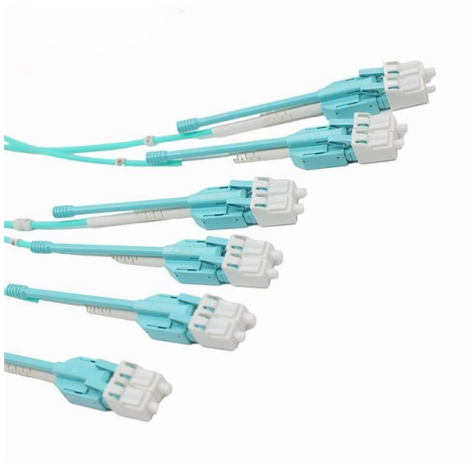
Fiber optic Om3 connector



Overview

UniCam® Connectors LC, 50 µm Multimode (OM3/OM4), BlackCorning® UniCam® connectors offer high optical performance in a fast, easy field-termination solutio.

Key Takeaways

OM3 fiber optic connectors, such as LC, SC, and ST types, are designed for high-speed multimode networks, supporting 10G to 100G Ethernet with reliable, low-loss connections. Overview of OM3 FiberOM3 is a laser-optimized multimode fiber (MMF) with a 50 µm core diameter, capable of supporting high-bandwidth data transmission up to 2000 MHz·km at 850 nm wavelength. It is widely used in data centers, LANs, and storage area networks (SANs) for 10G, 40G, and 100G Ethernet connections over distances ranging from 70 meters to 300 meters depending on the data rate.

OM3 fiber is backward compatible with OM1 and OM2 fibers, making it suitable for upgrading existing networks.

Common Connector Types

The most commonly used OM3 fiber connectors include: LC (Lucent Connector): Small form factor, widely used in high-density patch panels and transceivers.

L

C connectors are available in duplex configurations for OM3 cables, providing efficient space utilization in data centers.

S

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C (Subscriber Connector): Larger, push-pull connector, often used in telecom and enterprise networks.

S

T (Straight Tip): Bayonet-style connector, less common in modern high-speed networks but still used in legacy systems. Performance and SpecificationsOM3 connectors are designed to maintain low insertion loss (≤0. 3 dB) and high return loss (≥30 dB), ensuring minimal signal degradation and stable transmission over the fiber link.

They are optimized for VCSEL (Vertical-Cavity Surface-Emitting Laser) sources at 850 nm, which enhances speed and reliability compared to older multimode fibers. Installation and FeaturesField-installable OM3 connectors, such as Corning UniCam® LC connectors, use precision mechanical splice technology, allowing quick and cost-effective installation without epoxy or polishing. Installation typically involves stripping, cleaning, cleaving, camming, and crimping the fiber, with tools providing go/no-go feedback to ensure proper alignment.

Keyed connectors are available for secure network segmentation, preventing unauthorized access and simplifying identification. ApplicationsOM3 fiber connectors are ideal for: 10G Ethernet: Up to 300 meters at 850 nm25G Ethernet: Up to 70 meters40G Ethernet: Up to 240 meters100G Ethernet: Up to 100 meters They are commonly deployed in high-density data centers, server farms, cloud storage networks, and enterprise backbone networks, providing scalable, high-performance connectivity. SummaryOM3 fiber optic connectors, particularly LC duplex types, offer high-speed, reliable, and space-efficient solutions for modern multimode networks.

Their low insertion loss, compatibility with VCSELs, and field-installable designs make them a preferred choice for 10G to 100G Ethernet applications in data centers and enterprise networks.

Article Content

UniCam® Connectors LC, 50 µm Multimode (OM3/OM4), Black

Corning® UniCam® connectors offer high optical performance in a fast, easy field-termination solution—ideal for fiber-to-the-workstation setups where time matters. Using precision mechanical

OM1 vs OM2 vs OM3 vs OM4 vs OM5 Multimode Fiber

In 2003, the OM3 fiber type was standardized and is closely linked to the IEEE 802.3 10GbE Ethernet standard. It has a core diameter of 50 µm and a

MPO/PC OM3 Connector Datasheet

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MPO/PC OM3 Connector Datasheet Connector Parts: Dust Cap, Outer Housing, Hakusan Ferrule Assembly(F/M), Spring, Stopper, Riveting Ring, Black Boot.

Multimode Fiber Types: OM1 vs OM2 vs OM3 vs OM4

OM4 fiber is completely backwards compatible with OM3 fiber and shares the same distinctive aqua jacket. OM4 was developed specifically for

Understanding OM3 Multimode Fiber: Advanced Guide

Explore our advanced guide on OM3 multimode fiber optic cables to understand the differences between OM1, OM2, and OM3, and find the best fiber

LC, OM3/4 Multi-Mode, Infinium Field Installable Mechanical Splice ...

Includes color coded 900um buffer, boot, cleave protector and extended dust cap for easy fiber indentification No epoxy or polishing and requires no special tools

LC OM3 Fast Connector Fiber Optic Manufacturer

The LC OM3 Fast Connector Fiber Optic is designed for quick, reliable, and tool-free field termination of multimode fibers. It enables installers to achieve high

Fiber Optic Patch Cords & Pigtails

Our keyed fiber optic patch cord secures data center connections with color-coded keyed connectors to prevent accidental mismatches. Available in Keyed-to

Fiber Optic Connector Types: A Beginners Guide

The fiber connector types, sometimes referred to as terminations, link fiber optic cables together through terminals, switches, adapters, and patch

Fiber Connectors

Fiber Optic Connectors are used to connect two runs of fiber optic cable and consist of an adapter assembly along with two plugs. The most popular versions include, push-on Square Connectors

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High-performance multimode and singlemode fiber patch cables. OM3, OM4, OS2 options. Low insertion loss, supports up to 400G. Fluke Versiv verified. Forever Warranty.

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2 sets of multi-mode LC/OM3 fiber optic loopback adapter cables, 50/125 test plugs, used for testing applications Standard duplex LC connector, bend...

MPO MTP OM3 Multimode 24F Fiber Optic Patchcord

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OM1 vs OM2 vs OM3 vs OM4 vs OM5 Multimode Fiber Guide | EDGE Optical ...

Compare OM1, OM2, OM3, OM4, and OM5 multimode fiber specs, distances, bandwidth, and applications. Essential guide for data center fiber selection.

The Ultimate Guide to Fiber Optic Cables – Types, Standards, and ...

Discover how to choose the right fiber optic cables for your network. Learn about fiber types, cable constructions, connectors, and industry standards — plus expert recommendations from

SC FC LC Multimode Patch Cord OM3 OM4 OM5 Fiber Optic Pigtail

SC FC LC Multimode Patch Cord OM3 OM4 OM5 Fiber Optic Pigtail Single Mode 25M Product description Optical fiber jumper (jumper) is a section of optical fiber, and connectors are added at

SeaMAX MM-PC-SC/SC-5-D-OM3 Fiber Optic Patch Cord, 5m, SC/SC UPC, OM3 ...

Fiber optic patch cord 5 m cable length SC to SC UPC connectors Duplex fiber construction OM3 multimode fiber 50/125 µm core/cladding 2.0 mm cable diameter LSZH jacket Low insertion loss

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