

Fiber Optic Transceiver Multimode SC Single Fiber



Summary of Content

A multimode SC single-fiber transceiver (BIDI) transmits and receives data over a single multimode fiber using two wavelengths, ideal for short-range, cost-effective network links.

Overview

A fiber optic transceiver converts electrical signals from network devices into optical signals for transmission over fiber and vice versa, enabling high-speed communication for Ethernet, Fibre Channel, or SONET networks . Multimode transceivers use multimode fiber (MMF) with a larger core (50-62.5 μm), allowing multiple light paths, typically using LEDs or VCSELs as light sources . SC connectors are robust, widely used in multimode installations, and compatible with many legacy and modern network devices .

Single-Fiber (BIDI) Operation

Single-fiber transceivers, also called bidirectional (BIDI) modules, transmit and receive signals over a single fiber by using two different wavelengths. For example, one module may transmit at 850 nm and receive at 1310 nm, while the paired module does the opposite . This reduces cabling requirements and simplifies network deployment, especially in environments where fiber availability is limited.

Transmission Distance and Performance

- Multimode BIDI transceivers are typically used for short-range links, ranging from a few meters up to 2-5 km depending on the fiber type and module specifications .

Article Content

Single-mode vs Multimode SFP, What's the Difference?

In the optical communication industry, single-mode SFP and multi-mode SFP are the two

Intro to Networking

The key difference between Multi-Mode (MM) and Single-Mode (SM) fiber optic cable is the core diameter. The diameter of MM fiber

Single Mode vs. Multimode Fiber Optic Cables

There are two main types of fiber optic cables: single mode and multimode. Although they can do the same job in

Single Mode vs Multimode SFP Modules: Which One to

Single Mode vs Multimode SFP Modules: Compare fiber types, wavelengths, cost, and

Single Mode SFP Transceiver: Complete Guide Explained

Learn what a single mode SFP transceiver is, how it works, key specs, common types, and real-world use cases for long-distance

Ubiquiti

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

The Difference Between Single/Dual Fiber and

As fiber optic networks continue to evolve, selecting the right optical transceiver becomes

Single Mode SFP vs Multimode SFP: Exploring the

Single-mode SFP (Small Form-factor Pluggable) and multimode SFP are two types of optical transceivers

Difference Between Single and Dual Fiber Optical Transceivers

Fiber optic technology has seen incredible growth over the past several years and will likely experience even more

Fiber Optic Transceivers | SFP, QSFP & GBIC | High

Shop SFP, QSFP, and GBIC transceivers for Gigabit Ethernet over multimode and singlemode fiber. Hot

Single-Mode vs Multi-Mode Compatibility — Guide, Best

Learn how single-mode and multi-mode transceivers differ, compatibility rules, testing tips, and best

SC Multimode Fiber Optic Transmitters, Receivers, Transceivers

Mouser offers inventory, pricing, & datasheets for SC Multimode Fiber Optic Transmitters, Receivers, Transceivers.

How to Specify Single-Mode and Multimode FO Connectors

As fiber optic technology continues to expand and evolve at an increasingly rapid rate, we asked the Fiber Optic

The Difference Between Single/Dual Fiber and

Understanding the distinction between single vs. dual fiber and single-mode vs. multi-mode

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

SC Fiber Optic Transceivers

SC Fiber Optic Transceivers are devices that facilitate the conversion of electrical signals into optical signals and vice

Solved: Can I connect SINGLE MODE SFP (GLC-LH-SM=) to MULTIMODE fiber ...

Can I connect SINGLE MODE SFP (GLC-LH-SM=) to MULTIMODE fiber patch cord which has ST connector on the

Transceiver kaufen - SFP, SFP+ & QSFP Module

Wir bieten Ihnen Multimode-Module mit 850nm, genauso wie Singlemode Transceiver für 1310nm, 1550nm, BiDi und CWDM. Die

SFP Fiber Optic Connector Types: LC, SC, MPO Explained

Explore common SFP fiber optic connector types, including LC, SC, and MPO/MTP. Learn their differences, use cases, and

Stand-Alone Fiber Converter | Multimode to Single mode | Perle

Perle Stand-alone Fiber to Fiber Media Converters transparently extend multimode to multimode or multimode to single mode fiber.

Singlemode and Multimode Fiber Optic Transceivers

Which is more advanced, single-mode or multi-mode technology? Single-mode fiber is used for long-distance

Single Mode SFP vs Multimode SFP: Deciphering the

The two primary categories of Fiber Optic Technology are Single-Mode (SM) and SC Fiber Optic Transceivers

Considerations When considering SC Fiber Optic Transceivers, it is important to evaluate the initial costs, which can be

Understanding Single-mode and Multi-mode Optical Modules and Optical ...

A single-mode optical module is a type of transceiver designed to transmit data over a single mode of light through an optical fiber.

Single-mode vs Multimode SFP 2026: Fiber Types and distances

A guide to single-mode vs multimode SFP modules. Covers fiber types, wavelengths, distances, BiDi, CWDM/DWDM,

Single -mode fiber transceiver and multi -mode fiber transceiver

The main difference between the two lies in their operating principles, performance characteristics, and applications. In

1.25G BIDI SFP SC Single Fiber Transceiver

The SFP transceivers are high-quality and cost-effective modules that support transmission speeds of up to 1.25Gbps with both

SC Singlemode and Multimode Fiber Optic Transmitters, Receivers ...

SC Singlemode and Multimode Fiber Optic Transmitters, Receivers, Transceivers are available at Mouser Electronics. Mouser offers

Buy Transceivers – SFP, SFP+, and QSFP Modules

Here you can find SFP, GBIC and all other types of modules for multi-mode as well als single-mode fiber

Gigabit Mini FTTH 1 Sc with 1 RJ45 Optical Transceiver

Gigabit Mini FTTH 1 Sc with 1 RJ45 Optical Transceiver 10/100/1000Mbps Single Fiber Single Mode Fiber

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