

How to use Huawei gigabit single-mode optical module



Article Overview

Huawei single-mode Gigabit optical modules provide reliable 1 Gbps connectivity over single-mode fiber up to 10 km, operating at 1310 nm with LC duplex connectors.

Key Specifications

- Data Rate: 1 Gbps (1000BASE-LX/LH) suitable for Gigabit Ethernet networks
- Wavelength: 1310 nm, optimized for single-mode fiber (SMF) transmission
- Maximum Distance: Up to 10 kilometers, ideal for building-to-building or campus backbone links
- Connector Type: LC duplex, ensuring standard compatibility with Huawei switches and routers
- Form Factor: SFP/eSFP, hot-swappable for easy installation and replacement without network downtime

Features and Benefits

- Digital Diagnostic Monitoring (DDM): Provides real-time monitoring of optical power, temperature, and transceiver health, enhancing network reliability and proactive maintenance
- IEEE 802.3z Compliance: Ensures broad compatibility with Huawei network devices and other SFP-enabled equipment
- Enterprise and Carrier Ready: Suitable for enterprise networks, data centers, and carrier environments requiring stable long-distance fiber connectivity...

Article Content

Feb 28, 2026

Optical Modules for Huawei S Series Switches

Single-mode optical modules are used with single-mode fibers. Single-mode fibers support a wide band and large transmission

Jul 28, 2025

Optical Module Solutions for Huawei S5700/S5720 Series Switches

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

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Checking Whether the Optical Fiber and Optical Module Match

Check whether the optical module and optical fiber match. A single-mode optical module (typically with a center wavelength of 1310

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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

Oct 25, 2025

10 Gbit/s SFP+ Optical Module

10 Gbit/s SFP+ Optical Module You can use different levels of 10 Gbit/s SFP+ optical modules only with 10 GE

Apr 26, 2026

Installing Optical Transceivers and Connecting Optical Fibers

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

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Troubleshooting for Optical Modules on Huawei Switch

Check whether the optical module is Huawei-certified. If it is not certified by Huawei, replace it with a Huawei certified one. Remove

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Huawei Enterprise Support Community

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1Gbps eSFP Optical Modules

This document provides technical details about 1Gbps eSFP Optical Modules, including specifications and support information.

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Gigabit single-mode single-core fiber optic module

The general parameters and basic knowledge of Gigabit optical transceivers are difficult to master. The following will

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Installation and Maintenance Guide for Gigabit Optical Modules and 10 ...

As an essential component of network communication, optical modules have been widely used in various scenarios

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Types of Optical Modules

Single-mode optical modules are used with single-mode fibers. Single-mode fibers support a wide band and large transmission

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Configuring Unidirectional Single-Fiber Communication

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

May 31, 2026

Huawei Optical Transceiver eSFP GE Single-Mode Module

Description The Optical Transceiver eSFP GE Single-Mode Module (1310 nm, 10 km, LC) is a high-performance Gigabit Ethernet

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01-10 OPTICAL MODULES

Single-mode optical modules are used with single-mode fibers. Single-mode fibers support a wide band and large transmission

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GE eSFP Optical Modules

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

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Optical Module Troubleshooting

Interfaces that use optical modules that are not certified for Huawei data center switches may be unable to go Up. If

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Displaying Optical Module Information

When single-mode optical modules use multi-mode fibers, signal identification is unstable. When multi-mode optical modules use

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Optical Fiber

When using optical modules and optical fibers, pay attention to the following to ensure proper communication between devices: Use

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Installing an Optical Module

When inserting an optical module to a port, hold the optical module horizontally. If the optical module cannot be completely inserted

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10GE SFP+ Optical Modules

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-10G-BXU1 must be used with SFP-10G-BXD1.

Apr 15, 2026

SFP-GE-LX-SM1310 (02315200)

This document provides specifications and details about the SFP-GE-LX-SM1310 optical module for Huawei devices.

Nov 12, 2025

Installing Optical Module Tutorial For HUAWEI Switch

Module installation is an important factor affecting the service life of switches and modules. In the installation process, be sure to

Nov 01, 2025

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

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Configuring Attributes for an Optical Interface

A single fiber means that two optical modules are connected by only one fiber, and unidirectional communication

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Optical Modules for Huawei S Series Switches

Multi-mode optical modules are applicable to short-distance transmission, while single-mode optical modules are applicable to long

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How To View Optical Transceiver Information On Huawei Switches

Optical modules are commonly used in switches, network cards, routers and other communications equipment, in the

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Guide to Using Pluggable Modules

If optical splitters must be used for special scenarios or requirements, strictly follow the link budget and insertion loss specifications of

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Huawei 02318170 Datasheet

Form factor: SFP+ Application standard: 10GBASE-LR Connector type: LC Optical fiber type: SMF Working case temperature

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Types of Optical Modules

Single-mode fibers support a wide band and large transmission capacity, and are used for long-distance transmission. Multimode

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Huawei Optical Transceiver eSFP GE Single-Mode Module

With Optical Transceiver eSFP GE Single-Mode Module a hot-swappable eSFP form factor, installation and replacement are quick

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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

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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

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FAQs About Optical Modules

Multi-mode optical modules are applicable to short-distance transmission, while single-mode optical modules are applicable to long

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Understanding Pluggable Optical Modules

Single-mode optical modules are used with single-mode fibers. Single-mode fibers support a wide band and large transmission

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Installing Optical Modules

The device must use optical or copper modules recommended on the configurator because non-Huawei-certified optical or copper

Contact Us

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