How to use the Huijue 10G optical module



Overview

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.

Key Takeaways

The Huijue 10G optical module is expected to perform similarly to standard 10G SFP+ modules, supporting 10Gbps data rates over single-mode fiber with typical distances up to 10 km at 1310nm wavelength.

Performance and Specifications

Huijue 10G optical modules are designed for 10 Gigabit Ethernet (10GbE) applications, similar to widely used SFP+ modules like Huawei SFP-10G-LR. These modules typically support: Data Rate: Up to 10 Gbps, suitable for high-bandwidth applications such as data center interconnects and enterprise networks. Wavelength: 1310 nm for single-mode fiber (SMF), which is standard for long-distance 10G links.

Transmission Distance: Up to 10 km over SMF without signal regeneration, making it ideal for medium-range connections between switches or routers. Encoding: 8B/10B encoding, ensuring reliable data transmission with error detection. Connector Type: LC duplex, compatible with most SFP+ ports and fiber patch cords.

Receiver Sensitivity and Output Power: Typically around -17 dBm sensitivity and +3 dBm output power, allowing stable signal reception over the supported distance.

© 2026 EXF OPTICAL NETWORKS - All rights reserved

Compatibility and Interoperability

Huijue 10G modules are generally MSA-compliant, meaning they can interoperate with a wide range of networking equipment from different vendors, including switches, routers, and network interface cards. This ensures flexibility in mixed-vendor environments. For single-fiber bidirectional (BIDI) modules, they must be used in pairs with complementary transmit and receive wavelengths, similar to Huawei BIDI modules, to achieve proper communication.

Use Cases

Data Center Interconnects: High-speed links between racks or buildings. Enterprise Networks: Backbone connections requiring 10GbE bandwidth. Metro Access Networks: Medium-range fiber connections up to 10 km.

Summary

The Huijue 10G optical module is a cost-effective, high-performance SFP+ solution for 10GbE networks. Its specifications align with industry standards, offering reliable 10 Gbps transmission over single-mode fiber up to 10 km, LC connector compatibility, and broad interoperability. For deployments requiring longer distances, modules similar to Huawei XFP-10G-1550NM-80KM-SM can be considered, supporting up to 80 km on single-mode fiber.

Overall, the Huijue 10G module is suitable for enterprise, data center, and metro network applications where standard 10G SFP+ performance is required.

Article Content

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.

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 transmission distance ranges from 0.5 km (0.31 mi) to 80 km (49.71 mi).

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

How to use the optical port on a Huijue switch

© 2026 EXF OPTICAL NETWORKS - All rights reserved

How to use the optical port on a Huijue switch This article summarizes several solutions for using optical modules with switches and common problems encountered during usage, along with specific solutions.

How to install and use the SFP+ Transceiver?

The SFP+ optical module is a mainstream enhanced hot-swappable optical module that connects the device board to other devices and has a data

SFP and SFP+ Modules: The Ultimate Guide to Choosing and Setting

Discover everything you need to know about SFP+ modules, including their functionality, compatibility with network switches, and step-by-step setup for a high-speed 10G or 40G network.

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 such as data centers, enterprise LANs, and WANs. An optical module is

Installation And Maintenance Of 10G Optical Modules

This article will explore best practices for deploying 10G optical modules and offer tips for troubleshooting and maintaining their performance to maximize the longevity and efficiency of your

Huijue Single-Core Optical Module Insertion Method

To use an SFP optical module, first confirm that the host port is SFP-type. Align the SFP module with the optical port and insert it horizontally, pressing firmly until the bottom of the module

10GB SFP Module Guide: Types, Specs, and How to Choose

Learn everything about 10GB SFP modules, including types, specifications, compatibility, and how to choose the right 10G SFP+ transceiver for your network.

OM3 Single Mode Fiber: Uses & Benefits

The search results for "OM3 Single Mode" reveal a market primarily focused on fiber optic connectivity components. The most promising product categories include standard-length single

huijue-4-port-10-gigabit-optical-switch

All Companies and suppliers for huijue-4-port-10-gigabit-optical-switch Find wholesalers and contact them directly Leading B2B martketplace Find companies now!

© 2026 EXF OPTICAL NETWORKS - All rights reserved

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.

huijue-optical-module-price-list Distributor

All suppliers for huijue-optical-module-price-list Distributor Find wholesalers and contact them directly B2B martketplace Find companies now!

Explanation of Optical Module Parameters

Considering that some newcomers to optical modules may not understand the letters on the optical module or the specific meanings of the parameters on the optical module, the following is

Meaning of Optical Module Pull Tap Colors

4. 10G SFP+ Optical Module Pull Ring Colors 10G SFP+ red pull tab = ER 40km, white pull tab = ZR 80km; this color rule is the mainstream standard among mainstream brands including

100G Optical Module: How to Choose Between SR4,

Continuing our discussion on 100G optical modules, let''s explore the essential 100G transmission standards—SR4, DR1, DR4, BiDi SR, LR4,

Hilink Optics QSFP QSFPDD OSFP 10G SFP transceiver, Optical

If you have any questions about Hilink Optics CWDM DWDM QSFP QSFPDD OSFP 10G SFP transceivers,we will give the professional solutions to you.

© 2026 EXF OPTICAL NETWORKS - All rights reserved

Contact Us

Continue your research online:

Website: https://explosivefunctions.co.za
Technical inquiry: https://explosivefunctions.co.za/contact.html
EU project coordination: Parque das Nações, Lisbon, Portugal

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

© 2026 EXF OPTICAL NETWORKS - All rights reserved