

Korea Single-Fiber Bidirectional SFP



Overview

Our 1G BiDi SFP transceivers enable full-duplex communication over a single fiber, reducing fiber usage while maintaining reliable performance. Ideal for enterprise networks, data centers, and telecom applications, these modules support long-distance transmission with low power. BiDi modules are transceivers that can send and receive at the same time over one fiber cable using two wavelengths. By using Wavelength Division Multiplexing (WDM), BiDi SFP modules transmit and receive data on two different wavelengths, cutting. While both are compact fiber optic modules for switches and routers, BiDi SFPs uniquely enable bidirectional data transmission over a single fiber strand using Wavelength Division Multiplexing (WDM), contrasting with standard SFP modules requiring two fibers. Learn how single-fiber bidirectional technology works, wavelength pairs, and when to choose BiDi over standard duplex SFPs. BiDi SFP modules use a single fiber strand for both transmitting and receiving data. BiDi transceiver, a compact optical transceiver with WDM (wavelength division multiplexing) technology and SFP multi-source protocol (MSA) compliance, allows fast data transmission using a single fiber optic for both sending and receiving signals, saving resources and cutting infrastructure costs. Hot-pluggable with a single LC connector, it features real-time DDM monitoring, industrial-grade temperature support, and is ideal for 5G backhaul, metro aggregation, and.



Article Content

Apr 05, 2026

Comprehensive Guide to FS 10G BiDi SFP Modules

Enter the 10G BiDi (bidirectional) SFP+ module —an elegant solution that enables full-duplex communication over a single fiber strand using wavelength division multiplexing (WDM). FS

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The Different SFP Transceiver Types Explained | Equal

Bidirectional transceivers work optimally on single-mode fiber cabling, where they can easily reach transmission distances of 100 kilometers or greater.

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What Is a Single Fiber SFP? A Complete Guide for Beginners

Learn what a single fiber SFP is, how it works, key differences from dual fiber SFPs, common applications, and how to choose the right BiDi SFP.

May 28, 2026

The Essential Guide to BiDi Transceivers: Everything

BiDi transceiver, a compact optical transceiver with WDM (wavelength division multiplexing) technology and SFP multi-source protocol

Oct 01, 2025

25G BiDi SFP28 80KM Optical Transceiver | FiberMania

The FiberMania 25G BiDi SFP28 1270/1330nm transceiver delivers single-fiber bidirectional 25G Ethernet transmission up to 80km. Hot-pluggable with a single

Jan 24, 2026

1000Base-BX WDM Bi-Directional SFP Module

The TP-LINK's TL-SM321B-2 is developed in accordance with the Small Form Pluggable Multi-Source Agreement (SFP-MSA). As a WDM Bi-Directional optical

Mar 30, 2026

Bidirectional or BiDi Transceivers Explained

Bidirectional (BiDi) transceivers are SFP transceivers that are able to send and receive data on the same fiber. Without BiDi, data can only travel in one direction on a single fiber, meaning each

Nov 08, 2025

BiDi SFP Modules: Single-Fiber Bidirectional Guide

BiDi SFP modules use a single fiber strand for both transmitting and receiving data. Learn how single-fiber bidirectional technology works, wavelength pairs, and when to choose BiDi over standard

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Bidirectional SFP Selection Guide for Single-Fiber Links

This guide explains how bidirectional SFP technology works and outlines the key specifications to consider when selecting modules for single-fiber links. It also covers common BiDi SFP types,

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BiDi SFP: The Complete Guide to Bidirectional SFP Transceivers and ...

Learn everything about BiDi SFP and BiDi fiber, including working principles, 1310nm/1550nm wavelength design, single fiber advantages, wiring diagrams, and key differences

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Single Fiber Bidirectional SFP Transceivers

Single Fiber Bidirectional SFP transceivers use simplex single-mode fiber to double the bandwidth, data rates up to 4G and distances up to 160km.

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Differences Between SFP And BiDi SFP--ETU-LINK

This single-fiber SFP configuration enables bidirectional communication over one fiber strand. BiDi SFP Applications At present, the BiDi SFP is mostly used in

Sep 14, 2025

What is BiDi Transceiver: A Beginner's Guide

What is a BiDi Transceiver? BiDi transceiver, or Bidirectional or simplex optical transceiver, is an optical module that uses Wavelength Division

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Differences Between Dual Fiber SFP and Simplex SFP

Simplex SFP modules excel in efficiently using a single fiber for bidirectional communication. This is particularly advantageous in situations where

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BiDi Optical Modules: Unlocking Single-Fiber

Comprehensive guide on BiDi Optical modules, detailing single-fiber bidirectional connectivity, deployment tips, troubleshooting, and multi-speed

May 07, 2026

BiDi SFP: The Complete Guide to Bidirectional SFP Transceivers and ...

BiDi SFP (Bidirectional Small Form-Factor Pluggable) transceivers have emerged as a powerful solution, enabling full-duplex communication over a single optical fiber. By using

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What is a 10G SFP+ Switch and How to Use It?

BiDi SFP+ Modules: Enable bidirectional data transfer over a single fiber strand. Pre-terminated Fiber Optic Cables: 100% factory-terminated and

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1G BiDi SFP | Syrotech

Our 1G BiDi SFP transceivers enable full-duplex communication over a single fiber, reducing fiber usage while maintaining reliable performance. Ideal for enterprise networks, data centers, and telecom

Jul 25, 2025

The Complete Guide to BiDi Transceiver

What Is BiDi Transceiver? BiDi transceivers have become synonymous with reliable and high-performance networking, which can achieve

Aug 15, 2025

1km Single Fiber SFP 11D K001B55

1 km Single Fiber SFP | SFP-11D-K001B55 OptoSpan 1 km Single Fiber SFP transceiver for 1G BX Ethernet. 1Gb single strand bidirectional SFP transceiver for multimode fiber. Details: This advanced

Jun 01, 2026

The Comprehensive Guide to SFP vs. BiDi SFP in

BiDi SFP: Maximizing Efficiency and Capacity Bidirectional SFP technology stands out as a game-changer, offering the ability to transmit data in

Aug 15, 2025

Single-fiber Bidirectional Transceivers

Bidirectional transceivers transmit and receive optical signals through a single fiber, saving optical fiber resources. This is useful where fiber resources are scarce and

May 12, 2026

Cisco 2911 Bidirectional SFP Question

05-17-2016 01:32 PM Thank you for your reply, In fact I need to connect two remote sites about 14km over a single strand of single mode fiber, reason why I need a bi-directional SFP. Generally SFP

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The Different SFP Transceiver Types Explained | Equal

Multi-Mode Another consideration when choosing SFP transceiver types is whether they operate on single-mode or multimode fiber. Distance is the

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Choosing the Right SFP: Single Fiber vs Dual Fiber

What Is a Single Fiber SFP? Single fiber SFP modules, often referred to as BiDi (Bidirectional) SFPs, utilize Wavelength Division Multiplexing (WDM)

Feb 19, 2026

What is the Difference Between SFP and BiDi SFP?

Compare SFP vs BiDi SFP: key differences, fiber requirements, compatibility, and best use cases to help you choose the right SFP module for

Contact Us

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