

# Using H3C 10 Gigabit Optical Modules



## Overview

Support Optical modules transmit signals over optical fibers. Optical transmission features low loss and is fit for long distance transmission. H3C devices.

## Key Takeaways

H3C 10G optical modules, such as the SFP-XG-LX-SM1310, enable high-speed, long-distance network connectivity over single-mode fiber with reliable performance and monitoring capabilities. Module Overview H3C 10G optical modules, including the SFP-XG-LX-SM1310, are designed for single-mode fiber applications, supporting data rates of 10.3125Gbps (10GBASE-LR) or 9.

953Gbps (10GBASE-LW) over distances up to 80 km depending on fiber type and network conditions. They operate at a 1310nm wavelength and use LC duplex connectors, compliant with IEEE 802.3ae standards and SFP+ Multi-Source Agreement (MSA) specifications.

These modules are suitable for backbone links, enterprise networks, and data center interconnects.

## Installation and Deployment

Compatibility Check: Ensure the module is compatible with your H3C switch or router model. The SFP-XG-LX-SM1310 is widely supported across H3C enterprise and data center devices. Fiber Type: Use single-mode fiber (SMF) for long-distance links.

For shorter distances (up to 300 meters), OM3 multimode fiber can be used with appropriate 10G modules. Insertion: Insert the module into the SFP+ port of the H3C device. Ensure the module clicks securely and the fiber connectors are clean to prevent signal loss.

**Link Verification:** After installation, verify the link status using H3C CLI commands: `display interface` to check module type, link state, and statistics. `display transceiver` for real-time monitoring of optical power, temperature, and laser bias current if the module supports DDMI.

## **Performance and Best Practices**

**Transmission Distance:** Single-mode 10G modules can reach up to 80 km, while multimode modules typically support shorter distances (up to 300 meters with OM3 fiber). **Signal Integrity:** Optical fiber provides low attenuation and high anti-interference capability, ensuring stable high-speed transmission. **Monitoring:** Use the Digital Diagnostic Monitoring Interface (DDMI) to track optical power, temperature, and voltage, which helps in proactive maintenance and troubleshooting.

**Network Design:** For enterprise or campus networks, H3C recommends integrating 10G modules with iOptic Ethernet or POL solutions to achieve high bandwidth, low latency, and scalable network architecture.

## **Troubleshooting Tips**

Ensure the fiber type matches the module specification (single-mode vs multimode). Clean connectors to avoid signal degradation. Verify that the module is seated properly and recognized by the switch.

Check for firmware updates on H3C devices to maintain compatibility and performance.

## **Use CL**

Use CLI commands to monitor link quality and detect potential faults early.

## **Using H3**

Correct use of 10G optical modules ensures high-speed, reliable, and scalable network connectivity, suitable for enterprise, data center, and campus environments. Proper installation, monitoring, and adherence to compatibility guidelines are key to maintaining optimal performance.

## Article Content

Efficient transmission is essential | H3c huaqiang 10 gigabit optical ...

Overall, the h3c huaqian gigabit/10 gigabit single-mode and multi-mode sfp-ge/xg-lx-sm1310-d optical modules not only excel in design and ease of use, but also deliver an

H3C Equipment Internet Cafe 10G Optical Module Solution

The transmission carrier of the server and the switch can use ETU-LINK's 10G optical modules with OM3 multi-mode fiber patch cords to achieve link transmission within 300 meters.

SFP-XG-LX-SM1310 H3C Compatibility Guide for 10G Networks

Learn how SFP-XG-LX-SM1310 works with H3C devices, including compatibility checks, deployment tips, and performance insights for stable 10G networks.

H3C Transceiver Modules User Guide

Preface H3C Transceiver Modules User Guide describes the types, views, and specifications of transceiver modules and network cables available for H3C devices. The following topics are covered in the document:

What are the differences between h3c optical modules, including

This article will deeply analyze the characteristics of each type of optical module and applicable scenarios to help users easily master the selection skills. 1.

H3C Compatible 10GBASE-LR SFP+ 1310nm 10km DOM Duplex

Featuring an operating temperature range of -40°C to 85°C, this industrial fiber optic transceiver is suitable for 10GBASE Ethernet, 4G wireless network and can work in harsh industrial environments,

H3C SFP-XG-LX-SM1330-BIDI Optical Module Sample Test Report

H3C offers the SFP-XG-LX-SM1330-BIDI optical module, which supports 10G Ethernet transmission up to 10 km over single-mode fiber. Modutek Laboratory has tested samples of this

JC131A | HP H3C Gigabit A8800 10-Port SFP 1000BASE-X (161C) Router Module

Technical Information Application/Usage Data Networking Interfaces/Ports  
Interfaces/Ports Details 10 x 1000Base-X Network Media & Performance Media Type  
Supported Optical Fiber Ethernet

How to distinguish whether an optical fiber module is single-mode or ...

Correctly distinguishing single-mode and multi-mode optical modules is critical for matching fiber patch cords, ensuring transmission stability, and avoiding network failures.

#### QSFP-SFP10G

HP H3C Compatible QSFP+ to SFP+ Convertor Module The Cisco compatible QSFP to SFP or SFP+ Adapter (QSA) Module offers 10 Gigabit Ethernet and 1 Gigabit Ethernet connectivity for Quad Small

#### Alcatel-Lucent (Nokia) 3HE00564CA 01 10GBASE-LR XFP Optical

The Alcatel-Lucent (Nokia) 3HE00564CA 01 is a genuine original 10GBASE-LR XFP optical transceiver, manufactured by Finisar for Nokia/Alcatel-Lucent. Designed for carrier-grade 10 Gigabit Ethernet

#### FR 10 Gigabit SFP+ 10G Optical Module Single-Mode 1310nm Multi

How do you ensure optical module compatibility? Every batch undergoes 100% live testing on Cisco, Huawei, Arista, Juniper, H3C and Dell switches. Custom EEPROM coding ensures digital-level

#### 10 gigabit sfp+ aoc active optical cable | the new darling of data ...

Did you know? in today's era of data explosion, even a second of slow internet speed can mean missing out on a hundred million! Today, i'm excited to introduce you to this 10 gigabit sfp+ aoc active optical

#### Stock SFP+ 10G BIDI 1270/1330nm 20km 5G 3G Optical Module

Type SFP+ optical module Brand Name FR Place of Origin China Use Gigabit and 10-Gigabit networks Warranty Time 3Y

#### Nokia 3HE11023AAAA01 10GBASE-SR SFP+ Optical Transceiver

The Nokia 3HE11023AAAA01 is a genuine original 10GBASE-SR SFP+ short-range optical transceiver, manufactured by Finisar for Nokia. Designed for high-speed 10 Gigabit Ethernet networks, this

#### H3c ls-s5560x 10 gigabit switch | 24/48 port poe+ vlan+ ...

that's until i came across the ls-s5560x-30f-ei - the official h3c ei version. brand new, unopened, with a metal chassis and redundant dual fans (lspm1fansb x 2 is a must-have), and

#### SFP-10G-T-H3C

Home Optical Transceivers Choose By Vendor HP H3C SFP+ 10-Gigabit Ethernet SFP-10G-T-H3C - HP H3C Compatible 10GBASE-T SFP+ Copper RJ45 30m Transceiver Module Optical

## Genuine Transceiver Modules

GenuineModules is a reliable supplier of optical interconnect products for use in fiber optic networking, including optical transceiver modules, direct attach cables,

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

