

Optical Module Ic Single Fiber



AI Overview

LC single fiber optical modules use compact LC connectors to enable high-density, low-loss single-mode fiber connections, ideal for SFP transceivers and long-distance data transmission.

Overview of LC Connectors LC (Lucent Connector) is a small form-factor fiber optic connector originally developed by Lucent Technologies. It features a 1.25 mm ferrule and a push-pull latch mechanism, making it half the size of SC connectors and suitable for high-density applications in data centers and telecom networks. LC connectors are designed for single-mode fibers, which have a core diameter of approximately 9 microns, allowing light to propagate in a single mode for minimal interference and long-distance transmission.

Key Features

- High Port Density:** The compact design allows more connections per patch panel or transceiver cage, which is critical in modern SFP/SFP+ and QSFP deployments.
- Low Insertion Loss:** LC connectors are engineered for precise fiber alignment, reducing signal loss and maintaining high bandwidth performance.
- Ease of Use:** The snap-in push-pull mechanism enables quick and secure connections, simplifying installation and maintenance.
- Durability:** LC connectors maintain stable performance under mechanical stress, making them reliable for demanding environments.
- Versatility:** Available in pre-assembled or multi-piece designs, LC connectors can be used for field installations or factory assembly.

Single Fiber Applications Single fiber LC modules are often used in SFP transceivers, which are small form-factor pluggable modules for optical networking. The LC connector aligns the fiber core with the optical transmitter and receiver inside the SFP, ensuring precise light coupling and minimal insertion loss. These modules are compatible with single-mode fiber (OS2) and are commonly deployed in long-distance, high-bandwidth networks.

Variants and Considerations

- Simplex vs Duplex:** Single fiber LC modules typically use simplex LC connectors for one-way transmission, while duplex LC connectors support bidirectional communication.

Article Content

Used 5 PCS LC/UPC Fiber Optic Coupler Keystone Jack Module

Unbelievable Savings! Come to our stores, where your satisfaction is guaranteed.-5pcs LC/UPC Fiber Optic Coupler Keystone Jack Modular for Patch Panels and Wall Plates Fiber Optic Cable Adapter

How to Choose the Right Fiber Optic Cable for Your Optical

How to Choose the Right Fiber Optic Cable for Your Optical Transceiver Selecting the right optical transceiver is only half of building a reliable fiber network. Many network failures that appear

LC Fiber Optics: Complete Guide 2026 to Patch Cables,

Explore LC fiber optics in depth: LC connectors, LC patch cables, uniboot designs, attenuators, breakout cables, LC adapters, patch panels, MPO-to-LC and more.

Ortronics Cisco SFP+ Module

Ortronics Cisco SFP+ Module - For Optical Network, Data Networking - 1 x LC Duplex 10GBase-BX Network - Optical Fiber - Single-mode - 10 Gigabit Ethernet - 10GBase-BX - 10 Gbit/s -

10G BiDi SFP+ TX1550nm/RX1490nm 70KM LC Optical Transceiver

Product Description□10G BiDi SFP+ 1490nm/1550nm 70KM LC Optical Transceiver This high-performance bidirectional SFP+ transceiver delivers 10Gbps connectivity over 70km single-mode

Optic Modules Datasheet

4 Optic Modules Data Sheet ... SFP (form factor) = small form-factor pluggable transceiver SMF (media) = single-mode fiber-optic MMF (media) = multimode fiber-optic XFP (form factor) = 10-gigabit small

Fiber Savvy SFP+ Optical Transceiver Modules, SFP-10G-SR,

Comparable to Cisco's SFP-10G-SR and compatible with Cisco switches. Description SFP+ Optical Transceiver Modules, SFP-10G-SR, 10GBASE-SR, 850nm MMF, up to 300 Meters, LC, Cisco

Fiber Optic Hardware | Fiber Panels, Housings, Racks, and ...

Fiber Optic Hardware Corning has a wide variety of hardware solutions to choose from to fit your cabling needs. Choose from racks, panels, modules, splice trays, ethernet fiber switches and other

Cisco 40GBASE QSFP Modules Data Sheet

The Cisco 40GBASE-LR4 QSFP module supports link lengths of up to 10 kilometer over a standard pair of G.652 single-mode fiber with duplex LC connectors. The QSFP-40G-LR4-S module

Fiber Optic Cables | Fiber Patch Cables | Patch Cords, Duplex

Fiber Patch Cables, Multimode & Singlemode Duplex Fiber Optic Cables, Secure Order Fiber Patch Cords, Preferred Mil. Edu. Gov. Pricing, Same Day Shipping From CA USA, Verified Reviews

Ubiquiti 10 Gbps Bidirectional Single-Mode Optical Module

Single-mode, simplex, fiber transceiver module. The 10 Gbps Bidirectional Single-mode Optical Module is a simplex transceiver that delivers up to 10 Gbps speed over distances up to 10 kilometers.

QSFP28 Optical Transceiver Modules for Sale (100G) | Cables on

Our QSFP28-SR Multi-Mode-Fiber (MMF) Optical Modules integrate a 12-lane MTP/MPO fiber receptacle (port) for 100G Ethernet links using industry-standard MTP/MPO fiber patch cords up to

HOLIGHT Fiber Optic Manufacturer in China | Patch Cords

HOLIGHT is a global fiber optic manufacturer in China, providing patch cords, adapters, terminal boxes and FTTH solutions for worldwide telecom projects.

Ubiquiti 10G Single-Mode Optical Module UACC-OM-SM-10G-D-2

Ubiquiti 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. Max data rate: 10 Gbps Compatible with

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

LC is the default and most widely used fiber optic connector for SFP modules due to its small size and broad compatibility. It is designed specifically to support high port density without compromising

A Complete Guide to Single Mode LC Connectors in

The single-mode LC fiber optic patch cord is a key accessory for connecting optical fiber equipment in optical network communication. It consists of two parts: single

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 taking up less space in your

Cisco 10GBASE SFP+ Modules Data Sheet

When shorter distances of single-mode fiber are used (<40km), an inline optical attenuator must be used to avoid overloading and damaging the receiver. Table 7 describes the bail latch color

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://umele-pestovani.eu>

Email: info@umele-pestovani.eu

Phone: +49 152 287 6349

Address: Neue Mainzer Straße 66-68, 60311 Frankfurt am Main, Germany

This document is for informational purposes only. Specifications subject to change without notice.

