AOC active optical cable, optical module and

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