

How to test the optical port on a Huawei switch

Article Overview

Use the display transceiver and display interface commands to view optical module information, diagnostics, and power levels on Huawei switches.

Viewing Optical Module Information

To check the optical port on a Huawei switch, you can use the following commands:

- o Display all optical modules: `display transceiver` This command lists all optical ports and their module types, connector types, wavelengths, transfer distances, and vendor information .
- o Display a specific optical port: `display transceiver interface` Replace and with the actual interface, e.g., GigabitEthernet 0/0/1. This shows detailed information for that port, including digital diagnostic monitoring (DMM) data, vendor, serial number, and manufacturing date .
- o Verbose output for power and diagnostics: `display transceiver [interface ] verbose` This provides receive (RX) and transmit (TX) power levels, voltage, bias current, and alarm thresholds. If the current power is within the limits, the optical module is functioning correctly; otherwise, alarms indicate too high or too low optical power .
- o Diagnostic check: `display transceiver diagnosis interface` This command provides diagnostic parameters to help identify faults in the optical module .

Checking Interface Status

- o Interface overview: `display interface brief` Lists all interfaces with their link status (UP/DOWN), speed, and traffic statistics. A link must be UP for normal optical module operation .
- o Detailed interface check: `display interface` Shows interface rate, module type, link status, and traffic statistics, which can help troubleshoot connectivity issues .

Troubleshooting Tips

- o Verify module certification: Always use Huawei-certified optical modules. Non-certified modules may not be recognized, can cause data bus errors, or damage the interface due to nonstandard sizes .
- o Check optical power: Use the verbose command or an optical power meter to ensure RX and TX power are within the specified thresholds .
- o Loopback testing: Form a loop on the port using an optical fiber to verify the port can go UP. For long-distance modules, use optical attenuators if necessary .
- o Configuration check: Ensure auto-negotiation and other interface settings match the remote port configuration .

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o Module replacement: If the module is faulty or non-certified, replace it with a Huawei-certified module. If issues persist, reboot the switch or check the software version . By following these commands and checks, you can effectively monitor, diagnose, and troubleshoot optical ports on Huawei switches, ensuring proper operation and network reliability.

Optical transceivers are widely applied in switches, network cards, routers and other communication devices.

If the transmit power remains low, replace the optical module or install it in another optical port to check whether it is faulty. If the

If it is not a Huawei-certified optical module, replace it with a Huawei-certified optical module. If the optical module is installed on a

To determine whether optical modules delivered for Huawei switches before January 1, 2016 are certified ones, contact Huawei

When connecting two devices, check whether optical modules match optical interfaces, whether optical modules match fiber models,

Why Cannot Connected Optical Ports Go Up After Single-Fiber Bidirectional Optical Modules Are Used?
How Do I Ensure that the

Check the physical link connection. View the indicator status on an interface. If the indicator is off, the interface is not connected.

Configure internal loopback on the interface to perform the test to check that the interface works properly inside. NOTICE: Prevent

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

Here is an example on how to query or display optical power of an interface in a Huawei Router. This is tested using NetEngine40E

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

Many friends have a doubt that the optical module I got is brand-new in appearance, but I don't know how to

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query the

Install an optical module, and then connect optical fibers to the optical module. Do not insert an optical module with optical fibers to

Taking the Huawei 5700 series switches as an example, the commands to view optical module information are as

Complete guide to performing loopback tests on switch ports. Diagnose network issues with fiber optic cables and

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

Web: <https://bssoda.pl>

