Huawei SN series optical modules

Overview

Optical Modules in General-Purpose Computing Scenarios Huawei offers a comprehensive portfolio of pluggable StarryLink optical modules for data center netw.

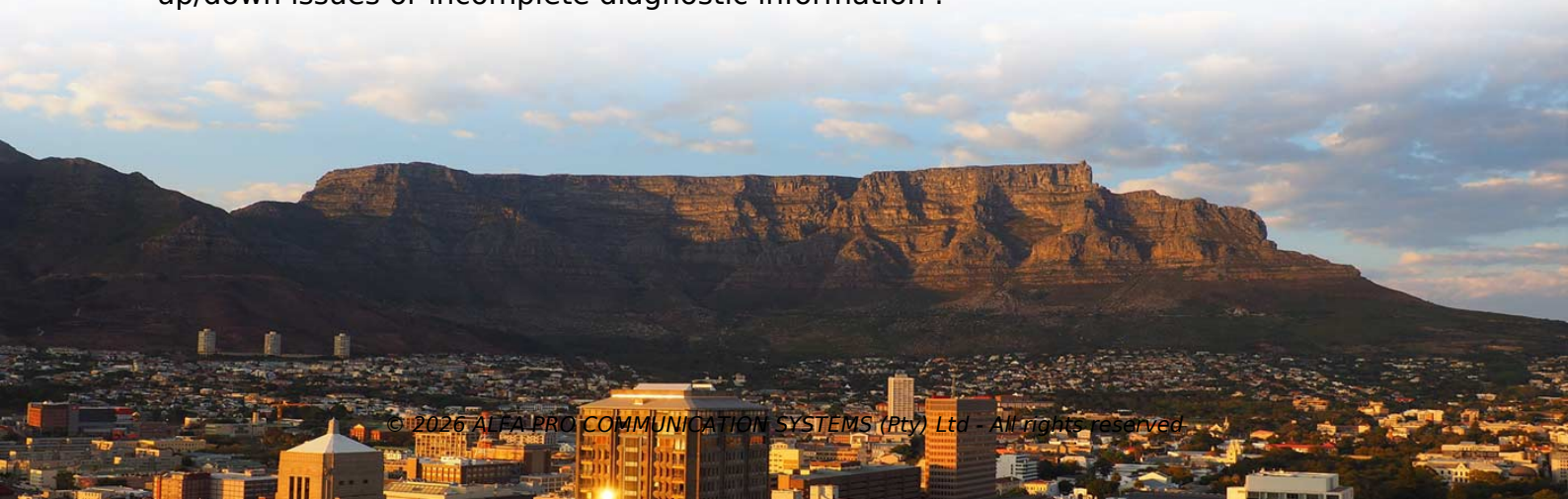
Key Takeaways

Huawei SN series optical modules are certified transceivers designed for S series switches, supporting a range of speeds from 100M to 800GE with single-mode and multi-mode options.Overview

Huawei SN series optical modules are high-performance transceivers that convert electrical signals to optical signals for network transmission. They are designed specifically for Huawei S series switches and include SFP, eSFP, SFP+, QSFP+, and CSFP form factors . These modules ensure reliable connectivity, long-distance transmission, and compatibility with Huawei-certified switches.

Certification and Compatibility
• Certified Modules: Only Huawei-certified optical modules are guaranteed to function correctly with S series switches. Certified modules display "HUAWEI" on the label, and the switch recognizes them in the display transceiver command output .

• Non-Certified Modules: Using non-certified modules may cause frequent link up/down issues or incomplete diagnostic information .



© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

• Copper vs Optical: Both copper and optical modules must be certified for proper operation, though the vendor name may show the original manufacturer .

Types and Specifications

• SFP/eSFP Modules: Commonly used for 100M/1G connections. Examples include SFP-FE-SX-MM1310 (multi-mode, 2 km) and eSFP-FE-LX-SM1310 (single-mode, 15 km), .

• SFP+ Modules: Support 10G connections for high-speed links.

• QSFP+ Modules: Used for 40G connections, with careful attention to orientation during installation .

• CSFP and XFP Modules: Provide additional high-speed options for specialized applications .

• Single-Fiber Bidirectional Modules: Allow simultaneous transmission and reception over a single fiber, reducing cabling requirements .

Advanced StarryLink Modules

Huawei's StarryLink optical modules are optimized for data center networks, offering ultra-reliable, long-distance, and secure interconnections. Key features include:

• Short-distance optical return loss positioning for precise fault detection

• Channel loss resistance technology for enhanced reliability

• Exclusive optical path coupling algorithms

• PHYSEC encryption for 100% packet security

• Support for GE to 800GE transmission

Installation and Usage Tips

• Fiber Type Matching: Single-mode modules must use single-mode fiber, and multi-mode modules must use multi-mode fiber .

• Transmission Distance: Ensure the module's rated distance matches the network requirements. Multi-mode modules have shorter distances than single-mode modules .

• Port Configuration: Use commands like display interface and display transceiver interface verbose to verify module status and optical power levels .

• Stacking and Interconnection: For S5700/S5720 series switches, follow proper stacking and service port connection procedures to avoid link issues .

Summary

Huawei SN series optical modules provide certified, high-performance, and secure optical connectivity for S series switches. They cover a wide range of speeds and distances, with specialized modules for data centers and long-distance interconnects. Proper selection, certification verification, and fiber type matching are essential for optimal performance and reliability .

