

Article Overview

Huawei optical module transmit power can be monitored and adjusted using system commands, threshold settings, and module replacement if necessary.

Checking Optical Module Power

To monitor the transmit (TX) and receive (RX) power of an optical module on Huawei devices, use the following commands:

- o Display interface information: `display interface` This shows the interface rate, module type, link status, and traffic statistics, which helps identify abnormal conditions .
- o Display transceiver details: `display transceiver interface verbose` This command provides detailed TX and RX optical power readings, wavelength, and module status .
- o For 100GE modules: `display interface 100GE` This shows the optical power for each 25G wave on the interface .

Adjusting Transmit Power

If the TX power is below the acceptable range, follow these steps:

- o Check the current TX power and thresholds: Use `display transceiver slot verbose` to verify if the TX power is within the allowed range .
- o Adjust the lower threshold: If the TX power is within the module's capability but triggers alarms, run: `transceiver diagnosis threshold tx-power` This command allows you to modify the transmit power lower threshold to prevent unnecessary alarms .
- o Replace the optical module: If the TX power remains low after threshold adjustment, the module may be faulty. Replace it with a module of the same type and recheck the power .

Troubleshooting Tips

- o Ensure fiber and module compatibility: single-mode modules with single-mode fiber, multimode with multimode fiber .
- o Avoid using modules with a higher rate than the interface (e.g., 10G module on a 1G port), .
- o Perform a loopback test by connecting the fiber jumper to the same module to check for abnormal conditions .
- o Cover idle optical ports with dust caps to prevent contamination, which can reduce TX power .
- o Collect alarms, logs, and configurations before contacting Huawei technical support if issues persist .

Summary

Huawei settings for optical module power

Monitoring and adjusting Huawei optical module power involves checking TX/RX readings, modifying threshold settings, and replacing faulty modules if necessary. Proper fiber-module compatibility and preventive maintenance, such as dust caps, help maintain optimal optical link performance. Using the commands above ensures accurate diagnostics and effective power adjustment.

If you know the model or type of an optical module, you can view the section "Pluggable Modules for Interfaces" in the Hardware

Possible Causes The optical module installed on the optical interface is not certified for Huawei data center switches.

Procedure Check whether the optical module has been certified for Huawei Ethernet devices. If not, contact the

You can set optical power alarm so that the device generates alarms if the transmit or receive power of an optical module exceeds a

How Do I View the Transmit and Receive Power of an Optical Module? Run the display transceiver verbose command. In the

This article summarizes several solutions for using optical modules with switches and common problems encountered

This page provides a guide on checking the transmit and receive optical power of an optical module for Huawei devices.

Gently push the optical module into the optical port until you hear a click. When inserting an optical module to a port, hold the optical

If non-Huawei-certified optical modules are used, incorrect optical module information may be obtained during the query of optical

If the connected optical modules have the same wavelength and provide short-distance transmission but alarms indicating low or

Check whether the receive power of the optical module is within a usable range. If so, run the transceiver diagnosis

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Procedure Run the `display transceiver interface interface-type interface-number verbose` command to view optical module

Check Optical Module Parameters: If an optical module is installed in a running switch, you can run the `display transceiver` command

Use the command `display transceiver` to view the optical module information of all optical ports, and use the command

Use a dust cap to cover the bores of an idle optical module. If the transmit power of the optical module is still low, install

If the transmit optical power remains low, replace the optical module or install it in another optical interface to check

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