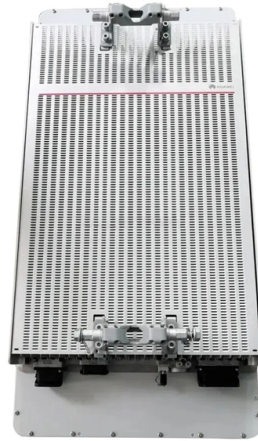


100g fiber optic om3



AI Overview

OM3 multimode fiber can support 100 Gigabit Ethernet using parallel optics or BiDi configurations, typically over distances up to 100 meters.

Overview of OM3 Fiber

OM3 is a laser-optimized multimode fiber (LO-MMF) with a 50 μm core diameter and a modal bandwidth of 2000 MHz·km, standardized in 2003. It is designed to work with VCSEL (Vertical-Cavity Surface-Emitting Laser) transceivers, making it suitable for high-speed Ethernet applications such as 10G, 25G, 40G, and 100G Ethernet. OM3 fiber is commonly used in data centers and enterprise networks for short- to medium-range connections.

100G Ethernet over OM3

OM3 can support 100G Ethernet using two main configurations:

- SR4 (Short Range 4-lane): Uses four parallel fibers, each carrying 25 Gbps, aggregating to 100 Gbps.
- BiDi (Bidirectional): Uses two fibers, each transmitting 50 Gbps in opposite directions, achieving 100 Gbps total. The maximum reliable distance for 100G over OM3 is typically 100 meters, depending on the transceiver type and network setup. For 10G Ethernet, OM3 can reach up to 300 meters, and for 40G Ethernet, distances are generally up to 100 meters.

Comparison with OM4 and OM5...

Article Content

Nov 09, 2025

OM3 And OM4 Fiber for 10G/40G/100G Network

OM3 And OM4 Fiber 10G/40G/100G Transmission Distance The maximum transmission distance of OM4 fiber is

Dec 08, 2025

Multimode Fiber Distance — OM3, OM4 Max Distance

Complete multimode fiber distance reference. Maximum distances for OM3 and OM4 fiber at

Sep 07, 2025

OM3 Fiber Cables – Multimode OM3 10GB Simplex & Duplex (50/125) Optical ...

The multimode OM3 fiber cables at ShowMeCables are ideal for service providers, enterprise networks, data centers, cloud storage

Sep 18, 2025

OM3 vs OM4 Fiber: Differences, Speeds, and Use Cases

Learn the differences between OM3 and OM4 multimode fiber, including bandwidth, distance limits, and compatibility with 10G, 40G,

Oct 31, 2025

100 Meter 10Gb OM3 Multimode Duplex Fiber Optic Cable (50/125)

100 Meter 10Gb OM3 Multimode Duplex Fiber Optic Cable (50/125) - LC to LC - Aqua Brand: Ultra Spec Cables 4.6 (21) £13336

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Five Differences Between OM3 vs OM4 Fiber

Laser-optimized OM3 and OM4 multimode fiber have become the best option for 10G/40G/100G Ethernet data center

Mar 26, 2026

OM3 vs OM4 Multimode Fiber: What's the difference?

As an advancement of OM3 fiber, OM4 fiber is chiefly used for 10G, 40G and 100G Ethernet. Both OM3 and OM4

Sep 10, 2025

Data Center 40G and 100G Multimode Fiber

Learn how 40G and 100G multimode fiber connectivity continues to provide reliable and low-cost solutions

Dec 29, 2025

100 meter 10Gb Aqua LC OM3 Duplex Fiber Optic Cable, 50/125

Our Aqua jacketed 100 meter (328 feet) 10 gigabit rated fiber optic cable is terminated with LC (Lucent Connector) connectors on

Sep 19, 2025

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

Sep 06, 2025

OM3 Fiber Cables | 10G OM3 Multimode Patch Cables

Additionally, OM3 fiber increases optical bandwidth from 500/500 MHz*km to 1500/1500 MHz*km, essentially tripling the data and

