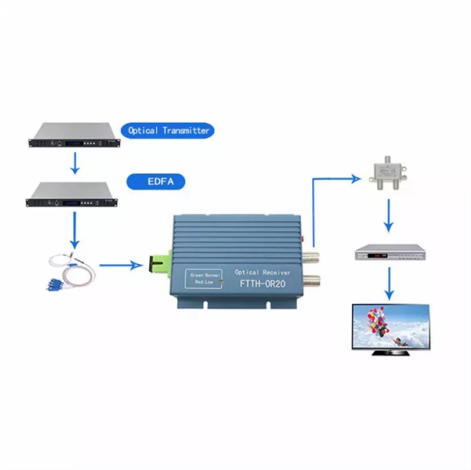
48-core single-mode outdoor fiber optic cable



Overview

2120148-4 | CommScopeFiber Optic Outside Plant Cable, 48-core, ECSS (Electro Chrome Coated Steel) Armored, Loose-tube, Gel-filled, 9/125 µm, OS2, Singlemod.

Key Takeaways

48-core single-mode outdoor fiber optic cables are available in armored or all-dielectric loose tube designs, optimized for long-distance transmission, environmental protection, and direct burial or duct installations.

Key Features

Fiber Type and Core Count: These cables contain 48 single-mode fibers (9/125 µm, OS2), suitable for high-bandwidth backbone and access networks. Cable Construction: Armored Cables: Options like the GYTY53 feature double steel tape armor and dual PE jackets, providing excellent mechanical protection, moisture resistance, and suitability for direct burial without conduit.

Gel-

Filled Loose Tube Cables: Products like CommScope 2120148-4 use gel-filled loose tubes with steel or dielectric strength members, offering stress-free fiber movement and protection against environmental hazards.

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All-

Dielectric Gel-

Free Cables: Corning ALTOS® cables are gel-free, water-blocked, and SZ-stranded, ideal for aerial lashed or duct installations, simplifying mid-span access and installation. Jacket Material: Common outdoor jackets include PE (polyethylene) for UV and moisture resistance, or PVC for indoor/outdoor riser-rated applications. Water and Environmental Protection: Many outdoor cables are water-blocked using gel or water-swellable materials, preventing moisture ingress and ensuring long-term reliability.

Installation Suitability: Direct Burial: Armored cables like GYTY53 can be buried directly in the ground. Duct Installations: Loose tube and gel-free cables are suitable for duct or conduit deployment. Aerial Use: All-dielectric cables can be lashed to messenger wires for aerial runs.

Performance: Single-mode OS2 fibers support long-distance transmission with low attenuation, compatible with 1310 nm and 1550 nm wavelengths, and are often compliant with ITU-T G. 652. D standards.

Temperature and Mechanical Ratings: Outdoor cables are designed to withstand wide temperature ranges and mechanical stresses, including tensile loads during installation and environmental impacts like wind or soil movement.

Summary

For outdoor applications requiring 48-core single-mode fiber, you can choose between: Armored, gel-filled loose tube cables for direct burial and maximum mechanical protection. All-dielectric, gel-free loose tube cables for duct or aerial installations with easy mid-span access. Indoor/outdoor riser-rated cables for mixed environments where vertical riser compliance is needed.

Selecting the right cable depends on your installation environment, mechanical protection needs, and long-term reliability requirements.

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Article Content

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Fiber Optic Outside Plant Cable, 48-core, ECSS (Electro Chrome Coated Steel) Armored, Loose-tube, Gel-filled, 9/125 µm, OS2, Singlemode, Black cable jacket. Click on image to enlarge.

Opti-Core Fibre Optic Indoor-Outdoor Armoured Cable 48 to 144

Opti-CoreTM Fibre Optic Indoor-Outdoor Armoured Cable 48 to 144-Fibres, EuroClass Cca and B2ca for EMEA A T A S H E E T

HES 48 Core Steel Armored Fiber Optic Cable SM 9/125µ Single Mode |

HES 48 Core Multiple Tube Steel Armored Fiber Optic Cable, SM 9/125µ Single Mode. Solution for high data traffic and high capacity.

Fiber Optic Cable Types: Single-Mode, Multimode, and

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

12 Core Span 120M ADSS Aerial Outdoor Fiber Optic Cable

ADSS Single Jacket All-Dielectric Self-Supporting Fiber optic cable □□ □□□□□□□□□□□□□□□□□□□ envirline ...

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, connectors, and industry standards — plus expert recommendations from

Direct Burial GYTA53 Optical Cable Single Mode 48 Core Armored Outdoor ...

Direct Burial GYTA53 Optical Cable Single Mode 48 Core Armored Outdoor Fiber Optic Cable No reviews yet $0.16-2 Minimum order quantity: 1,000 meters

Fiber Optic Cables

CommScope designs and manufactures a comprehensive line of fiber optic cables—from outside plant to indoor/outdoor and fire-rated indoor fiber cables.

1688 fiber optic cable wholesale: single-mode/outdoor armored fiber ...

Carrier-grade fiber optic cable - direct from 1688 source factory 1688 procurement: telecom-grade optical fiber cables. national standard certified, carrier-grade quality. supports 24

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Single-mode optical fiber

In fiber optics, a quadruply clad fiber is a single-mode optical fiber that has four claddings. Each cladding has a refractive index lower than that of the core.

Fiber Optical Cable Corporation & Manufacturer

Weichuang Optics, a leading optical cable corporation, serves as your trusted supplier. Discover latest fiber optic cables in 2024 with patents certified.

Corning® ALTOS® Loose Tube Fiber Optic Cables

Corning''s extensive ALTOS ® loose tube fiber optic cable portfolio offers reliable, high-speed data transmission in duct, buried, or aerial outdoor applications. The

ADSS 48 Core Fibra Optica Indoor 4 6 8 10 12 24 48 96 144 Core SM ...

ADSS 48 Core Fibra Optica Indoor 4 6 8 10 12 24 48 96 144 Core SM Single Mode G657A FTTX Network FTTH Optical Network Cable producing factory: We''re a state-level specialized and

TLC Indoor/Outdoor Fiber Optic Cable with Aluminum Interlocking

Key Features 48-Fiber Configuration: Supports high-density signal distribution, allowing for the management of 48 individual optical paths within a single cable assembly. Aluminum Interlocking

Single Mode Outdoor Armoured Fiber Optic Cable (48F)

Single Mode Outdoor Armoured Fiber Optic Cable (48F) The Outdoor fiber optic cables are PBT Multi loose tube with colored fiber cores are suitable for direct

Outdoor Singlemode 48 Core Fiber Optic Cable

This GYTA Outdoor Singlemode 48 Core Fiber Optic Cable has been designed for long haul / backbone application. Our stranded loose tube design provides stable

48-Strand Outdoor Corning Singlemode Fiber Optic

This is a black 500 foot spool of indoor/outdoor rated fiber optic distribution cable intended for long distance runs at high speeds. It is composed of 48 singlemode

48 Core GYTC8S Figure-8 Fiber Optic Cable Price & Datasheet

This kind of cable is specifically used for self supporting aerial installation. The mental strength member is made up of stranded wires as the supporting part are completed with a polyethylene (PE) sheath

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