Sc Single-mode single-fiber bidirectional transceiver



Overview

One Pair of 1.25G SFP WDM SC Bidi Transceiver WHAT WE PROVIDE: One pair of 1.25G WDM SC SFP Lantronix Simplex SFP Modules | Single-Fiber BiDi, 100Mbps to 1.

Key Takeaways

An SC single-mode single-fiber bidirectional transceiver allows simultaneous transmission and reception over a single fiber using WDM technology, typically supporting 1. 25G to 4G data rates and distances up to 160 km. OverviewSC BiDi transceivers are designed to transmit and receive optical signals on a single fiber by using wavelength-division multiplexing (WDM).

One fiber carries two wavelengths: for example, TX at 1310 nm and RX at 1550 nm, or vice versa, enabling bidirectional communication without laying additional fiber. These modules are widely used in single-mode fiber (SMF) networks, including metro, access, and enterprise networks.

Key Features

Connector Type: SC simplex connector compatible with standard SC ports. Data Rate: Typically 1. 25 Gbps, with some models supporting up to 4 Gbps.

Transmission Distance: Ranges from 20 km to 160 km, depending on the model and fiber quality. Wavelength Configuration: Common pairs include 1310 nm/1550 nm or 1550 nm/1310 nm for TX/RX. Power Supply: Single +3.

3V, with low power consumption (

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Article Content

Lantronix Simplex SFP Modules | Single-Fiber BiDi, 100Mbps to 10G

Simplex sfps Lantronix''s Simplex SFP Transceiver modules offer an efficient, single-fiber approach to fiber connectivity, enabling bidirectional data transmission over one strand where cabling resources

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.

BiDi Transceiver: Utilizing WDM Technology for Dual-Direction Data ...

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

Cisco 10GBASE SFP+ Modules Data Sheet

It supports link lengths of up to about 80 kilometers on standard Single-Mode Fiber (SMF, G.652). This interface is not specified as part of the 10 Gigabit

1.25G BiDi | SC Connector_Bi-Directional (BiDi)_Optical

The series is high performance module for single fiber communications by using 1310 nm transmitter and 1550 nm receiver or 1550 nm transmitter and 1310 nm

SFP BiDi 1000BASE-BX 1.25Gbps Tx1550nm/

The transceivers operate using WDM (Bi-Di) technology to provide bidirectional transmission over a single single-mode fiber. The built-in DFP laser transmits

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.

2.5G BiDi SFP Module, SC Single Mode Single Fiber Transceiver, 20km

Using 1310nm/1550nm BiDi wavelength technology and supporting up to 20km transmission distance, this SC BiDi SFP Module helps transmit and receive data over one fiber core while reducing fiber

The Complete Guide to BiDi Transceiver

Unlike traditional optical modules that use separate fibers for transmitting and receiving data, BiDi modules accomplish this bidirectional data transfer on a single fiber, optimizing space

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Small Form-factor Pluggable

SFP transceivers are available with a variety of transmitter and receiver specifications, allowing users to select the appropriate transceiver for each link to provide the required optical or electrical reach over

SFP+ transceiver CBO SFP-10G-BX-D | AiO.lv

Buy CBO SFP-10G-BX-D SFP+ 10G fiber transceiver for single-fiber bidirectional links. Order for reliable network upgrades with delivery in Riga, Latvia and the EU.

DS-3D501T-A 20KM Gigabit Fiber Transceiver

20KM Gigabit Fiber Transceiver DS-3D501T-A is a gigabit single-mode single-fiber fiber optical transceiver developed by Hikvision. It provides one 10/100/1000 Mbps self-adaptive RJ45 port and

XGSPON ONU SFP+ 1270nm-TX/1577nm-RX 9.953G-TX/9.953G-RX

Overview The XGS-SFP-ONT-MAC-I is a high-performance optical transceiver module designed for 10-Gigabit-capable passive optical network (XGS-PON) deployments. It functions as an integrated

Optical Fiber: Single-Mode Multimode Single-Fiber Dual-Fiber

Single-fiber vs. dual-fiber refers to how many fiber strands are used to send and receive data. In this guide, we''ll explain each of these clearly and simply so you can understand their

Fiber Optic Transceiver Guide | PHILISUN

Understand fiber optic transceivers, including form factor, speed, wavelength, reach, connector, coding and cable matching.

SEL-2829 Single-Mode Fiber-Optic Transceiver/Modem

Single-Mode Fiber-Optic Transceiver/Modem Improve safety, signal integrity, and reliability by using two optical fibers instead of wire to transfer bidirectional serial data using single-mode optical fiber. Apply

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

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

Ubiquiti 1 Gbps Bidirectional Single-Mode Optical Module

Ubiquiti 1 Gbps Bidirectional Single-Mode Optical Module The 1 Gbps Bidirectional Single-mode Optical Module is a simplex transceiver that delivers up to 1.25 Gbps speed over distances up to 3

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

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