Jun 03, 2026

ClearCurve® Multimode Fiber | High Data Rate Laser

ClearCurve multimode laser-optimized, bend resilient fibers are widely deployed to deliver high data rate,

Dec 20, 2025

Multimode Fiber Types: OM1 vs OM2 vs OM3 vs OM4

Identified by ISO 11801 standard, multimode fiber optic cables can be classified into OM1

Dec 06, 2025

OM3 Multimode Fiber Cable: The Ultimate Guide for 10G Networks

The OM3 fiber optic cables are used for high-speed data transfer over short to medium distances. The 50 micrometer

Oct 05, 2025

Multimode Optical Fiber Selection & Specification

OM3 laser-optimized fiber is the minimum recommended performance level for new LAN/DC installations today. Corning Cable

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Multimode OM3 Fiber Patch Cables | 10G/100G | Shop

Multimode OM3 50/125 μ fiber patch cables for data centers and telecom networks. Supports up to 100G at

May 23, 2026

OM3 Fiber Cables | LC/SC/FC/ST Simplex & Duplex | 10G/40G/100G

Browse OM3 multimode fiber cables with LC, SC, FC, and ST connectors for 10G/40G/100G SR links. Bend-insensitive, OFNR

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Multimode Fiber Cable Types: OM1/OM2/OM3/OM4/OM5 Compared

Introduction Fiber optic cables are the backbone of modern telecommunications infrastructure, enabling high-speed

Aug 12, 2025

Migrating to 40 and 100G with OM3 and OM4 connectivity

OM3 and OM4 are the only multimode fibers included in the standard. Multimode fiber uses parallel-optics transmission instead of

Nov 18, 2025

100GBASE QSFP-100G Modules Data Sheet

The Cisco QSFP-100G-SR-S Module is a pluggable optical transceiver with a duplex LC

Aug 07, 2025

OM3 vs OM4 Fiber Optic Cables: Key Differences Explained

OM3 vs OM4 fiber optic cables explained. Compare performance, distances, and key differences for your network setup.

Nov 19, 2025

StarTech 3m (10ft) LC/UPC to LC/UPC OM3 Multimode Fiber Optic

Guaranteed reliability Each Duplex 50/125 (OM3) Multimode Fiber Patch Cable is individually tested and certified to be within

Feb 27, 2026

OM3 Multimode Fiber Optic Cables

L-com offers a variety of 10 Gigabit OM3 Multimode 50/125 Micron fiber optic cables. These OM3 cables are constructed from the

Feb 23, 2026

OM1 vs OM2 vs OM3 vs OM4 vs OM5 Multimode Fiber

Typically, OM3 fiber is used for 10G Ethernet and can make connections up to 220 meters

Apr 30, 2026

How far can OM3 100Gb go?

The maximum reach of OM3 (Optical Multimode 3) fiber for 100 Gigabit Ethernet (100GbE) depends on the optical

Sep 08, 2025

OM1 OM2 OM3 OM4 OM5 Multimode Fibers Explained

Multimode optical fiber plays a crucial role in modern networking. Among its types, OM1 to OM5 fibers differ

Jun 23, 2026

FLYPROFiber

0.2M (7inch), OM3 LC-LC Fiber Optic Patch Cable Multimode 10Gb is designed for high density applications in gigabit ethernet, fiber

Mar 25, 2026

OM3 vs OM4 Multimode Fiber: What's the difference?

OM3 vs OM4 Speed The OM3 fiber spec indicates that OM3 fiber is mainly designed for 10 Gb/s transmission speed,

May 10, 2026

Can OM3 do 100Gbps?

Yes, OM3 (Optical Multimode 3) fiber optic cabling can support 100 Gigabit Ethernet (100Gbps) transmission. OM3 is

Contact Us

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