

## Article Overview

You can view and monitor Huawei switch port optical power using commands like `display transceiver` or `display interface`, which show TX (transmit) and RX (receive) power along with thresholds for troubleshooting.

## Viewing Optical Power

To check the optical power of a specific port or all optical ports on a Huawei switch:

- o All ports: Run `display transceiver` to list all optical modules and their parameters, including TX and RX power, wavelength, and vendor information .
- o Specific port: Use `display transceiver interface` to view detailed information for a single port. Adding the `verbose` parameter provides TX and RX power readings in dBm, along with high and low thresholds .
- o Alternative command: `display interface` or `display interface extensive` can also show link status, transceiver type, and traffic statistics, which is useful for fault analysis .

## Understanding TX and RX Power

- o TX Power (Transmit): The optical power sent from the switch port. If TX power is too low, it may indicate a faulty or low-quality transceiver. If too high, it can damage the receiving device or indicate a misconfigured long-distance module .
- o RX Power (Receive): The optical power received by the switch port. Low RX power can cause link failures or packet loss, often due to excessive distance, fiber damage, or incorrect module type. High RX power may require an optical attenuator to prevent damage .

## Typical Thresholds

- o Each optical module has default high and low thresholds for TX and RX power. For example, an SFP module may have:
  - o RX Power Low Threshold: -16.99 dBm
  - o RX Power High Threshold: 0 dBm
  - o TX Power Low Threshold: -9.50 dBm
  - o TX Power High Threshold: 0 dBm
- o Values outside these thresholds trigger alarms or warnings, which can be checked using `display transceiver` or `display interface`.

## Troubleshooting Tips

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- o Check module certification: Ensure the optical module is Huawei-certified; non-certified modules may cause inconsistent power readings .
  - o Inspect fiber and connections: Verify fiber integrity and proper LC/SC connectors.
  - o Loopback test: Form a loop on the port with an optical fiber to test if the port can go UP; use attenuators for long-distance modules .
  - o Check configuration: Ensure auto-negotiation and port settings match the module specifications.
  - o Replace faulty modules: If TX/RX power is abnormal and the module is certified, consider replacing it .
  - o Software updates: Upgrading the switch OS may resolve persistent issues affecting optical power readings .
- By regularly monitoring TX and RX power and comparing them to module thresholds, you can maintain stable optical links and quickly identify potential faults on Huawei switches.

CloudEngine S5736-S series switches are all-optical switches that feature 48 downlink optical ports and four uplink 10 GE ports.

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

Huawei-certified switch optical modules are recommended. If non-Huawei-certified switch optical modules are used, incorrect optical

A switch must use optical or copper modules that have been certified for use on Huawei switches. Non-certified optical or copper

If your network feels sluggish or devices mysteriously disconnect, the culprit might be smaller than you think--buried inside your

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

When connecting switches through optical ports, pay attention to the following points: The optical modules used on both ends must

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

Use an optical power meter to measure the receive power of the port. Form a loop on the port using an optical fiber, and check

If they are damaged, replace them. If the receive optical power is high (Current RX Power has a larger value

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than Default RX Power

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

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

Final Takeaway: SFP Power Is the Canary in Your Network Coal Mine Checking SFP power in a Huawei switch isn't just about fixing

Using a Command If an optical module is installed in a running device, you can run the display transceiver command

Let's take Huawei's S3328TP-SI switch as an example. This switch has 2 combo ports, which can be changed either

This document provides an overall description of the CE12800 series switches hardware, helping you obtain detailed information

Web: <https://morwarreconst.co.za>

