

Multimode logging fiber optic cable size specifications



Overview

Optical Fiber Product Information Sheets An all inclusive list of the various optical fiber specification sheets. OM1 vs OM2 vs OM3 vs OM4 vs OM5 Multimode.

Key Takeaways

Multimode fiber optic cables typically have a core diameter of 50 μm or 62.5 μm , a cladding diameter of 125 μm , and buffer and jacket layers ranging from 250 μm to 3 mm depending on the application.

Core and Cladding

The core of a multimode fiber is the central region that carries light. Standard multimode fibers come in two main core sizes: 50 μm (used in OM2, OM3, OM4, OM5 fibers) and 62.5 μm (OM1 fiber).

The cladding, which surrounds the core and keeps light confined via total internal reflection, is standardized at 125 μm for all multimode fibers. These dimensions are expressed as 50/125 μm or 62.5/125 μm , where the first number is the core diameter and the second is the cladding diameter.

Coating and Buffer



Directly applied to the cladding is a protective coating, typically 250 μm in diameter, which shields the fiber from mechanical damage and environmental exposure. For tight-buffered fibers, the coating may be 900 μm , providing additional durability and easier handling, especially in indoor or controlled environments. The buffer layer further enhances durability and facilitates installation, with sizes ranging from 900 μm (tight-buffered) to 2–3 mm (loose-tube fibers for outdoor or rugged environments).

Outer Jacket

The outer jacket provides the final layer of protection against environmental and mechanical stress. Its diameter typically ranges from 1.6 mm to 3 mm, depending on the cable type and installation requirements.

The jacket material and thickness are chosen based on whether the fiber is intended for indoor, outdoor, or industrial applications.

Summary

Core diameter: 50 μm (OM2/OM3/OM4/OM5) or 62.5 μm (OM1) Cladding diameter: 125 μm Coating diameter: 250 μm (standard) or 900 μm (tight-buffered) Buffer diameter: 900 μm to 2–3 mm Outer jacket diameter: 1.6 mm to 3 mm These dimensions ensure compatibility with connectors, splicing equipment, and network performance standards, while also providing mechanical protection and ease of installation.

Article Content

Optical Fiber Product Information Sheets

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

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 guide for data center fiber selection.

Fibre Specification | Technicals | Belcom Cables

The fibres are designed for use at 850, 953 and 1300 nm. These fibres are suitable for use in premises wiring applications, like Local Area Networks (LAN) with video, data and voice using LED, VCSEL or

2024 Optical Fiber Reference Guide

Trusted by leading entities worldwide, customized Fiber Lab solutions are built to your specifications and include high-precision lengths of all fiber types and brands available in the market.

Specifications For Fiber Optic Networks

The Fiber Optic Association - Reference Guide Specifications For Fiber Optic Networks
Per current standards and specs, maximum supportable distances and attenuation
for optical fiber applications

The Ultimate Fiber Optic Cable Size Reference Chart

Our comprehensive chart simplifies the process by outlining the key
dimensions—core size, cladding size, coating diameter, and buffer size—that
technicians, engineers, and buyers need

Optical Fiber OM4 (50/125µm Multimode Fiber

Datasheet: GD057198v10 850 nm LASER-OPTIMIZED 50/125 MULTIMODE OPTICAL
FIBER IEC 60793-2-10 Type A1a.3 and ISO/IEC 11801 (OM4 cabled optical fiber)

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

This comprehensive guide explores Multimode Fiber Cable Types, covering technical
specifications, deployment scenarios, and best practices to help you optimize your
fiber infrastructure

PRODUCT SPECIFICATIONS

PRODUCT DESCRIPTION Fiber Optic Cable - OM4 Multimode Fiber, Plenum or Riser
Rated cable that is offered in 48, 60, 72, or 96 fiber configuration. ... DESCRIPTION OM4
48 Fiber Cable OFNP, XXX

OFNP OM4 Tight Buffer Fiber Cable | Corning Glass | Indoor & Outdoor

OM4 Multimode 50/125 Indoor/Outdoor Plenum OFNP Distribution Fiber Optic Cable
with Corning Glass This OM4 plenum distribution fiber cable is composed of 2-24
colored tight buffers, aramid yarn, and

The FOA Reference For Fiber Optics

The usual fiber specifications are size (core/cladding diameter in microns),
attenuation coefficient (dB/km at appropriate wavelengths) and bandwidth (MHz

LC-ST Multimode 62.5 Duplex Patch Cable

Product Description LC-ST Multimode 62.5 Duplex Patch Cable Spec Sheet Corning
Brand Fiber E229789 Fiber Optic Cable OFNR 100% tested Optical Multimode 1

MPO MTP OM5 Multimode Fiber Optic Patchcord 24F

High-performance MPO/MTP multimode OM5 fiber optic patchcord with 24 fibers,
customizable options, and rigorous quality testing for data centers & telecom.

Infinite Cables US OM4 Multimode Duplex LC/LC 50 Micron

Application Specifications Physical Characteristics Color Aqua Cable Diameter 2mm
Fiber Size 50/125 micron - Laser Optimized Fiber Type Multimode Glass Manufacturer
Corning Glass Connector

Everything You Need to Know About Multimode Fiber Cable

Explore multimode fiber optic cables for enterprise, campus, and data center networks. Learn about OM1-OM5 types, transmission ranges, installation tips, and cost-effective high-speed

what does fiber optic cable look like: 7 Powerful Facts

Discover what does fiber optic cable look like with photos, color codes, and expert tips for easy identification and safe handling.

MPO MTP OM3 Multimode 24F Fiber Optic Patchcord

High-performance MPO/MTP OM3 multimode 24F fiber optic patchcord for data centers & telecom. Customizable, rigorously tested, with premium ferrules for stable connectivity.

Camplex 8-Channel ST Multimode OM1 Fiber Optic Tactical Reel

Hybrid Fiber 8-Channel ST Multimode OM1 Fiber Optic Tactical Reel - 1750 Foot HF-TR08STM1-1750 Extremely Rugged & Lightweight OM1 Orange 62.5 Micron Multimode Tactical Fiber Snakes

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This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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Technical inquiry: <https://cgweb.co.za/project-enquiry.html>

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

