

What is the interface of the XFP optical module



Article Overview

XFP modules use LC fiber connectors and operate at 850 nm, 1310 nm, or 1550 nm wavelengths for high-speed optical transmission.

Overview of XFP Optical Interface

XFP (10 Gigabit Small Form-factor Pluggable) modules are hot-swappable optical transceivers designed for high-speed data communication over fiber networks, supporting 10 Gigabit Ethernet, 10G Fibre Channel, OC-192/STM-64 SONET/SDH, and 10G OTN systems (). The optical interface of an XFP module is protocol-independent, allowing it to transmit and receive serial optical signals over single-mode or multi-mode fiber ().

Connector and Wavelengths

- Connector Type: XFP modules typically use LC duplex connectors, which provide high-density fiber connections suitable for data centers and telecom applications ().
- Wavelengths: They operate at 850 nm for short-range multimode fiber, 1310 nm for intermediate-range single-mode fiber, and 1550 nm for long-range single-mode fiber ().
- Reach: Depending on fiber type and module variant, XFP modules can support distances from tens of meters on multimode fiber to tens of kilometers on single-mode fiber ()....

Article Content

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Cisco 10-Gigabit XFP Transceiver Modules Install Note

Step 1 Disconnect the network interface cable from the XFP transceiver module connectors. Immediately reinstall the dust plug in the

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What is the difference between SFP, SFP+ and XFP optical modules?

SFP optical modules usually use dual LC interfaces, in addition to single-core SFP optical modules. From the rate and

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XFP 10G Dual LC Optical Transceivers

In order to avoid conflicts, the host system shall not attempt 2-wire interface communications within the Mod_DeSel assert time after

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Extreme Networks XFP Modules

XFP modules are 10-gigabit modules that convert serial electrical signals to external serial optical or electrical signals. XFP modules

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Optical module design resources | TI

Integrated circuits and reference designs help you create a smaller and faster optical module design used in high-bandwidth data

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Cisco Transceiver Modules

Cisco Transceiver Modules - Learn product details such as features and benefits, as well as hardware and

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Cisco XFP Modules for 10 Gigabit Ethernet and Packet Over-Sonet ...

Table 2 shows the main optical characteristics for the Cisco optical XFP modules. A multirate module, the XFP module can operate

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XFP modules for high-speed optical transport

An XFP transceiver (10 Gigabit Small Form-factor Pluggable) is a hot-swappable optical module designed

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Types of Optical Modules

All optical modules are hot swappable. Small form-factor pluggable (SFP) optical module: supports LC fiber connectors. Enhanced

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What is SFP Module and How to Choose it

Ethernet SFP Module: What Is It? Ethernet SFP module, known for its compact, small form-factor pluggable design,

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Extreme Networks XFP Modules

Extreme Networks XFP Modules XFP modules are 10-gigabit modules that convert serial electrical signals to external serial optical or

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Understanding Pluggable Optical Modules

If you cannot push the optical module into an optical module cage any further, the optical module is in good contact with the board

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XFP Optical Modules and SFP+ Optical Modules Guide

XFP Optical Modules can only operate in XFP ports, while SFP+ Optical Modules are designed specifically for SFP+

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XFP 10G Dual LC Optical Transceivers

The module's 2-wire serial interface and all laser safety functions must be fully functional in this low power mode. During P_Down,

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What is SFP+ Module? An Ultimate Guide (2024)

The SFP+ module is also called the SFP+ transceiver, SFP+ optical module, SFP+ optics, or SFP+ fiber transceiver.

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XFP vs SFP+: What Are the Differences?

XFP vs SFP+: Definition The XFP (10 Gigabit Small Form Factor Pluggable) is a standard for modules for high-speed

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Key Differences Between XFP and SFP+ Explained

Unlike XFP, SFP+ modules offload signal modulation, clock recovery, and MAC functions to the host device, reducing

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Arista Optics Modules and Cables

SFP+ Optical interoperability with 10GbE XFP, X2 and XENPAK pluggable form factors
QSFP+ Universal transceiver for 40G

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Differences Between Optical Modules SFP, SFP+, CFP, XFP, QSFP?

Compared to earlier XFP modules, SFP+ is significantly smaller than XFP due to the fact that SFP+ saves PCB area

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Small Form-factor Pluggable

Small Form-factor Pluggable Small Form-factor Pluggable connected to a pair of fiber-optic cables Small Form-factor Pluggable

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Optic Modules Datasheet

These platforms support multiple interface types and technologies such as Ethernet, ATM, and SONET. Depending on the

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Key Differences Between XFP and SFP+ Explained

Can you use XFP and SFP+ modules interchangeably? No, you cannot use them interchangeably. XFP and SFP+

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Optical Module Package Types Overview

Optical transceiver module (optical transceiver), referred to as optical module, is an important device in optical

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Understanding Optical Modules

CloudEngine 12800 and 12800E Series Switches Hardware Description This document provides an overall description of the

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Engineering:XFP transceiver

The XFP (10 gigabit small form-factor pluggable) is a standard for transceivers for high-speed computer

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XFP transceiver

XFP modules are hot swappable and support multiple physical layer variants. They typically operate at near-infrared

Contact Us

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