

A pair of gigabit single-mode single-fiber optical modules



Article Overview

Single-fiber single-mode gigabit optical modules (BIDI SFPs) transmit and receive data over a single fiber strand and must be used in matched pairs for proper operation.

Overview

Single-fiber, single-mode optical modules, also known as BIDI (bidirectional) SFPs, allow 1 Gbps data transmission over a single strand of single-mode fiber. Unlike traditional duplex SFPs that require two fibers (one for transmit, one for receive), BIDI modules use different wavelengths for transmitting and receiving on the same fiber, reducing cabling requirements and simplifying network deployment .

Key Specifications

- **Transmission Distance:** Typical gigabit BIDI SFPs support distances from up to 3 km (Ubiquiti 1G BIDI module) to 10 km or more depending on the module and fiber quality .
- **Connector Type:** Most modules use simplex LC UPC connectors, which are standard for single-mode fiber .
- **Power Consumption:** Modules are generally low-power, often classified as Class 1 laser products, requiring standard safety precautions .
- **Form Factor:** Small Form-Factor Pluggable (SFP) modules are compact, hot-swappable, and compatible with MSA-compliant switches and routers

Article Content

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This Fiber Transceiver / Media Converter is designed to convert data signal between 10/100/1000Base-T and 1000Base-LX Gigabit

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ipolex A Pair of Gigabit Ethernet Single-Mode SC Fiber Bidi Media ...

Seamless Conversion of SC Fiber to Copper - This fiber optic to ethernet media converter is built-in single mode Bidi SFP LX

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SFP Gigabit Transceivers Singlemode Single-Strand BiDi

Discover SFP Gigabit single-strand BiDi modules for 20Km with SC connector. Cisco compatible - buy now for efficient fiber links!

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Amazon : Sfp

Hanutech 1.25G DDM SC Type Optical Transceiver Bidi SFP Module 1310/1550nm Single Mode Single Fiber 20KM- 1 Year

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SFP+ 10GBase-LR 1310nm SingleMode Module, 10G LC SMF Fiber Optic ...

10Gbps 1310nm SFP to LC Single Mode Transceiver Module The SFP 10GBase-LR module stands out with its

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Gigabit single-mode single-core fiber optic module

The general parameters and basic knowledge of Gigabit optical transceivers are difficult to master. The following will

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Amazon : 2Pack BiDi Gigabit Multi-Mode Fiber

About this item Complete Package: Includes 2 Gigabit Multi-Mode Fiber Ethernet SFP Slot media

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Cisco SFP Modules for Gigabit Ethernet Applications Data Sheet

This data sheet describes the benefits, specifications, and ordering information for the Cisco SFP Modules for Gigabit

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Open SFP Slot A Pair of 1.25G/s Gigabit Fiber Ethernet ...

Product Description Supports Multi-mode or Single-mode fiber using different SFP modules (not including any SFP transceiver);

Nov 10, 2025

SFP Modules: Types, Selection Guide & Applications

Dual Media Support: Works with both fiber optic cables (single-mode and multimode) and copper cables (twisted-pair),

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Amazon : Single Mode Sfp

Discover high-performance single mode SFP modules for your network. Compatible with major brands like Cisco, Ubiquiti, and more.

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1000Base-BX WDM Bi-Directional SFP Module

With one single-mode fiber, the pair of modules can create a full-duplex gigabit path between your

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Gigabit SFP Module: A Complete Guide to 1G SFP Transceivers

1000BASE-LX SFP for single-mode fiber transmission 1000BASE-BX SFP for single-fiber BiDi communication 1000BASE-T SFP for

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Gigabit Singlemode Fiber to Ethernet Media Converter, SC, 1310 nm,

Convert your copper Ethernet signal to fiber and extend your Gigabit connection up to 12 miles. This lightweight media converter

Jan 10, 2026

The Ultimate Guide to SFP Modules (2026): Types, Speeds

Confused by SFP vs SFP+? Read the definitive 2026 guide on SFP modules. We explain Single Mode vs Multimode, DDM

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Single Mode SFP Fiber Module

For horizontal shorter-length run, the Fastcabling modules are available with single mode fiber to suit your fiber connectivity

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1 Gigabit Singlemode SFP Fiber Optic Transceivers | Long-Distance

1 Gigabit Singlemode SFP Transceivers Our 1 Gigabit Singlemode SFP Transceivers offer high-performance, reliable connectivity for

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10/100/1000Base-T RJ45 to 1000Base-FX SFP Fiber

The MC-GSA11-L is a Gigabit SFP media converter designed to convert 10/100/1000BASE-T copper to

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1G Bidirectional Single-Mode Optical Module

SFP transceiver that supports 1G connections up to 3 km using single-mode fiber with a simplex LC UPC connector.

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A Pair of 1.25G/s Bidi Gigabit Single-Mode Fiber

A Pair of 1.25G/s Bidi Gigabit Single-Mode Fiber Ethernet Media Converter with 2PCS Bidi SFP LC

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10 Gigabit Ethernet connectivity over single-mode fiber,

Connect a singlemode 10GBase-LR fiber cable to the SFP+ port on your Cisco switch or router with this

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4-Port 10/100/1000Base-T to 2-Port SFP Fiber Media Converter

The MC-GSA24-L is an SFP Ethernet media converter designed to convert 4-port 10/100/1000BASE-T copper to 2-port 1000BASE-X

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Industrial Gigabit Fiber SFP Optical Transceiver

Compatibility in your network is everything, and this industrial SFP Transceiver Module delivers. Use it with

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Single vs Dual Fiber Media Converters (2025): A/B Pairing and WDM

Understand single-fiber (BiDi) vs dual-fiber, A/B wavelength pairing (1310/1550), copper-to-fiber use cases, LED meanings, and

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ipolex A Pair of Gigabit Single Mode Fiber Media Converter | Single ...

Seamless Conversion of LC Fiber to Copper – This fiber optic to ethernet media converter let you easily convert Single mode simplex

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Cisco SFP Modules for Gigabit Ethernet Applications

The 1000BASE-ZX SFP operates on standard single-mode fiber-optic link spans of up to approximately 70 km in length. The SFP

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Gigabit Fiber SFP Optical Transceiver Module

The transceiver is available as a mini-GBIC form factor, making it ideal for environments that require many fiber connections by

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10G Single-Mode Optical Module

SFP+ transceiver that supports 10G connections up to 10 km using single-mode fiber with a duplex LC UPC connector.

Feb 15, 2026

Gigabit SFP Module: A Complete Guide to 1G SFP Transceivers

This guide focuses on what a gigabit SFP module is, how it works, the main types available, and how to choose the right one for your

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TL-MC101 | Gigabit Single-Mode Media Converter | TP-Link

Other features of this module include the ability to be used as a stand alone device (no chassis required) or with TP-Link's MC1400

Jul 17, 2026

Fiber to Ethernet Media Converter, Gigabit Single Mode Dual SC ...

About this item What You Get: 1x Gigabit SC to RJ45 Media Converter, 1x external power supply, 1x

Contact Us

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