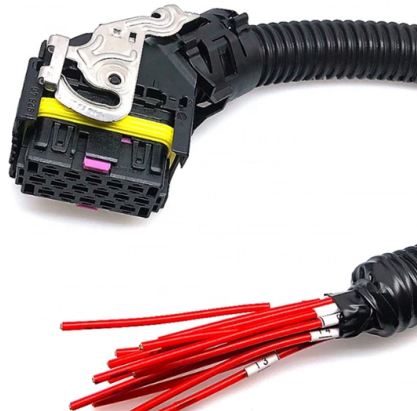


Classification of Single-Mode Fiber Optic Cables



Article Overview

Single-mode fiber optic cables are primarily categorized into OS1 and OS2 types, with additional classifications like G.652 and G.655 for specific applications.

1. OS1 and OS2 Fiber

-

OS1 Fiber: This type is designed for indoor applications, such as campus networks and data centers. It has a maximum distance of up to 10 km and is suitable for Gigabit and 10G Ethernet links. OS1 fibers typically have a maximum attenuation of 1 dB/km at 1310 nm wavelength.

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OS2 Fiber: OS2 fibers are intended for outdoor applications, including backhaul networks and FTTH (Fiber to the Home). They can transmit data over distances of up to 200 km and support higher bandwidths, including 40G and 100G Ethernet links. OS2 fibers have a maximum attenuation of 0.4 dB/km at 1550 nm wavelength .

2. G.652 Fiber

- G.652 Fiber: This is the most common type of single-mode fiber, characterized by a narrow core diameter that allows light signals to travel in one mode. It is designed for long-haul and metropolitan networks, providing minimal signal loss and high clarity over extended distances. G.652 fibers are often used in applications requiring high...

Article Content

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It can transmit higher bandwidth than multimode fiber but requires a light source with a limited spectral range. The

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Recommendation ITU-T G.652 (08/2024)

This document outlines the specifications for a single-mode optical fiber and cable designed for use around the 1310 nm zero

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

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What does OS1, OS2, OM1, OM2, OM3 and OM4 mean? | Proterial Cable ...

ISO/IEC 11801 fiber optic labels: OS for singlemode, OM for multimode. OM1-OM4 & OS1-OS2 vary by performance & material.

Contact Us

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