

Multimode Fiber Classification Standard Table



Summary of Content

Multimode fibers are classified into OM1, OM2, OM3, OM4, and OM5, each with specific core size, bandwidth, distance, and application standards.

Multimode Fiber Classification Table

Fiber Type	Core Size (µm)	Modal Bandwidth (MHz·km)	Max Data Rate	Max Distance (10 GbE)	Jacket Color	Optical Source	Typical Applications
OM1	62.5	200 @ 850 nm	1-10 GbE	33 m	Orange	LED	Legacy LAN, 100 MbE
OM2	50	500 @ 850 nm	1-10 GbE	82 m	Orange	LED	LAN, 1 GbE
OM3	30	2000 @ 850 nm	10-100 GbE	300 m	(10 GbE)	Aqua VCSEL	Data centers, 10 GbE, 40/100 GbE up to 100 m
OM4	50	4700 @ 850 nm	10-100 GbE	550 m	(10 GbE)	Aqua VCSEL	High-performance computing, 40/100 GbE up to 150 m
OM5	50	4700 @ 850 nm, 2470 @ 953 nm	40-400 GbE	150 m	(40/100 GbE)	Lime/Erinaceous VCSEL, SWDM	Short-wavelength division multiplexing, 40/100 GbE, 400G-BD4.2

Key Notes

- OM1 and OM2 are legacy fibers, primarily LED-illuminated, suitable for lower-speed networks and shorter distances .
- OM3 and OM4 are laser-optimized multimode fibers (LOMMF) designed for VCSELs at 850 nm, supporting higher data rates and longer distances in modern LANs and data centers .



Article Content

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

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

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

There are several types of multimode fibers classified by the ISO 11801 standard, including OM1, OM2, OM3, OM4,

Fiber Optic Cable Types Explained

Our comprehensive guide to types of fiber optic cables. Learn all about the differences between single mode and multimode cables,

Differences_between_OM1__OM2__OM3__OM4_ copy

In ISO/IEC 11801 and EIA/TIA standards four types of Multimode – OM1, OM2, OM3 & OM4 and two types of Single mode – OS1 &

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

Types of Multimode Fiber: Industry Standards and Classification

Multimode fiber (MMF) plays a critical role in short-distance high-bandwidth applications. Unlike single-mode fiber, MMF features a

What Are The Multimode Fiber Cable Types?

Multimode Fiber Classification According to the standard ISO/IEC 11801 specification, multimode fibers are divided

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

Multimode fibers OM1 through OM5 offer varying levels of performance, bandwidth, and transmission capabilities.

Multimode Fibre Optics (MMF) | Comms InfoZone

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

Difference Between Multimode Fiber Types: OM1 vs OM2 vs OM3 vs

Unlike the complex classifications of single-mode fiber, multimode fiber is usually divided into four types of OM1, OM2, OM3, OM4.

Multimode fiber standards: OM1, OM2, OM3, OM4, and OM5

In fiber optic communication systems, multimode fiber is favored because of its suitability for short-distance

Multi-mode optical fiber

Multi-mode optical fiber is a type of optical fiber mostly used for communication over short distances, such as within a building or on a

Types of Multimode Fiber: Industry Standards and Classification

Below is a detailed breakdown of multimode fiber types, their performance standards, and key use cases in modern network

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

Compare all five multimode fiber grades — OM1 through OM5 — with full specs, bandwidth, distance limits, and real

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

Understanding the Differences Between OM4 and OM5 Multimode Fiber

Multimode fiber is a staple of fiber-optic cable infrastructure in data centers and campus networks. The ISO/IEC 11801 standard

Major Recommendations: Optical

G.652The characteristics of a single-mode optical fibre and cable with zero-dispersion wavelength around 1310 nm, but which can

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

OPTICAL FIBER CLASSIFICATIONS UNDER ISO 11801 & EN

SINGLE-MODE GLASS FIBRE OS Single mode fibres are governed by two different regulatory documents: ITU-T standards or

Multimode Fiber Standards Guide: OM1 OM2 OM3

We reviewed the technical specs, performance traits, and application scenarios of OM1,

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

Multimode Fiber Cable Types: Complete Comparison The TIA-498 and IEC 60793-2-10 standards classify multimode

Multimode Fiber Data Sheet

All fibers are designed for use at 850 nm and/or 1300 nm. In addition, the fibers are suitable for use in premises wiring application like

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

A complete guide to multimode fiber types: from OM1 to OM5, covering modal dispersion, bandwidth limits, cabling design, and

Optical Fiber Types

ITU Standards The ITU has defined a series of recommendations that describe the geometrical properties and transmissive

Contact Us

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

Website: <https://madibabayelectrical.co.za>

Email: sales@madibabayelectrical.co.za

Phone: +27 63 947 2185

Address: 15 Fredman Drive, Sandton, Johannesburg, 2196, South Africa

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