

Article Overview

Huawei switches require certified optical modules for reliable operation, but options include Huawei-certified modules, StarryLink modules, and carefully selected third-party modules with verification.

Huawei-Certified Optical Modules

Huawei switches are designed to work with Huawei-certified optical modules, which undergo comprehensive testing for plug/unplug functionality, optical power, signal quality, error tolerance, EMC, and environmental parameters . Certified modules are labeled with "HUAWEI" and are verified in system commands such as `display transceiver` or `display elabel` . Using non-certified modules can lead to installation failures, data bus suspension, interface damage, or incorrect alarms, and Huawei does not provide support for issues caused by non-certified modules .

StarryLink Optical Modules

For high-performance and secure data center networks, Huawei offers StarryLink optical modules. These modules support GE to 800GE speeds, ultra-long transmission distances, and enhanced reliability through technologies like short-distance optical return loss positioning and channel loss resistance . StarryLink modules also provide PHYSEC encryption for 100% packet security, making them suitable for sensitive or high-demand environments .

Third-Party Optical Modules

While Huawei generally recommends certified modules, some third-party optical modules may be used if they are MSA-compliant and verified for compatibility. Key considerations include:

- o Matching interface speed: Do not use a 10G module on a 1G port .
- o Fiber type compatibility: Single-mode and multi-mode fibers must match the module type .
- o Wavelength and optical power: Ensure the module's transmit and receive power are within acceptable ranges .
- o Physical dimensions: Non-standard sizes may block adjacent ports or damage interfaces . Before deploying third-party modules, it is recommended to perform loopback tests, check port status, and consult Huawei technical support to confirm compatibility and avoid service disruptions .

Summary

For Huawei switches, the safest options are:

Other optical modules for Huawei switches

- o Huawei-certified optical modules for guaranteed reliability and support.
- o StarryLink modules for high-speed, secure, and long-distance data center applications.
- o Verified third-party modules that comply with MSA standards and have been tested for compatibility, with caution regarding speed, fiber type, and physical dimensions. Using certified or verified modules ensures stable transmission, avoids alarms, and protects switch hardware while enabling flexible deployment options for different network scenarios .

An optical module is a device for converting electrical signals to optical signals and vice versa, widely used in telecommunications

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

On an optical network, a sender needs to convert electrical signals into optical signals before sending them to a receiver, and the

Use optical modules certified for Huawei switches. Using other optical modules may affect service stability and Huawei can accept no

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

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

Wavelength division multiplexing modules differ from other optical modules in center wavelengths. A common optical module has a

This document provides an overall description of the CE5800&6800&7800&8800 series switches hardware that versions earlier than

100GE QSFP28 Optical Modules Understanding Optical Modules What Is an Optical Module Types of Optical Modules Parameter

When Huawei switches are connected to other products such as routers, comply with the preceding optical module interoperation

To determine whether optical modules delivered for Huawei switches before July 1, 2013 are certified ones,

contact Huawei technical

Cables Pluggable Modules for Interfaces Important Notes About Using Optical Modules Certified for Huawei Switches Understanding

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

Support Documentation Switches Campus Switch S3700&S5700&S6700 Learn About Products Hardware Description

CloudEngine 12800 and 12800E Series Switches Hardware Description This document provides an overall description of the

Huawei offers a comprehensive portfolio of pluggable StarryLink optical modules for data center networks, with various models

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

