

Outer sheath of multimode fiber optic patch cord



Overview

The outer sheath color of multimode fiber optic patch cord can be divided into multiple colors, OM1 and OM2 are orange, OM3 is aqua, OM4 is violet, and OM5 is lime green.

Key Takeaways

The outer sheath of multimode fiber optic patch cords is typically color-coded and made from protective materials like PVC or LSZH to ensure durability and safety. Color Coding by Fiber Type Multimode fiber optic patch cords use distinct outer sheath colors to differentiate fiber grades and facilitate identification in network installations:

- OM1 and OM2: Orange
- OM3: Aqua (light blue)
- OM4: Violet or aqua depending on manufacturer standards
- OM5: Lime green

These colors help technicians quickly distinguish multimode fibers from single-mode fibers, which usually have a yellow sheath.

Sheath Materials and Properties

The outer sheath serves as the primary protective layer for the fiber, providing resistance against physical damage, moisture, and environmental factors. Common materials include: PVC (Polyvinyl Chloride): Standard indoor use, flexible, cost-effective, but not suitable for plenum spaces due to smoke and toxicity concerns.



LSZ

H (Low Smoke Zero Halogen): Emits minimal smoke and toxic gases when burned, ideal for high-safety areas and European installations.

LSO

H (Low Smoke Zero Halogen, similar to LSZH): Often used in high-quality multimode patch leads for indoor applications.

Additional Considerations

Indoor vs Outdoor: Outdoor multimode patch cords may include armored jackets, waterproofing, or reinforcement (FRP) to withstand environmental stress. Simplex vs Duplex: The sheath may cover a single fiber (simplex) or two fibers (duplex) for bidirectional transmission. Mechanical Protection: The sheath cushions the fiber against bending, abrasion, and tensile stress, ensuring signal integrity in short-distance LAN or data center applications.

In summary, the outer sheath of multimode fiber optic patch cords is both a color-coded identifier and a protective layer, typically made from PVC or LSZH/LSOH materials, designed to safeguard the fiber while supporting indoor or outdoor network installations.

Article Content

Fiber Optic Patch Cord Types

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Fiber Patch Cord Types and Functions | Yingda

Explore the single mode and multimode fiber optic patch cables in terms of fiber core diameter and outer sheath, functions and features, and applications.

The difference between single-mode fiber patch cord and multi ...

Among them, OM1/OM2 multimode fiber adopts orange outer sheath, OM3/OM4 multimode fiber adopts water green outer sheath (for non-military use), and OM5 multimode fiber

Fiber Optic Patch Cord Guide: Types, Connectors

Confused about fiber optic patch cords? Learn the differences between single mode and multimode, LC vs SC vs MPO connectors, and how to

Fiber Color Code: Basic Guide

Single mode fibers use yellow outer jacket, while multimode optical fibers use orange, aqua, violet, lime green to help quickly identify different types

Fiber Optic Patch Cord

Both singlemode and multimode versions fiber optic patch cord come with a zirconia ceramic ferrule with pre-polished PC, UPC, APC profile and convex spherical

DTC Fiber Optic Patchcord Multimode OM3

The outer sheath of the cable is PVC / LSZH material, Use SC, LC, ST, or FC Simplex / Duplex Connector, and UPC / APC Polishing Method. Need Help?

Fiber Patch Cables Explained 2025: Types, Connectors,

Choosing the wrong type of patch cable can cause signal loss, downtime, or higher costs. This guide explains what fiber patch cables are, their

Multimode Patch Cables

They are ideal for quick patching of cables into rack or wall mounts due to their push-pull design. Available in simplex and duplex with a reusable duplex holding clip to allow for duplex connections.

Strategic Ranking Of Chinese Fiber Optic Manufacturers in 2026

MPO/MTP pre-terminated trunk cables Fiber patch cords, pigtails, PLC splitters, fiber distribution frames (ODF) A precise product definition helps eliminate mismatched supplier selection

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Learn how to connect a fiber optic cable to an SFP module correctly. Follow our step-by-step guide, avoid common mistakes, and troubleshoot connection issues.

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Learn about SC, LC, FC, and ST fiber optic patch cords, their uses in FTTH, telecom, and data centers, and how to choose the right type.

How Fiber Optic Patch Cords

In the backbone of modern connectivity, fiber optic patch cords are unsung heroes, enabling lightning-fast data transmission in data centers, telecom networks, and industrial systems.

Fiber Optic Patch Cables: The Complete 2026 Buyer's Guide

Confused by LC, SC, MPO, UPC, and APC? This complete fiber optic patch cable guide covers connector types, single-mode vs multimode, insertion loss specs, and how to choose the right

ADSS Fiber Optic Cables Types Prices & Technical Specifications

ADSS cable is a type of fiber optic cable that is strong enough to support itself between structures without containing conductive metal elements. Both single mode and multimode fibers can be

TMT Single Mode LC-LC/UPC Duplex 3M Tight Buffered Fiber Optic Patch ...

Single Mode LC-LC/UPC Duplex 3M TMT GLOBAL High Quality and Cost-effective SM,MM Simplex Fiber Patch Cord Patch Cords are used to provide optical connection for fiber optic electronics. The

Fiber Optic Cable vs Patch Cord vs Pigtail – Complete Guide

When you build or upgrade a fiber network, the same four words pop up everywhere— fiber optic (bare fiber), pigtail, patch cord, optical cable. They're related, but they are not

Fiber Optic Drop Cable: An Ultimate Guide for 2024

Strength Member: The material used to provide tensile strength and support the cable, often metallic or aramid fibers. Outer Jacket Material: The

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