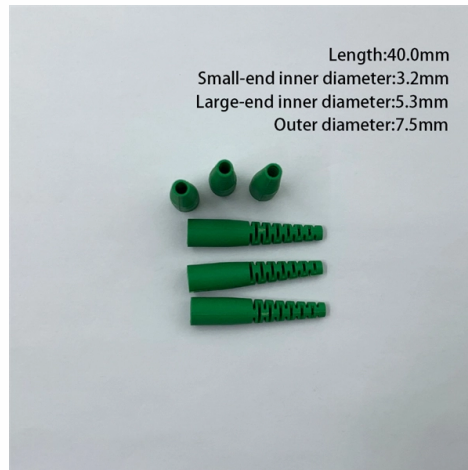


RIVO MULTITRADE OPTICAL SYSTEMS

What does a 48-core optical fiber cable look like and how much does it cost



Overview

Learn what to look for in a 48 core fiber optic cable, from types and specs to pricing and top models.

Key Takeaways

A 48-core optical fiber cable typically consists of multiple fibers organized in loose tubes, protected by armor and outer jackets, and costs between \$1.50 to \$5 per meter depending on type and specifications.

Physical Appearance and Structure

A 48-core fiber optic cable contains 48 individual optical fibers, usually arranged in 4 to 6 loose tubes inside the cable. Each fiber is coated with a protective layer, and the tubes are often filled with water-blocking gel or powder to prevent moisture damage. The cable may have single or double jackets, with steel tape or aluminum-clad steel armor for mechanical protection, especially in outdoor or direct-burial applications. Common designs include:

- OPGW (Optical Ground Wire): Used on overhead power lines, combining lightning protection with fiber communication. Fibers are housed in a central loose tube surrounded by aluminum-clad steel wires.



- GYTY53 Double-Armored Cable: Designed for underground or long-distance outdoor use, featuring steel tape armor and dual PE jackets, providing high resistance to mechanical stress, moisture, and environmental hazards . The cable is typically cylindrical, with a diameter ranging from 10 mm to 20 mm depending on armor and jacket layers. The fibers inside are color-coded for easy identification during splicing and termination.

Applications

48-core cables are used for:

- Telecom backbone networks
- Long-distance data transmission
- Smart grid communication
- Direct burial or duct installations They are suitable for both singlemode (OS2) and multimode fibers, with singlemode preferred for long-distance, high-bandwidth applications .

Cost

The price of a 48-core optical fiber cable varies based on:

- Fiber type (singlemode vs. multimode)
- Armor and jacket type (armored, double-jacketed, OPGW)
- Length and supplier Typical costs range from \$1.50 to \$5 per meter for standard outdoor armored cables. Custom designs, extreme environmental resistance, or OPGW variants may increase the price, and suppliers often provide quotes based on project requirements . In summary, a 48-core optical fiber cable is a robust, multi-fiber cable with protective layers and optional armor, designed for high-capacity data transmission, and its cost depends on construction, fiber type, and environmental specifications.

Article Content

How to Choose the Best 48 Core Fiber Optic Cable for Your Network

Learn what to look for in a 48 core fiber optic cable, from types and specs to pricing and top models. Make an

Fibre Cable Price Breakdown – Cost Per Metre & Installation

Discover the fibre cable price for OM3, OM4, and singlemode cables. Compare per metre costs, installation types, and real-world

Fiber-optic communication

An optical fiber patching cabinet. The yellow cables are single-mode fibers; the orange and blue cables are multi-mode fibers:

Fiber Optic Cables | Corning

Corning's invention of the first low-loss optical fiber ignited the critical spark that began a communications

PRODUCT SPECIFICATIONS

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

760154633 | D-048-LA-CM-F12NS/8W024/5K024 | CommScope

Fiber OSP cable, TeraSPEED® Single Jacket/Single Armor, Gel-Free, 48 fibers, Stranded Loose Tube, Composite OM4 and

48 core optical fiber cable – 48-Core Optical Fiber Cable

A 48 core optical fiber cable contains exactly 48 individual optical fibers bundled within a single protective sheath.

48 Fiber Optic Strand Indoor/Outdoor Singlemode Dry Loose Tube Cable

These cables combine flexible dry buffer tubes and swellable water blocking materials with Prysmian's extensive portfolio of single

48-Strand Outdoor Corning Singlemode Fiber Optic Cable, 500ft

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

48 Core Fiber Optic Cable: The Ultimate Guide to High-Speed ...

Discover the 48 core fiber optic cable: high-speed, future-proof connectivity for data centers, telecom networks, and enterprise

48 Fiber Breakout Cables

48 fiber breakout cables reduce the overall cost and clutter associated with large quantities of individual fiber optic patch cables.

Multi-Loose Tube Fiber Cable

Product feature: This cable has improved rodent protection by Corrugated Steel Tape (Full Rodent Protected). Existing out of 6 tubes

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