Single-mode lc module interface



Overview

SFP Single Mode LC Module (10km) Each Single Mode SFP module is equipped with a duplex LC fiber connection interface, and supports gigabit single mode fibe.

Key Takeaways

An LC interface single-mode module is a fiber optic transceiver that uses LC connectors to transmit data over long distances via single-mode fiber, typically in SFP form factors.

Overview

An L

C interface single-mode module is a compact fiber optic transceiver designed for high-speed, long-distance data transmission using single-mode fiber cables.

The L

C connector, with a 1. 25 mm ferrule, allows for high-density port deployment and reduced signal loss, making it ideal for data centers, telecommunications, and enterprise networks.

Key Features

Connector Type: LC (Lucent Connector), available in simplex or duplex configurations depending on whether one or two fibers are used. Fiber Type: Single-mode fiber, which has a core diameter of approximately 9 microns, allowing light to propagate in a single mode for minimal interference and long-distance transmission. Data Rates: Typically supports 1 Gbps to 1.

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25 Gbps, with some modules capable of higher speeds depending on the manufacturer. Distance: Single-mode LC modules can span from a few kilometers up to 80 km or more, depending on the module's specifications and wavelength. Form Factor: Most modules are SFP (Small Form-factor Pluggable), which are hot-pluggable and compatible with standard SFP slots on switches and fiber converters.

Advantages

High Port Density: The compact LC design allows more ports per switch or patch panel, saving space in high-density environments. Low Signal Loss: Accurate ferrule alignment and single-mode fiber reduce insertion loss and maintain signal integrity over long distances. Ease of Use: Snap-in LC connectors and hot-pluggable SFP modules simplify installation and maintenance.

Long-

Distance Capability: Single-mode fiber supports long-range connections, suitable for campus networks, business parks, and industrial applications.

Applications

Enterprise Networks: Connecting switches across large office buildings or campuses. Data Centers: High-speed uplinks between racks or server clusters. Telecommunications: Long-haul fiber links for ISPs or backbone networks.

Industrial Networks: Reliable connections in manufacturing or remote facilities.

Summary

An L

C interface single-mode module is essential for modern fiber optic networks requiring long-distance, high-speed, and reliable data transmission. Its combination of LC connectors, single-mode fiber, and SFP form factor ensures compatibility, scalability, and efficient network deployment.

Article Content

SFP Single Mode LC Module (10km)

Each Single Mode SFP module is equipped with a duplex LC fiber connection interface, and supports gigabit single mode fiber connections for long distance

SFP Single Mode LC Module (10km)

Each single mode SFP transceiver is equipped with a duplex LC fiber connection interface, and supports high-speed data rates up to 1.25Gbps. All TRENDnet SFP fiber modules support connections for

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

No, the LC connector format is the same for both single-mode and multimode fibers. What differs is the fiber core size and wavelength, which must match the SFP''s optical specification.

Cisco SFP Modules for Gigabit Ethernet Applications Data Sheet

The 1000BASE-ZX SFP operates on standard single-mode fiber-optic link spans of up to approximately 70 km in length. The SFP provides an optical link budget of 21 dB, but the precise link

SFP LC Single Mode: How to Choose the Right Module

Learn how to choose the right SFP LC Single Mode transceiver for distance, compatibility, fiber type, and stable network performance.

SFP+ Single Mode LC Module (20km)

TRENDnet''s SFP+ Single Mode LC Modules are compatible with standard SFP+ slots found on network switches and fiber converters. Each single mode 10G SFP+ transceiver is equipped with a duplex LC

1Gb Singlemode Module with 1m OS2 LC to LC Fiber Cable ...

1000Base-LX/LH Module: Gigabit Ethernet SFP Transceiver, 1.25 Gb/s Singlemode Dual LC interface, 1310nm wavelength,link OS2 Singlemode Fiber Cable up to 20km in length. 1 Pack.

10GbE SFP Single Mode Fiber Module LC Connection

Adder SFP-SM-LC-10G is a Single-mode Fiber SFP module with LC connectors for use with the AdderLink INFINITY 4000 series. SFP-SM-LC-10G provides 10Gbps data rate up to 10KM away.

490NAC0201 Modicon M580 HSBY CPU Fiber Optic Sync Module

Buy Schneider 490NAC0201 Modicon M580 hot standby fiber optic single mode adapter. Supports 1 Gbit/s transmission rate and LC-LC connection. Fast dispatch.

QSFP-40GB Transceivers Guide and Compatibility

This transceiver type supports link lengths of up to 10kms via a single-mode fiber cable with duplex LC connectors. 40GBase-CSR4 The principle behind the 40GBase-CSR4 module is the same as the

CBO QSFP28-100G-LR4-DE QSFP28 100G LR4 module | AiO.lv

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The Optical Transceiver Module CBO QSFP28-100G-LR4-DE is a QSFP28 form-factor module engineered for 100 Gigabit Ethernet LR4 links. It aggregates four 25G lanes into a single QSFP28

1 Pair 1.25G SFP Transceiver Single-Mode Single-Fiber SFP Module

1 Pair 1.25G SFP Transceiver Single-Mode Single-Fiber SFP Module with LC Connector 10 for H3C and Ruijie Description Power Source and Wireless Functionality: This transceiver is non-powered and

Cisco GLC-LH-SMD 1Gbps Single-Mode SFP GBIC Transceiver

Cisco GLC-LH-SMD= 1Gbps single-mode SFP transceiver – 10km reach, 1310nm, DOM diagnostics & LC connector. Cisco-validated enterprise fiber module.

Optic Modules Datasheet

These platforms support multiple interface types and technologies such as Ethernet, ATM, and SONET. Depending on the deployment scenario, they support different pluggable optic modules that can be

TANIQIACa 10 Pcs Single Mode Optical Module SFP LC Single Core

□Single Mode Single Fiber□Ideal for long-distance transmission, mainly used in optical fiber communication. □SFP Interface□Small form-factor pluggable interface allows for easy, plug-and

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

Cisco QSFP-100G-FR-S= network transceiver module Fiber optic

The QSFP-100G modules are our latest generation of 100G transceiver modules solution based on a QSFP form factor. Cisco QSFP-100G-FR-S The Cisco QSFP-100G-FR-S Module supports link

2X SFP Optical Module Gigabit Single-Mode Optical Module SFP-GE

Descriere 2X SFP Optical Module Gigabit Single-Mode Optical Module SFP-GE-LX-SM1310 20KM Dual Fiber 1.25G for H3C Product Name: SFP Gigabit Optical Module Product model: SFP-GE-LX

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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

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