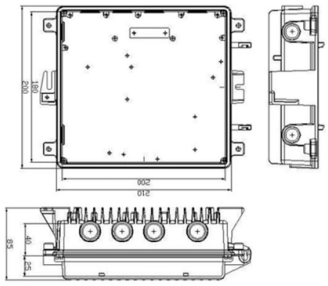
What optical module does Huawei firewall use



Overview

Displaying Optical Module Information A switch must use optical or copper modules that have been certified for use on Huawei switches. Non-certified optica.

Key Takeaways

Huawei firewalls support a range of optical modules including SFP, SFP+, SFP28, QSFP+, QSFP28, XFP, and CFP, depending on the model and required transmission speed.

Supported Optical Module Types

Huawei firewalls, particularly the USG series, are compatible with multiple optical module types to meet different network requirements: SFP (Small Form-Factor Pluggable): Standard modules for Gigabit Ethernet connections, suitable for short- to medium-distance links.eSFP: Enhanced SFP modules that support monitoring of voltage, temperature, bias current, transmit and receive optical power. SFP+: High-speed SFP modules for 10 Gbit/s transmission, commonly used in 10GE ports. SFP28: Supports 25 Gbit/s transmission, compatible with SFP+ interface size.

QSFP+ (Quad SFP Plus): Supports 40 Gbit/s transmission, typically using MPO fiber connectors. QSFP28: Supports 100 Gbit/s transmission or 40 Gbit/s when using QSFP+ modules, compatible with QSFP+ interface size.

XF

P: 10 Gbit/s modules with LC fiber connectors, larger than SFP+ modules.

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CF

P (Centum Form-Factor Pluggable): High-speed modules for data communication and telecom applications, dimensions 144. 75 mm x 82 mm x 13. 6 mm.

Transmission Modes and Fiber Types

Huawei optical modules are designed for both single-mode fibers (SMF) and multi-mode fibers (MMF): Single-mode modules: Used for long-distance transmission with high bandwidth and large capacity. Multi-mode modules: Used for short-distance, lower-capacity links, offering cost-effective solutions. Modules are also classified by transmission rates: FE, GE, 10GE, 25GE, 40GE, and 100GE, allowing firewalls to support a wide range of network speeds.

Special Huawei Optical Modules

Huawei also offers the StarryLink optical module series, designed for ultra-long-distance, high-reliability, and secure transmission, particularly in data center and AI-driven network environments. These modules are optimized for high-bandwidth interconnections and low-latency enterprise networks.

Practical Considerations

All Huawei firewall optical modules are hot-swappable, allowing replacement without shutting down the device. Selection of the module depends on port type, required speed, and fiber type. For example, a USG6320 firewall with 10GE SFP+ ports will require SFP+ modules for 10 Gbit/s links.

For long-distance or high-capacity links, single-mode SFP, SFP+, or QSFP28 modules are recommended, while multi-mode modules are suitable for short-distance connections. In summary, Huawei firewalls are compatible with a wide range of optical modules, from standard SFPs for Gigabit Ethernet to high-speed QSFP28 and CFP modules for 100 Gbit/s links, supporting both single-mode and multi-mode fibers to meet diverse network deployment needs.

Article Content

Displaying Optical Module Information

A switch must use optical or copper modules that have been certified for use on Huawei switches. Non-certified optical or copper modules cannot ensure transmission reliability and may affect service

What Is an Optical Module and Its FAQs (V200)

Describes what an optical module is and FAQs, including the fundamentals, appearance and structure, key performance counters, common types, and naming conventions of optical modules, causes of

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WHAT IS AN OPTICAL MODULE AND ITS FAQS (V200)

As an important part of fiber-optic communication, an optical module is a photoelectric converter which converts electrical signals into optical signals and vice versa. An optical module works at the physical

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

SFP (Small Form-factor Pluggable) is a compact, hot-pluggable network interface module used to connect network devices (switches, routers, firewalls) to fiber optic or copper cables.

HUAWEI USG6650/6660/6670/6680

Support various types of interface cards, such as GE electrical/optical and 10 GE interface cards, providing up to 78 interfaces, including 56 GE electrical, 8 SFP optical, and 14 10GE optical interfaces

Huawei Optical Module Common Models

Optical modules are important devices in fiber optic communication systems. Huawei Optical Module is manufactured by Huawei Technologies Co. and originated in Shenzhen.

HUAWEI Secospace USG6600 Next-Generation Firewall Datasheet

Traditional security gateway implements security control only based on IP addresses and ports, and cannot cope with the ever-increasing application layer and web threats. Against this background,

HUAWEI USG6620/6630 Next-Generation Firewalls

Support both NETCONF and RESTCONF northbound APIs, which enable you to centrally configure and maintain the firewalls using an upper-level controller to simplify O&M

Huawei Unveils StarryLink Optical Modules That Deliver Ultimate

BARCELONA, Spain, March 6, 2025 /PRNewswire/ -- At the Mobile World Congress 2025 (MWC 2025), Huawei launched the StarryLink optical modules, designed to enhance network experiences with "3S"...

How To View Optical Transceiver Information On Huawei Switches

Optical transceivers are widely applied in switches, network cards, routers and other communication devices. Checking transceiver parameters allows users to monitor real-time

Types of Optical Modules

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Therefore, optical modules are also classified into single-mode and multimode modules to support different optical fibers. Single-mode optical modules are used with single-mode fibers.

Understanding Optical Modules

Therefore, optical modules are also classified into single-mode and multimode modules to support different optical fibers. Single-mode optical modules are used with single-mode fibers.

Types of Optical Modules

Multimode optical modules are used with multimode fibers. Multimode fibers have lower transmission performance than single-mode fibers because of modal dispersion, but their costs are also lower.

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 modules cannot ensure transmission reliability and may affect service

Understanding Optical Modules

This document explains optical modules, their types, and applications, providing a comprehensive understanding of their functionality and usage.

Understanding Pluggable Optical Modules

Optical modules are available in various types to meet diversified requirements. Classified by transmission rates Currently, the transmission rates of optical modules cover a wide range.

Understanding Pluggable Optical Modules

The transmit power of a long-distance optical module is often larger than its overload power. Therefore, when using such optical modules, select optical fibers of an appropriate length to ensure that the

Troubleshooting Optical Module Issues

Symptom An optical port cannot go Up. The optical module cannot be properly identified and optical module information cannot be obtained. After an optical module is inserted, the console port displays

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