

Complete List of Multimode Fiber Specifications and Models



Article Overview

Multimode fiber is classified into OM1, OM2, OM3, OM4, and OM5, each defined by ISO/IEC 11801 standards based on core size, bandwidth, and supported data rates.

Overview of Multimode Fiber (MMF)

Multimode fiber (MMF) is designed for short- to medium-distance optical communication, typically within buildings, campuses, or data centers. It has a larger core diameter (50–62.5 μm) than single-mode fiber, allowing multiple light modes to propagate simultaneously. MMF is cost-effective because it uses LEDs or VCSELs as light sources, which are less expensive than single-mode laser modules, and supports high data rates up to 100 Gbps over distances of 300–550 meters depending on fiber type (OM3, OM4, OM5).

OM Fiber Designations

The OM (Optical Multimode) designation indicates the fiber generation and its performance characteristics:

- OM1: Legacy 62.5 μm core fiber, typically with an orange jacket. Supports 10 Gigabit Ethernet up to 33 meters and is mainly used for 100 Mbps networks. Uses LED light sources and is considered obsolete for modern high-speed applications.
- OM2: 50 μm core fiber, also with an orange jacket, supporting 10 Gigabit Ethernet up to 82 meters. Commonly used for 1 Gigabit Ethernet and LED-based systems

Article Content

Aug 27, 2025

2024 Optical Fiber Reference Guide

The Optical Fiber Reference Guide is intended to provide a comprehensive list of single mode and multimode optical fibers currently

Oct 12, 2025

Multimode Fiber: OM1 vs OM2 vs OM3 vs OM4 vs OM5 Comparison

This comprehensive guide elaborates on the definition, classification, core differences, and practical application

Aug 12, 2025

Fiber Type vs. Speed and Distance | Multimode vs. Singlemode Fiber

Compare fiber type vs. speed and distance in fiber optic cabling. Learn the differences between multimode and singlemode fiber for

Jan 09, 2026

The Ultimate Guide to Multimode Fiber Optic Cable

Multimode fiber optic cables are essential in modern data communication systems since

Oct 02, 2025

Multimode Fiber Optic Cable Types: OM1 vs OM2 vs OM3 vs OM4 vs

For short to medium distance high speed data transport, multimode fiber optic cables are popular in data centers,

Nov 27, 2025

Multimode Fiber Types: OM1 vs OM2 vs OM3 vs OM4 vs OM5

One such vital component is the optical fiber, specifically, the multimode fiber. In this article, we dive into the world of

May 14, 2026

Multimode Fiber Optic Cable Types: OM1 vs OM2 vs OM3 vs OM4 vs

Multimode fiber optic cable types OM1, OM2, OM3, OM4 and OM5 compared for core size, bandwidth, speed, distance

Oct 13, 2025

A Guide to Multimode Fiber Types (OM1-OM5) -

OM1-OM5 multimode fiber standards, detailing their core sizes, jacket colors, transmission

Oct 07, 2025

Optical Fiber Product Information Sheets

An all inclusive list of the various optical fiber specification sheets.

Dec 25, 2025

Multimode Fiber Types: OM1 vs OM2 vs OM3 vs OM4

Learn about the differences between multimode fiber types OM1, OM2, OM3, OM4, and OM5. Discover

Mar 24, 2026

Multimode Fibers - optical glass fiber, large-core fibers, fiber ...

Multimode fibers are fibers supporting more than one guided mode per polarization direction - in some cases even a large number of

Mar 03, 2026

Multimode Fiber Types: OM1 vs OM2 vs OM3 vs OM4 vs OM5

Identified by ISO 11801 standard, multimode fiber optic cables can be classified into OM1 fiber, OM2 fiber, OM3 fiber,

Sep 15, 2025

Multimode Fiber Cable Types: OM1 vs OM2 vs OM3 vs OM4 vs OM5

This comprehensive guide explores Multimode Fiber Cable Types, covering technical specifications, deployment

Jul 29, 2025

Fiber Optic Cable Types: Comprehensive Guide

Explore the different types of fiber optic cables and understand which type suits your specific needs for speed, distance,

Nov 30, 2025

Multimode Fibre Optics (MMF) | Comms InfoZone

Multimode fibre transmits digital signals using light. Multimode ISO classifications are OM1 through OM4, with OM3 as a

Feb 19, 2026

Fiber Optic Cable Types | Omnitron Systems Guide

Conclusion Understanding fiber optic cable types, fiber core sizes, and proper installation methods is

Aug 20, 2025

2024 Optical Fiber Reference Guide

The Purpose of this Guide The Optical Fiber Reference Guide is intended to provide a comprehensive list of single mode and

Oct 15, 2025

OM1 vs OM2 vs OM3 vs OM4 vs OM5: Understanding

With several types available—OM1, OM2, OM3, OM4, and OM5—each offering distinct

Dec 24, 2025

Multimode Fiber Data Sheet

This fiber is a bend-insensitive, graded-index multimode fiber designed for transmission speeds of 1 Gbps but also appropriate for

Oct 09, 2025

Specifications For Fiber Optic Networks

Specifications For Legacy Fiber Optic Networks A listing of many fiber optic LANs and links available in the last 30 years, with basic

Mar 13, 2026

Multimode Fiber: OM1 to OM5 - MapYourTech

Multimode optical fiber represents one of the most critical infrastructure components in modern data centers,

Feb 19, 2026

Fiber Optics Part 2: Single-Mode Fiber vs. Multi-Mode

Multi-mode fiber has a larger core size than single-mode fiber. Typical cores sizes are 50

Nov 11, 2025

Multimode Fiber Guide: Differences Between OM1,

Each generation brings improvements in core size, bandwidth, wavelength support, and

May 13, 2026

Multimode Fiber Types: OM1 vs OM2 vs OM3 vs OM4

A complete guide to multimode fiber types OM1, OM2, OM3, OM4, and OM5. Compare

Jun 11, 2026

OM1 Vs OM2 Vs OM3 Vs OM4 Vs OM5: Multimode Fibre Guide

Explore OM1, OM2, OM3, OM4 & OM5 multimode fibres. Compare features, bandwidth & distances to choose the

Dec 09, 2025

Multimode Fiber Types Explained: OM1 vs OM2 vs OM3 vs OM4 vs OM5

Explore the differences between OM1 to OM5 multimode fiber. Understand bandwidth, reach, and which fiber type

Feb 06, 2026

Multimode Optical Fiber Selection & Specification

This Applications Engineering Note (AE Note) discusses the criteria for properly selecting the optimal multimode fiber (MMF) for

Sep 28, 2025

OM1 vs OM2 vs OM3 vs OM4 vs OM5 Multimode Fiber Guide

Compare OM1, OM2, OM3, OM4, and OM5 multimode fiber specs, distances, bandwidth, and applications. Essential

Aug 27, 2025

Multimode Fiber Data Sheet

OM5 Fiber 50/125 This fiber is a laser-optimized, bend-insensitive, graded-index multimode fiber designed for transmission speeds of

Contact Us

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

Website: <https://chromadecksigns-eastrand.co.za>

Email: sales@chromadecksigns-eastrand.co.za

Phone: +32 2 318 5792

Address: Avenue Louise 500, 1050 Brussels, Belgium

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

