

Price of materials for 288-core optical fiber cable

Article Overview

The cost of 288-core optical fiber cable materials ranges from approximately \$1 to \$6 per foot, depending on fiber type, construction, and installation requirements.

Material Composition and Construction

288-core fiber optic cables are typically constructed with the following components:

- o Fiber Strands: Single-mode or multimode glass fibers, arranged in loose tubes filled with gel or water-blocking compounds for protection against moisture and mechanical stress .
- o Loose Tubes: Fibers are grouped into 24 loose tubes, stranded around a central strength member (CSM) made of steel or FRP for tensile strength .
- o Armoring: Corrugated steel tape (CST) or longitudinally applied PSP/ALP provides mechanical protection and moisture resistance, especially for direct burial or aerial installations .
- o Outer Jacket: PE, LSZH, or flame-retardant materials protect the cable from environmental hazards and comply with safety standards .
- o Additional Features: Water-blocking yarns, gel fillers, and optional armored layers enhance durability for underground, aerial, or backbone deployments .

Pricing Overview

- o Material Costs: Wholesale bulk purchases of 288-core fiber optic cables typically range from \$0.09 to \$1.52 per foot, while retail prices can reach \$1 to \$6 per foot, depending on fiber type, armoring, and jacket material .
- o High-Density Assemblies: Pre-terminated MTP/MPO trunk cables, patch panels, and fanout assemblies increase costs due to factory termination and connector type .
- o Installation Factors: Underground or duct installations are more expensive than aerial or indoor runs due to additional protective materials and labor .
- o Customization: ODM/OEM services allow customization of armor, strength members, jacket materials, cable length per reel, and color-coding, which can affect pricing .

Applications and Considerations

288-core cables are used in Metropolitan Area Networks (MAN), Data Center Interconnects (DCI), FTTH feeder lines, and smart city projects. The choice of materials and construction depends on:

- o Environmental conditions (humidity, temperature extremes)



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- o Installation type (aerial, underground, indoor)
- o Required durability and lifespan (typically 20-30 years)
- o Compatibility with network hardware and connectors

Summary

For budgeting purposes, expect \$1-\$6 per foot for 288-core optical fiber cable materials, with higher costs for armored, pre-terminated, or specialized cables. Material selection--including fiber type, armoring, and jacket--directly impacts performance, durability, and overall cost. For precise quotes, contacting manufacturers like Kocent Optec Limited or HOC Cable with your specifications and minimum order quantities is recommended .

288 Cores Fiber Optic Cable, Find Details and Price about Optical Fiber Cable Non-Metallic

1. Fiber Count and Cable Construction One of the most obvious price drivers is fiber count. A

The choice of materials directly impacts the efficiency, durability, and cost of 288 cores single mode fiber optical cable,

Fiber type Single mode Fiber material Doped silica Attenuation coefficient @ 1310 nm @ 1550 nm 0.36 dB/km 0.23dB/km Cable cut

288 Strand Corning ALTOS Outdoor (OSP) Armored Direct Burial Rated Singlemode Custom Pre-Terminated Fiber Optic Cable

This guide outlines the major factors that influence fiber optic cable costs and provides practical tips for estimating

This guide outlines typical cost ranges and the main drivers behind pricing to help formulate a budget and estimate

How Much Does Fiber Optic Installation Cost Per Foot? Cable Material Costs: Standard

288 fibre are placed into 24 loose tubes with fibre jelly compound, multi loose tube are stranded around a

Discover the cost of fiber optic cable in this pricing guide. Learn material prices, installation

This cable shall contain 144 or 288 singlemode fibres for high density data center distribution applications.

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The fibres shall be

Searching for how much does fiber optic cable costs? Stop guessing. We break down 2025 prices for OS2,

The portfolio includes armored, non-armored and dielectric fiber optic cable designs, available with dry or gel-filled tubes. These

Fiber Optic Cable, Optical Fiber Cable, Outdoor Fiber Cable manufacturer / supplier in China, offering 2-288 Core Dongguan Light

Select a Variant 288 Fiber OSP Single Mode Fiber Optic Cable Dry Core Steel Armored Black 122883101
Availability: In stock Price:

Types of Fiber Optic Cables by Core Count Fiber optic cables are essential for high-speed data transmission and

Web: <https://www.in-au.co.za>

