

Article Overview

Gigabit Single-Mode Fiber SFP modules provide 1Gbps connectivity over long distances using single-mode fiber, with options for standard, BiDi, and industrial-grade models.

Cisco Single-Mode SFP Modules

Cisco offers a range of single-mode SFPs for Gigabit Ethernet, including:

- o GLC-BX40-D-I / GLC-BX40-DA-I / GLC-BX40-U-I: Operate on a single strand of standard single-mode fiber (SMF) with distances up to 40 km. Transmission is achieved by separating wavelengths for upstream and downstream communication .
- o GLC-2BX-D / GLC-2BX-D-I: 2-channel SFP modules connecting to two 1000BASE-BX10-U interfaces over two single strands of SMF, supporting distances up to 10 km. Industrial versions support -40°C to 85°C operation .
- o 1000BASE-LX/LH and 1000BASE-EX: Standard single-mode SFPs for distances ranging from 10 km to 40 km depending on the model and fiber type .

Lanshack Single-Mode SFP Modules

Lanshack provides high-performance single-mode SFP transceivers:

- o 1.25G Singlemode SFP with LC Duplex: Hot-pluggable, suitable for distances up to 2 km at 1310 nm.
- o 1.25G Singlemode BiDi SFP with LC Simplex: Supports distances up to 20 km using a single fiber with two wavelengths (1310/1550 nm), compatible with Cisco devices .

Ubiquiti Single-Mode SFP Modules

Ubiquiti offers single-mode SFPs for long-distance connections:

- o UF-SM-1G: Supports 1 Gbps over single-mode fiber up to 3 km.
- o BiDi models: Must be deployed in pairs, using two wavelengths on a single fiber for upstream and downstream communication .

Key Features Across Models

- o Hot-pluggable SFP form factor for easy installation and replacement .
- o Wavelength options: Typically 1310 nm or 1550 nm for single-mode fiber.

- o Connector types: LC Duplex or LC Simplex depending on standard or BiDi modules.
- o Industrial-grade options: Support extended temperature ranges for harsh environments.
- o Compatibility: Many modules are Cisco-compatible and interoperable with other standard-based networking equipment .

Choosing the Right Module

- o Distance requirements: Select modules based on the maximum link distance (e.g., 2 km, 10 km, 40 km, or longer).
- o Fiber type: Ensure the module matches single-mode fiber specifications.
- o Deployment environment: Consider industrial-grade modules for extreme temperatures.
- o BiDi vs standard: Use BiDi modules to reduce fiber usage by transmitting upstream and downstream on a single strand. These Gigabit Single-Mode SFP modules are widely used in enterprise, campus, and industrial networks for reliable long-distance connectivity while maintaining flexibility and compatibility with existing infrastructure .

The Gigabit Ethernet network module provides single-port Gigabit Ethernet connectivity through an installed Gigabit

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

Cisco offers a range of GBIC transceivers and Small Form-factor Pluggables (SFP) transceivers for Gigabit Ethernet and Fibre

1000BASE-EX SFP for long-reach single-mode fibers The 1000BASE-EX SFP operates on standard single-mode fiber-optic link

TP-LINK Omada Gigabit SFP Module, 1000Base-SX Multi-Mode Fiber Mini GBIC Module, Plug and Play, LC/UPC Interface, Up to

Technical data of SFP-S-10KM-G-N Ethernet Interface ... Interface 1 ... Fiber optics functionality ... Directive conformity

Also known as a mini-Gigabit Interface Converter (GBIC), this industrial SFP module's metal housing offers

The SM311 series Fiber Module Cards are introduced for extending transfer distance.



Gigabit Single-Mode Fiber Module Interface

About this item Seamless Conversion of LC Fiber to Copper - This fiber optic to ethernet media

10Pcs 1.25G Single Mode SFP Fiber Module Network Transceiver, LX SM 1310nm 20km, Duplex LC Interface for

Buy ipolex 1000Base-LX/LH SFP Transceiver, 1.25G SFP LC Fiber Module, Gigabit Single Mode Mini GBIC, 1310nm

Learn what a gigabit SFP module is, how it works, main types, key specifications, and common use cases to choose the right 1G

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The interface type of dual fiber optical module is duplex LC, and the optical fiber types are single-mode and multi

The Cisco® 10GBASE SFP+ modules (Figure 1) give you a wide variety of 10 Gigabit

Amazon.com: TP-Link Omada Gigabit SFP Module | 1000Base-LX Single-Mode Fiber Mini GBIC Module | Plug and

Web: <https://bssoda.pl>

