# Huawei HG Optical Module



## Overview

Optical Modules in Intelligent Computing Scenarios Huawei provides a full series of pluggable optical modules. A wide variety of modules give you flexible.

## Key Takeaways

Huawei Optical Modules, including the HG series, are pluggable transceivers designed for high-speed data transmission in Huawei networking equipment, supporting various form factors, fiber types, and transmission rates.

### Overview

Huawei optical modules are essential components in fiber optic communication systems, converting electrical signals into optical signals for transmission and vice versa at the receiver end.

### The H

G model is part of Huawei's certified optical module portfolio, ensuring compatibility and reliability with Huawei switches and data center networks. These modules are hot-swappable, allowing easy installation and replacement without powering down the network device.

### Common Types and Form Factors

Huawei optical modules come in multiple form factors to meet different network requirements: SFP (Small Form-factor Pluggable): Supports Gigabit Ethernet and LC fiber connectors. SFP+: Enhanced SFP for 10 Gbit/s transmission. SFP28: Supports 25 Gbit/s transmission, compatible with QSFP28 interfaces for higher speeds.

XF

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P: 10 Gbit/s modules, wider and longer than SFP+. QSFP+ / QSFP28: Quad small form-factor pluggable modules for 40 Gbit/s and 100 Gbit/s, supporting MPO fiber connectors.

CF

P: Centum form-factor pluggable modules for high-speed data communication.

## Fiber Types and Transmission

Huawei optical modules support both single-mode and multimode fibers: Single-mode modules: Used for long-distance transmission with high bandwidth. Multimode modules: Suitable for short-distance, lower-capacity connections, cost-effective for local networks. Wavelength division multiplexing (WDM) modules, including CWDM and DWDM, allow multiple signals to be transmitted over a single fiber using different wavelengths.

## Certification and Compatibility

Huawei requires that optical modules used with its switches be Huawei-certified to ensure transmission reliability and service stability. Certified modules are labeled with "HUAWEI" and can be verified using commands such as display transceiver or display version on Huawei devices. Non-certified modules may cause link instability or service issues and are not supported by Huawei.

Power and PerformanceHigh-speed modules like QSFP DD (Quad Density) typically consume 12–14 watts per module, depending on the specific model.

## The H

G series modules are designed to meet the performance and reliability standards required for data center and enterprise networks.

## Summary

## Huawei H

G optical modules are versatile, high-performance transceivers suitable for a wide range of networking applications. They support multiple transmission rates, fiber types, and form factors, and are certified to ensure compatibility with Huawei switches and data center equipment. Proper selection of the module type, fiber, and certification status is crucial for optimal network performance and reliability.

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## Article Content

Optical Modules in Intelligent Computing Scenarios

Huawei provides a full series of pluggable optical modules. A wide variety of modules give you flexible plug-and-play options for all types of interfaces.

Optical Modules in General-Purpose Computing Scenarios

Huawei offers a comprehensive portfolio of pluggable StarryLink optical modules for data center networks, with various models providing flexible plug-and-play solutions tailored to diverse interface

MTRS-02X13-G

MTRS-02X13-G is a high performance, cost effective module, which is supporting data rate up to 10.3125Gbps, and transmission distance up to 10km over single mode fiber.

Optical Communication

The company currently has 7 major product lines: data center product line, wireless/transmission product line, access product line, silicon optical product line, network terminal product line, home

HG MTRS-02X13-G Datasheet

MTRS-02X13-G is a high performance, cost effective module, which is supporting data rate up to 10.3125Gbps, and transmission distance up to 10km over single mode fiber.

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 deployment in Huawei OLT platforms and modern Fiber-to-the-Home

Wuhan Huagong Genuine Optics Tech Co., Ltd

HG Genuine is a leading developer and manufacturer of optical components in China with registered capital of 30 million US Dollars. It has more than 800 staff, 11,000 square meters of factory and the

01-10 OPTICAL MODULES

Huawei S series devices support optical modules of the following encapsulation types: CFP, QSFP+, QSFP28, XFP, SFP, eSFP, and SFP+. All optical modules are hot swappable.

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LightCounting :: Optics for AI: 800G, 1.6T, LRO/LPO and CPO – a

To enhance support for intelligent computing networks, HiSilicon introduced some innovative optical module designs named “XingYun”. The XingYun intelligent modules are

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 display transceiver interface interface-type interface-number to view the

Types of Optical Modules

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Optical Modules Market Research Report 2034

Optical Modules Market Outlook 2025-2034 The global optical modules market was valued at $14.8 billion in 2025 and is projected to reach $39.6 billion by 2034, advancing at a compound annual

25Gbps SFP28 BIDI Optical Module

125M~2.67Gbps eSFP DWDM Optical Module 10Gbps SFP+ Optical Module 1.25/9.953/10.3125Gbps SFP+ Optical Module 10Gbps SFP+ CWDM Optical Module 10Gbps SFP+ BIDI Optical Module

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 process of using the optical module information can be read to

Optical Components

Provides corporate revenue market share by end-market segment as well as the detailed market size for select optical components.

Optical Module Troubleshooting

The optical module installed on the optical interface is not certified for Huawei data center switches. The optical module type does not match the optical fiber type.

AI drives ramp-up in datacom optics – report

Total shipments of leading-edge datacom optical modules are projected to tally over US$9 billion for 2024, according to the latest Optical

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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

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

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