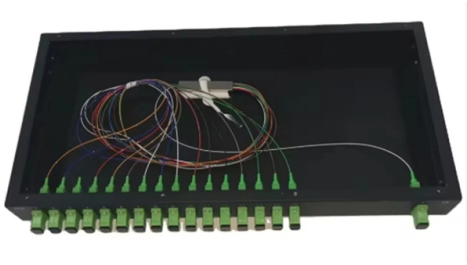
Is the SX optical module 10 Gigabit



Overview

Cisco SFP Modules for Gigabit Ethernet Applications Data SheetThe SFP-1G-SX module operates in 10G, 10/25G dual rate and 10/25/50G tri-rate ports of Cisco.

Key Takeaways

No, SX optical modules are 1 Gigabit (1000BASE-SX) and do not support 10 Gigabit Ethernet.

The SX SF

P module, also known as 1000BASE-SX, is designed for Gigabit Ethernet (1 Gbps) over multimode fiber using an 850nm short-wavelength laser. It is intended for short-distance connections, typically up to 550 meters on modern OM3/OM4 multimode fiber.

S

X modules convert electrical signals from switches or routers into optical signals for transmission over fiber, but their maximum data rate is 1 Gbps, not 10 Gbps. Comparison with 10 Gigabit ModulesFor 10 Gigabit Ethernet, you need SFP+ modules, such as 10GBASE-SR, which are specifically designed for 10 Gbps speeds and also use multimode fiber.

S

X modules cannot be used in place of 10G modules because: SX modules plug into 1G SFP ports, not SFP+ ports. The internal VCSEL laser and encoding of SX modules are limited to 1 Gbps. Attempting to use an SX module in a 10G network will not achieve 10 Gbps speeds and may not be compatible with the switch hardware.

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

SummarySX SFP module: 1 Gbps, multimode fiber, short-range (1000BASE-SX)SR SFP+ module: 10 Gbps, multimode fiber, short-range (10GBASE-SR)LX SFP module: 1 Gbps, single-mode fiber, long-range (1000BASE-LX) If you need 10 Gigabit connectivity, you must use a 10G SFP+ module like 10GBASE-SR, not a 1000BASE-SX module.

Article Content

Cisco SFP Modules for Gigabit Ethernet Applications Data Sheet

The SFP-1G-SX module operates in 10G, 10/25G dual rate and 10/25/50G tri-rate ports of Cisco switches and routers but provides 1G connectivity. The SFP-1G-SX interoperates with

Cisco 10GBASE SFP+ Modules Data Sheet

The Cisco ® 10GBASE SFP+ modules (Figure 1) give you a wide variety of 10 Gigabit Ethernet connectivity options for data center, enterprise

1000BASE-SX, 1000BASE-LX, 1000BASE-ZX&BX SFP: A Simple

1000BASE-SX is a gigabit Ethernet standard over fiber optic for short reach. It is used for operating on multimode fiber with a short wavelength of 770 to 860 nanometers (typically 850nm).

SX SFP Module Guide: SX vs LX vs SR Differences Explained

Plugging a 10G “SR” module into a 1G “SX” switch might not link up. Among all these options, the SX SFP Module is the most common workhorse for enterprise networks.

1000BASESX SFP: How to Select the Right Optical Module

At its core, 1000BASESX SFP refers to a Gigabit Ethernet optical transceiver designed for short-range transmission over multimode fiber. It combines a standardized Ethernet optical interface (1000BASE

1000BASE-SX vs 1000BASE-LX, EX, ZX & BX SFP Guide

1000BASE-SX, 1000BASE-LX, 1000BASE-EX, 1000BASE-ZX and 1000BASE-BX are all Gigabit Ethernet fiber optic module terms, but they are not the same type of link. They differ in fiber

1000BASE-SX VS 1000BASE-LX SFP Transceivers

Discover the differences between 1000BASE-SX and 1000BASE-LX SFP transceivers. Learn which one suits your network needs for optimal performance and connectivity.

SFP vs SFP+: The OEM Guide to 1G and 10G Optical Transceivers

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

Whether you need legacy SFP-SX or high-speed SFP-10G-SR, our engineering team offers fully tested, custom-coded transceivers. Contact us for compatibility lists and samples.

10G SFP+ Optical Transceivers | Transceiver Module

FS 10GbE SFP+ module solutions provide a wide variety of 10 Gigabit Ethernet connectivity options for data centers, enterprise wiring closets, Internet Service Providers (ISPs) applications.

10 Gigabit Ethernet Interface Module Market Analysis witch ...

The 10 Gigabit Ethernet Interface Module (10GbE IM) is a networking hardware component designed to facilitate high-speed data transfer over Ethernet networks, primarily supporting data

H3CSFP-XG-LX-SM1310-S 10G SFP+ Multi-mode Optical Module

SFP+ optical module is a new generation of 10 Gigabit optical modules. Compliant with the ANSI T11 protocol, it supports 10 Gigabit Ethernet (10GbE) applications. The SFP+ module is approximately

The Ultimate Guide to ZTE SFP Module Distance and Wavelength

10 Gigabit Ethernet (10GBASE) and 40 Gigabit Ethernet Transceivers As bandwidth demands grow, 10 Gigabit Ethernet SFP+ modules become critical for aggregation and server connectivity. For long

Cisco Transceiver Modules

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

Arista Optics Modules and Cables

25 Gigabit Ethernet SFP25 Optical Specifications ... When connecting 25G-MR-XSR/LR optics to legacy fixed rate 10G optics, attenuation may be required to ensure the optical input power to the 10G

Dahua PFT3950 Compatible 1000BASE-SX SFP Transceiver

Dahua PFT3950 Compatible 1000BASE-SX SFP 850nm 550m Transceiver supports 1G gigabit Ethernet throughput over multimode fiber (MMF) with LC connector.

1G SFP Mini GBIC | SFP Transceiver Modules

Cisco Compatible 1000BASE-SX SFP 1310nm 2km DDM LC SMF/MMF Optical Transceiver Module Cisco Extreme Networks Juniper 1G / Cisco / 2km / LC / MMF / SMF / SFP 5438 in real-time stock,

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

Pluggable Optical Modules: Transceivers for the Cisco

Cisco offers a comprehensive range of pluggable optical modules for the Cisco ONS family of multiservice platforms. The wide variety of modules

Finisar FTLF8519P3BNL Compatible LINK-PP LS-MM851G-S5C 1000BASE-SX

Finisar FTLF8519P3BNL Compatible & MSA Compliant This 1000BASE-SX SFP is engineered as a 100% compatible, plug-and-play alternative to the highly ubiquitous Finisar FTLF8519P3BNL optical

Contact Us

Continue your research online:

Website: https://ensaa.es
Technical inquiry: https://ensaa.es/contact.html

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

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved