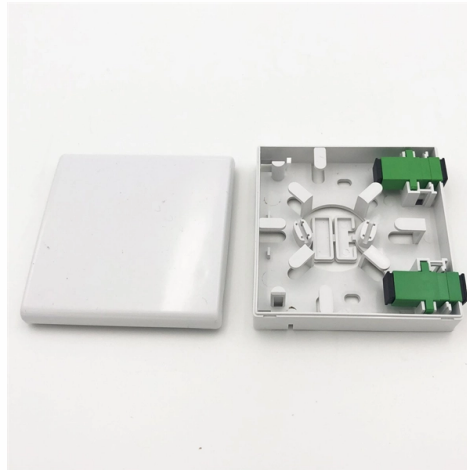


Dual-channel optical cable type



AI Overview

Dual-channel optical cables include dual-core fibers and ruggedized opticalCON DUO cables, designed for high-speed, multi-channel data transmission.

Dual-Core Fiber Technology

Dual-channel optical cables often use dual-core fibers, a type of multi-core fiber containing two separate cores within a single fiber strand. Each core acts as an independent waveguide, allowing simultaneous transmission of two optical signals. These fibers can be fabricated using all-glass technology or photonic crystal fibers, and they may experience some mode coupling if the cores are closely spaced. Dual-core fibers are ideal for applications requiring compact cabling while maintaining high bandwidth and low signal loss.

Ruggedized Dual-Channel Cables

A widely used model is the Neutrik opticalCON DUO, which features a ruggedized dual-channel optical fiber cable with a heavy-duty connector and push-pull locking mechanism. It accommodates standard LC-Duplex connectors in a durable metal housing, providing excellent protection against dirt and dust with an automatic sealing cover. These cables are pre-assembled, available in various lengths, and compatible with opticalCON DUO chassis connectors, making them suitable for professional audio/video setups and multi-camera workflows.

Applications

Dual-channel optical cables are commonly used in:

- Broadcast and live event production for multi-camera video transmission.

Article Content

Guide | JTOPTICS

Guide Your go-to resource for understanding fiber optic essentials—learn about different types of fiber cables, connector types,

Connector Types | Juniper Networks

Optical connectors ensure efficient and reliable connections between fiber optic cables. Connectors are designed to

Fiber Optic Cable Types | Omnitron Systems Guide

In this guide, Omnitron Systems explores the key differences between different types of fiber, their

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,

10 Types of Fiber Optic Cable Explained: Selection Guide (2026)

Explore the top 10 fiber optic cable types for 400G/800G networks. From ADSS to MPO, learn technical specs, applications, and how

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Explore fiber optic cable types, features, and applications. Omnitron Systems explains single-mode, multi

Fiber-optic cable

This list includes both standards-based and real-world technical cable types utilized in fiber-optic

Fiber Optic Cable Types Explained: Choosing the Right Fiber Cable

Explore different types of fiber optic cables, from single mode to armored and LC uniboot options. Learn how to

What Is Dual Mode Fiber Optic Cable?

A fiber optic cable is a thin glass strand used for transmitting light. Fiber optic cables are used primarily by telephone companies and

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

How Many Types of Multimode Fiber? Identified by ISO 11801 standard, multimode fiber optic cables can be classified

Simplex vs Duplex Fiber Cable: Key Differences and How to Choose

Check the Optical Module Type The first step is to determine whether the optical transceiver is designed for single-fiber

Dual & Quad Fiber Cables

Originally these split (bifurcated) cables were designed to be used as scanners with emitters and detectors,

Types of Fiber Connectors | LC, ST, SC | ShowMeCables

Find out the difference among fiber optic connector types LC, ST, SC including which is push-pull, which uses a

Fiber Optic Cable Types & What They Are Used For

Transmission Efficiency: These cables are superior to traditional copper cables as they can transmit data over longer

The Ultimate Guide to Fiber Optic Cables – Types, Standards, and ...

Discover how to choose the right fiber optic cables for your network. Learn about fiber types, cable constructions,

Optical Cables

The following section refers to both optical cables that constitute a part of AOC cables as well as standalone optical

Fibre optic cable selection guide

Fibre optic cable selection guide; explains the differences between the different fibre optic cable types and the commonly available

Fiber Optic Cable Types: A Complete Guide

Here's everything you need to know about the various fiber optic cable types, what makes them so useful, and what

Difference Between Single and Dual Fiber Optical Transceivers

Dual Fiber Optical Transceivers: These devices are the more frequently employed type. Employing two fibers strands

Multi-core Fibers – dual core, twisted, space division

Multi-core fibers enable space division multiplexing (SDM) by providing multiple parallel spatial channels

Optical fiber connector

Optical fiber connectors are categorized into single-mode and multimode types based on their distinct characteristics. Industry

Fiber Optic Cable Types: Single-Mode, Multimode, and Beyond – A ...

Discover fiber optic cable types, including single-mode (OS1, OS2) and multimode (OM1, OM2, OM3, OM4, OM5),

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

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,

Fiber Optic Cable Types * | Single Mode

Latest Fiber Optic Cable Technologies Network Cabling is an important part of computer networking. In this

Single vs Dual Fiber Media Converters (2025): A/B Pairing and WDM

Whether you choose single-fiber BiDi for fiber savings or dual-fiber for simplicity, the fundamentals are the same: match

Fibre Optic Cable & Connector Guide

Fibre optic cables can be used in a huge variety of applications, from small office LANs, to datacentres, to inter-continental

Contact Us

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