

What is the purpose of Huawei's 10 Gigabit optical module



Article Overview

Huawei's 10G optical module enables high-speed, long-distance, and reliable network connectivity, serving as a critical enabler for data centers, enterprise networks, 5G, and AI applications.

Overview and Technical Features

Huawei's 10G optical modules, such as the OSX010000, are SFP+ (Small Form-factor Pluggable) transceivers designed for high-speed optical fiber transmission. They support the 10GBASE-LR standard and use single-mode fiber (SMF), allowing transmission distances up to 10 kilometers. Key technical parameters include a central wavelength of 1310nm, maximum transmit optical power of 0.5dBm, receiving sensitivity of -12.6dBm, and digital diagnostic functions for monitoring performance. These modules operate reliably in temperatures ranging from 0°C to 70°C and are compatible with a wide range of Huawei network equipment.

Applications in Networking

- **Data Centers:** The 10G optical module facilitates server-to-server, server-to-storage, and inter-data center connections, supporting high-speed computing, storage, and large-scale data processing.
- **Enterprise Networks:** It enables inter-building and multi-location interconnections, providing high bandwidth and low-latency communication for enterprise backbones.
- **5G Communications:** With the growth of 5G, these modules support high-bandwidth, low-latency links essential for mobile networks, edge computing, and AI...

Article Content

Introduction of Optical Modules on Huawei Switches

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

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.

Huawei Optical Module Common Models

Huawei's main business scope is switching, transmission, wireless and data communication telecommunication products, providing

Understanding Pluggable Optical Modules

Optical modules are available in various types to meet diversified requirements. Classified by transmission rates Currently, the

Using Huawei SFP-10G-LR Optical Transceivers to Strengthen Your

With its single-mode 1310nm wavelength, this transceiver offers a reach of up to 10 kilometers, making it ideal for short

Understanding Optical Modules

This document explains optical modules, their types, and applications, providing a comprehensive understanding of their functionality

2X10GL (2-Port 10GE Optical Ports Interface Card)

2X10GL (2-Port 10GE Optical Ports Interface Card) Card Overview The 2X10GL is a high-speed WAN access module that provides

Types of Optical Modules

Wavelength division multiplexing modules differ from other optical modules in center wavelengths. A common optical module has a

Optical Modules in General-Purpose Computing Scenarios

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

Optical/Electrical Modules

HUAWEI USG6000 Series V100, V500 Hardware Guide Optical/Electrical Modules This chapter describes hardware information for

Intelligent OptiX Network | OptiX | All-Optical Networking

Huawei's intelligent OptiX network strategy aims to build intelligent, simplified, ultra-broadband, and ubiquitous next generation all

SFP-10G-LR, Huawei SFP+ Optical Transceiver, 10G, 1310nm, 10km

Huawei SFP-10G-LR 10G SFP+ 1310nm 10km single-mode LC module for enterprise and carrier networks. Check real-time Huawei

Types of Optical Modules

XFP: 10 Gigabit small form-factor pluggable. X is the Roman numeral 10, meaning that all XFP optical modules provide a 10 Gbit/s

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

10GBASE-T SFP+ Transceiver: Benefits, Use Cases & Comparison

This article takes a deep dive into how 10GBASE-T SFP+ modules work, their benefits and trade-offs, deployment scenarios, and

Huawei SFP-10G-USR 10G SFP+ Optical Transceiver Module Price

The Huawei SFP-10G-USR is an enterprise-class SFP+ optical transceiver designed for short-reach 10G links over OM3 multimode

10 Gbit/s SFP+ Optical Modules

You can use different levels of 10 Gbit/s SFP+ optical modules only with 10 GE interfaces. The wavelength of these 10 Gbit/s SFP+

10 Gigabit Ethernet

10GBASE-PR originally specified in IEEE 802.3av is a 10 Gigabit Ethernet PHY for passive optical networks and uses 1577 nm

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.gmarkconstruction.co.za>

Email: sales@gmarkconstruction.co.za

Phone: +31-6-15-38-72-94

Address: Herengracht 456, 1017 BS Amsterdam, Netherlands

This document is for informational purposes only. Specifications subject to change without notice.

