

Huawei Gigabit Optical Module Transmission Monitoring



AI Overview

Huawei Gigabit optical modules support Digital Diagnostic Monitoring (DDM), allowing real-time monitoring of optical parameters such as transmit/receive power, temperature, and voltage for reliable network management.

Overview of Huawei Gigabit Optical Modules

Huawei offers a range of Gigabit Ethernet optical transceivers, such as the SFP-GE-LX-SM1310 and eSFP GE Single-Mode Module, designed for long-distance single-mode fiber (SMF) connectivity up to 10 km at 1310 nm wavelength . These modules are hot-swappable, compact, and compatible with Huawei switches, routers, and aggregation devices, making them suitable for enterprise networks, data centers, and campus backbones . A key feature of these modules is Digital Diagnostic Monitoring (DDM), which provides real-time monitoring of critical optical parameters, including:

- Transmit power (Tx)
 - Receive power (Rx)
 - Module temperature
 - Supply voltage
 - Laser bias current
- This capability allows network administrators to detect potential faults early, maintain signal integrity, and optimize network performance .

Monitoring Commands on Huawei Switches...

Article Content

Oct 04, 2025

Huawei Optical Switch View Optical Module Commands

View the general, manufacturing, alarm, and diagnostic information of the specified port

Sep 09, 2025

Checking the Receive and Transmit Optical Power

Check whether the distance between the two devices exceeds the maximum transmission distance of the remote optical module. If

Aug 02, 2025

Checking the Optical Module

Ensure that the rate, wavelength, and transmission distance of the interconnected optical modules are consistent. Using the same

Jul 13, 2026

Checking Whether the Optical Module Works Properly

If the receive power is too high or low: Replace the (local or remote) optical module or fiber. Check whether the transmission distance

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Introduction of Optical Modules on Huawei Switches

Check Optical Module Parameters: If an optical module is installed in a running switch, you can run the display transceiver command

Jul 23, 2026

How to View Optical Module Parameters

Using a Command If an optical module is installed in a running router, you can run the display transceiver command to view

May 15, 2026

Checking Parameter Settings of the Optical Modules

Check the parameter settings such as rate, wavelength, and transmission distance of the interconnected optical modules. Using the

Nov 13, 2025

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

Apr 12, 2026

Checking the Working Modes

Procedure Run the display transceiver interface interface-type interface-number verbose command to view the optical

Dec 05, 2025

Optical Module

Optical Module Names This topic describes the names of optical modules used by WDM products.

Jul 17, 2026

Optical Transmission

Real-time monitoring and intelligent diagnostics on the network at every level every time, covers service,

Oct 07, 2025

How To Read Optical Module Information On Huawei Switches

The following uses the Moduletek SFP-10G-LR module connected to a Huawei S6700 switch as an example to

Nov 11, 2025

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

Jan 27, 2026

How Do I Check the Transmit and Receive Optical Power of an Optical ...

This page provides a guide on checking the transmit and receive optical power of an optical module for Huawei devices.

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Huawei Switches Viewing Optical Port Receiving and Sending

Use the command display transceiver to view the optical module information of all optical ports, and use the command

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Optical Modules in General-Purpose Computing Scenarios

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

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01-10 OPTICAL MODULES

If an optical module is installed in a running device, you can run the display transceiver command to view parameters of the optical

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Typical Troubleshooting Cases of Optical Module

An Optical Module Has Normal Transmit Power but Many Packets Are Dropped on the Port Due to Bit Errors Use an optical power

Dec 10, 2025

Types of Optical Modules

Optical modules are available in various types to meet diversified requirements. Classified by transmission rates Depending on

Sep 14, 2025

How Do I Ensure that the Transmit and Receive Optical Power of an ...

You are advised to replace the optical module. To ensure normal communication between two optical interfaces, check for transmit

Oct 31, 2025

Huawei Optical Transceiver eSFP GE Single-Mode

The Huawei eSFP GE Single-Mode Module 1310 nm 10 km LC delivers reliable 1 Gbps fiber connectivity

Jul 26, 2025

Displaying Optical Module Information

When certifying an optical module, Huawei comprehensively verifies the functions of the optical module to ensure the optical module

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Optical Interface Interconnection Is Abnormal on CE Switches ...

Depending on the transmit optical power and overload optical power, optical modules are classified into short

Nov 11, 2025

Classification and Specifications of HUAWEI Transceivers

An eSFP module is an SFP module that supports monitoring of voltage, temperature, bias current, transmit

Feb 23, 2026

Displaying Optical Module Information

Run the display transceiver diagnosis interface [interface-type interface-number] command to view diagnostic information about a

Sep 28, 2025

Displaying Optical Module Information

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

Mar 25, 2026

Installing Optical Transceivers and Connecting Optical Fibers

Before connecting optical fiber cables, read the following precautions: Do not overbend optical fibers, and the radius should not be

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