

Optical module lc interface type



Summary of Content

LC (Lucent Connector) is a small form factor fiber optic interface widely used in SFP, SFP+, SFP28, QSFP+, QSFP28, and QSFP-DD transceiver modules for high-density optical networking.

Overview of LC Connectors

LC stands for Lucent Connector, originally developed by Lucent Technologies for telecom applications. It features a 1.25 mm ferrule, which is half the size of the SC connector's 2.5 mm ferrule, allowing high port density in switches, routers, and patch panels . LC connectors use a push-pull latch mechanism, similar to RJ45 connectors, making them easy to insert and remove while maintaining precise fiber alignment . They conform to TIA/EIA-604 standards, ensuring cross-vendor compatibility .

Key Features

- **Small Form Factor:** Ideal for high-density applications in data centers and enterprise networks .
- **Low Insertion Loss:** Many LC connectors include a six-position tuning mechanism to optimize fiber core alignment, reducing signal loss .
- **Duplex and Simplex Options:** LC connectors can be duplex (two fibers for bidirectional communication) or simplex (single fiber), depending on the transceiver and network design .
- **Polish Types:** LC connectors may have UPC (Ultra Physical Contact) or APC (Angled Physical Contact) end-face polish, affecting return loss and signal quality .

LC-Interfaced Optical Modules

Article Content

Fiber Optic Cable Assembly Guide | LC, SC & ST Connectors Explained

Learn how to select and test LC, SC, and ST connectors for reliable fiber optic cable assemblies. Includes polish types,

How to distinguish the common interfaces of optical module?

LC is currently the most mainstream fiber optic connector, with a ferrule diameter of 1.25mm. Its compact size makes it a standard

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

Fiber Optic Cable Assembly Guide | LC, SC & ST Connectors Explained

Learn how to select and test LC, SC, and ST connectors for reliable fiber

LC Fiber Optics: A Comprehensive Guide

LC-interfaced transceiver modules are the modules that use LC interface type so that they can be linked with LC fiber

How to distinguish between LC and SC interfaces of optical modules?

LC optical module refers to the optical module whose interface type is LC, which is divided into simplex and duplex,

Optical fiber connector

Optical fiber connectors are categorized into single-mode and multimode types based on their distinct characteristics. Industry

LC Fiber Optics: Guide to LC Connectors, ULL Cables, MPO 2026

LC (Lucent Connector) is the world's dominant duplex optical interface, used across enterprise networks, telecom

LC Fiber Optics: Complete Guide 2026 to Patch Cables, Adapters,

This guide provides a fully updated and industry-ready overview of LC fiber optics, explaining the origin and design of

Contact Us

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