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Article Content

Optical Modules in General-Purpose Computing Scenarios

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

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

StarryLink Optical Module

Huawei''s StarryLink optical modules for data center networks offer seamless interconnection from GE to 800GE across all scenarios,

Optical Modules for Huawei S Series Switches

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

What Is StarryLink Optical Module? Why Do We Need It?

The StarryLink optical module is a core component developed by Huawei for data center networks. It delivers ultra

01-10 OPTICAL MODULES

Huawei S series devices support optical modules of the following encapsulation types: CFP, QSFP+, QSFP28, XFP, SFP, eSFP,

Displaying Optical Module Information

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

How To View Optical Transceiver Information On Huawei Switches

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

Huawei PON SFP Modules | GPON XG-PON XGS-PON & 50G-PON

These modules support transmission distances up to 60 km, provide excellent optical budgets, and are optimized for

Huawei Optical Module Common Models

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Optical modules are important devices in fiber optic communication systems. Huawei Optical Module is manufactured by Huawei

Displaying Optical Module Information

Learn how to display optical module information effectively with Huawei''s technical support guide.

Understanding Optical Modules

Important Notes About Using Optical Modules Certified for Huawei Switches Understanding Optical Modules What Is

OptiX OSN 1800 OTN Platform

The Huawei OptiX OSN1800 is a series of box architecture Multi-Service Optical Transport Network (MS

Understanding Optical Modules

Important Notes About Using Optical Modules Certified for Huawei Switches Understanding Optical Modules What Is an Optical

Types of Optical Modules

Huawei S series devices support optical modules of the following encapsulation types: CFP, QSFP+, QSFP28, XFP, SFP, eSFP,

FAQs About Optical Modules

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

Understanding Optical Modules

Huawei S series devices support optical modules of the following encapsulation types: CFP, QSFP+, QSFP28, XFP, SFP, eSFP,

HUAWEI USG6000E Series Hardware Guide

The USG supports both 1 Gbit/s, 10 Gbit/s, and 40 Gbit/s optical modules. The optical modules at both ends are the same, including

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,

Understanding Optical Modules

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

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

Important Notes About Using Optical Modules Certified for Huawei ...

100GE QSFP28 Optical Modules Important Notes About Using Optical Modules Certified for Huawei Switches How to Identify

Understanding Optical Modules

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

10 Gbit/s SFP+ Optical Modules

HUAWEI NIP6300, NIP6600 Series V500 Hardware Guide (pdf) This document of the NIP6300 and NIP6600 Series describes

10 Gbit/s SFP+ Optical Modules

10 Gbit/s SFP+ optical modules apply to 10 GE optical ports. The wavelength can be 850 nm, 1310 nm, or 1550 nm, and the

Important Notes About Using Optical Modules Certified for Huawei ...

Accessories Important Notes About Using Optical Modules Certified for Huawei Switches How to Identify Huawei-Certified Switch

What Is an Optical Module

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

OptiX OSN 9800 M Series Datasheet

OptiX OSN 9800 M Series The OptiX OSN 9800 M series are Huawei''s next-generation flagship WDM products. They are designed

Understanding Optical Modules

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

How to Identify Huawei-Certified Switch Optical Modules

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

Understanding Optical Modules

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

POS eSFP Optical Modules Understanding Optical Modules What Is an Optical Module Types of Optical Modules Parameter

Displaying Optical Module Information

Learn how to display optical module information effectively with Huawei''s technical support guide.

Understanding Optical Modules

Important Notes About Using Optical Modules Certified for Huawei Switches Understanding Optical Modules What Is

OptiX OSN 1800 OTN Platform

The Huawei OptiX OSN1800 is a series of box architecture Multi-Service Optical Transport Network (MS

Understanding Optical Modules

Important Notes About Using Optical Modules Certified for Huawei Switches Understanding Optical Modules What Is an Optical

Types of Optical Modules

Huawei S series devices support optical modules of the following encapsulation types: CFP, QSFP+, QSFP28, XFP, SFP, eSFP,

FAQs About Optical Modules

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

Optical Modules in General-Purpose Computing Scenarios

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

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

StarryLink Optical Module

Huawei''s StarryLink optical modules for data center networks offer seamless interconnection from GE to 800GE across all scenarios,

Optical Modules for Huawei S Series Switches

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

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

What Is StarryLink Optical Module? Why Do We Need It?

The StarryLink optical module is a core component developed by Huawei for data center networks. It delivers ultra

01-10 OPTICAL MODULES

Huawei S series devices support optical modules of the following encapsulation types: CFP, QSFP+, QSFP28, XFP, SFP, eSFP,

Displaying Optical Module Information

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

How To View Optical Transceiver Information On Huawei Switches

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

Optical Modules in General-Purpose Computing Scenarios

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

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

StarryLink Optical Module

Huawei''s StarryLink optical modules for data center networks offer seamless interconnection from GE to 800GE across all scenarios,

Optical Modules for Huawei S Series Switches

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

What Is StarryLink Optical Module? Why Do We Need It?

The StarryLink optical module is a core component developed by Huawei for data center networks. It delivers ultra

01-10 OPTICAL MODULES

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Huawei S series devices support optical modules of the following encapsulation types: CFP, QSFP+, QSFP28, XFP, SFP, eSFP,

Displaying Optical Module Information

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

Contact Us

Continue your research online:

Website: https://alfa-pro.co.za
Technical inquiry: https://alfa-pro.co.za/contact.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved