

Huawei switch optical ports converted to single-mode



Summary of Content

To use single-mode fiber on Huawei switch optical ports, you need compatible single-mode SFP modules and may need to configure the port or Combo interface to optical mode.

Hardware Requirements

Huawei switches support various optical modules (SFP, SFP+, QSFP+) that handle electrical-to-optical conversion . To convert a port to single-mode:

- Select a single-mode SFP module compatible with your switch model (e.g., 1000BASE-LX for 1G or 10GBASE-LR for 10G) and the desired transmission distance .
- Ensure fiber type matches the module: single-mode fiber (SMF, 9/125 μm) must be used with single-mode modules; multimode fibers cannot be mixed with single-mode modules .
- Check transmit/receive power: For short distances, some single-mode modules may require optical attenuators if the received power exceeds the module's acceptable range .

Configuration Steps

- Identify the port type: Some Huawei switches have Combo interfaces, which can operate as either electrical or optical ports but not simultaneously .
- Switch the interface to optical mode (for Combo ports):
- Enter system view: `system-view`

Article Content

FAQs About Optical Modules

A multi-mode optical module cannot use a single-mode optical fiber. This is because a single-mode optical fiber is thin and may

Installing Optical Transceivers and Connecting Optical Fibers

Installing Optical Transceivers and Connecting Optical Fibers This section describes how to install optical transceivers on the SFP or

10GE SFP+ Optical Modules

Fan Modules Installing a Power Surge Protector Pluggable Modules for Ports Understanding Optical Modules Understanding Copper

Huawei Data Center Switch Optical Transceiver Portfolio

Description 40GBase-iSR4 Optical Transceiver, QSFP+,40G,Multi-mode (850nm,0.15km,MPO) (connecting to one QSFP+ or four

Optical Module Solutions for Huawei S5700/S5720 Series Switches

When using switches, we may encounter many confusions, such as what types of optical modules are needed for

Troubleshooting of Optical Transceiver Issues

Check whether the port matches with the optical transceiver. If no, replace the original optical transceiver with one that

Optical Fiber

Use a multimode fiber jumper for a multimode optical module. Use a single-mode fiber jumper for a single-mode optical module.

Introduction of Optical Modules on Huawei Switches

Introduction of Optical Modules on Huawei Switches On an optical network, a sender needs to convert electrical signals into optical

How To Switch Optical/Electrical Mode On Huawei Router Combo Ports

This article takes the Huawei AR5710S-S8T2X router as an example to explain how to switch the optical and

Configuring the Working Mode of a Combo Interface

This guide explains how to configure the working mode of a combo interface on Huawei devices, including switching between

Troubleshooting for Optical Modules on Huawei Switch

When the transmit/receive power of the optical ports is too high, optical modules on the ports may be damaged. In this case, connect

Huawei Optical Transceiver eSFP GE Single-Mode Module

Engineered for enterprise networks, data centers, and carrier environments, this module ensures fast, reliable, and stable

The Ultimate Guide to SFP Modules (2026): Types,

Confused by SFP vs SFP+? Read the definitive 2026 guide on SFP modules. We explain Single Mode vs

How To View Optical Transceiver Information On Huawei Switches

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

Optical Module Solutions for Huawei S5700/S5720 Series Switches

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

How to Convert Multimode to Single-mode Fiber: A Complete Guide

Fiber optic networks are essential for high-speed data transmission across various industries. While multimode fiber

Port: Optical Ports on the AC Cannot Go Up

Use an optical fiber to perform a loopback test on the Huawei device. If the link goes Up, the Huawei device is working properly, and

Displaying Optical Module Information

How Can I Determine Whether an Optical Module Is Single-Mode or Multi-Mode? The system may fail to obtain information about

Ethernet Interface Configuration Commands

This page provides configuration commands for Ethernet interfaces on Huawei devices, covering settings like duplex mode and auto

Types of Optical Modules

Optical modules are encapsulated in different modes to provide different structures. Huawei S series devices support optical modules

Configuring Unidirectional Single-Fiber Communication

40GE optical interfaces support unidirectional single-fiber communication only when no optical module is installed or 40GE optical

Configuring Attributes for an Optical Interface

Converted interfaces go Up after the switch restarts and the configurations delivered when the split interface is in Offline state take

Optical Modules for Huawei S Series Switches

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

How to Convert Multimode to Single-Mode Fiber and Vice Versa

With the help of network equipment like fiber media converters, you can convert multimode to single-mode fiber and vice versa to

FAQs About Optical Modules

For details about the optical modules supported by optical ports on switches, see "Appearance and Structure" of a specific switch

How To Switch Optical/Electrical Mode On Huawei Router Combo Ports

A Combo port, also known as an optical-electrical multiplexing port, consists of one optical port and one electrical port

10GE SFP+ Optical Modules

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

Huawei Enterprise Support Community

We're sorry but web site doesn't work properly without JavaScript enabled. Please enable it to continue.

What Is an Optical Module and Its FAQs (V200)

What Is an Optical Module and Its FAQs (V200) Describes what an optical module is and FAQs, including the fundamentals,

Ethernet Interface Configuration Commands

Four SFP28 Ethernet optical interfaces (25GE by default) and two QSFP28 Ethernet optical interfaces (40GE by default) have been

How Do I Select Optical Modules and Fibers?

An optical module works in full-duplex mode with a pair of optical fibers, one for transmission and one for receiving, as shown in the

How to Convert Multimode to Single-mode Fiber: A Complete Guide

Discover the complete guide on converting multimode to single-mode fiber in communication networks. Understand

Convert Single mode input to multimode output on a switch

I have to convert single mode input into multimode using 3750-E switch to support upto 300 mbps of throughput. The

Troubleshooting for Optical Modules on Huawei Switch

Some single-mode optical modules need optical attenuators, but some do not need. This depends on the transmit/receive power of

Optical Module Troubleshooting

If there is a Huawei logo on the label, the optical module has been certified for Huawei data center switches. If not,

Contact Us

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

Website: <https://benniedesignstudio.co.za>

Email: sales@benniedesignstudio.co.za

Phone: +27 82 391 4765

Address: The Towers, 1 St Georges Mall, Cape Town, 8001, South Africa

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

