ZITHA TECH SPECIALTY CABLES (Pty) Ltd

How much does an 80-core fusion spliced optical cable cost



Overview

Fiber Optic Splicing Cost Per Splice (2025 Guide)For most commercial projects, expect to pay $50–$150 per fusion splice point - but that number can swing i.

Key Takeaways

The total cost of an 80-core fusion spliced optical cable typically ranges from $4,000 to $12,000 or more, depending on cable type, installation method, and labor rates.Cable Material Cost

The price of fiber-optic cable depends on the number of cores and type of fiber. For an 80-core single-mode cable, the material cost generally ranges from $1 to $6 per foot . For example, a 1,000-foot run could cost $1,000 to $6,000 for the cable alone, with higher-end prices for armored or plenum-rated cables .

Fusion Splicing Cost

Fusion splicing labor is typically charged per splice, with rates ranging from $50 to $150 per splice for standard single-mode fibers . An 80-core cable requires 80 splices per termination point, so the labor cost for one end could range from $4,000 to $12,000 if splicing both ends, the cost doubles . Volume discounts may reduce the per-splice cost for large fiber counts .

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Additional Costs
• Equipment and tools: Fusion splicers cost $3,000–$15,000, cleavers $500–$2,000, and OTDR testers $5,000–$20,000, though these are typically included in contractor labor rates .

• Installation factors: Underground or confined-space installations increase labor costs, while aerial installations are cheaper .

• Project overhead: Mobilization, closures, trays, and testing may add extra costs if not included in the per-splice rate .
Summary Estimate

For a standard 80-core single-mode optical cable, assuming a 1,000-foot run and typical installation conditions:

• Cable material: $1,000–$6,000

• Fusion splicing labor: $4,000–$12,000

• Total estimated cost: $5,000–$18,000, depending on site conditions, cable type, and contractor pricing . This estimate provides a practical range for budgeting, but actual costs may vary based on local labor rates, cable specifications, and installation complexity.

Article Content

Fiber Optic Splicing Cost Per Splice (2025 Guide)

For most commercial projects, expect to pay $50–$150 per fusion splice point - but that number can swing in either direction based

FTTP Drop Installations: Fusion Splicing Versus Pre-terminated Costs

At $60-120/hr, a fusion splice in a drop location will cost $30-$60 labor plus the splicing cost. A mechanical splice would also require

Cost of Fiber Optic Cable: Pricing Guide (2026)

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

Fiber Optic Cable Cost Guide 2026

Typical costs hinge on fiber count, indoor versus outdoor use, and whether trenching, splicing, or termination is

Amazon : Fusion Splicer

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

DECAAT FTTH Optic Fusion Splicer with Fiber Cleaver | Automatic Core Alignment; Fusionadora De Fibra Fibra Optica, Optical

Fiber Optic Splicing

Fiber Optic Center has fiber optic splicing equipment, including splicers, cleavers, protection sleeves, mechanical splicing tools and

Top 5 Fusion Splicers for 2025: Precision Tools for

An expert resource for selecting the most reliable, accurate, and cost-effective fusion

Amazon : Fiber Optic Fusion Splicer

Shop fiber fusion splicers designed for FTTH and telecom applications. Get reliable equipment with fast splicing times and

FTTP Drop Installations: Fusion Splicing Versus Pre-terminated Costs

At $60-120/hr, a fusion splice in a drop location will cost $30-$60 labor plus the splicing cost. A mechanical splice would also require

Fusion Splicers | Fusion Splicer Store

Fusion splicer is a precision instrument used to join two optical fibers end-to-end using heat, typically

The FOA Reference For Fiber Optics

Many high fiber count cables today are made from ribbons of fibers, usually 12 fibers per ribbon. Splitting

How to Splice Fiber Optic Cable – Step-by-Step Fusion Splicing Guide

Learn how to splice fiber optic cable using fusion splicing with this complete step-by-step guide. Includes tools, best

Splicing Fiber Optic Cables | A Beginner''s Guide

How to Splice Fiber Optic Cables How does Fiber Splicing Work? A fusion splicer is a machine that aligns and then splices two or

How Anyone Can Splice Fiber Optic Cable | BroadbandSearch

This guide explains both professional and entry-level approaches, including fusion and mechanical splicing, while

Fiber Splicing

Spec Sheet The SPARC core Alignment Fusion Splicer is an advanced Ribbon Fiber Fusion Splicer. It ensures impeccable fiber

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Fiber Optic Cable Splicing Explained

Splicing in optical fiber is the joining two fiber optic cables together. There are 2 methods of cable splicing, mechanical

Amazon : Fusion Splicer

DECAAT FTTH Optic Fusion Splicer with Fiber Cleaver | Automatic Core Alignment; Fusionadora De Fibra Fibra Optica, Optical

Fiber Optic Splicing

Fiber Optic Center has fiber optic splicing equipment, including splicers, cleavers, protection sleeves, mechanical splicing tools and

Top 5 Fusion Splicers for 2025: Precision Tools for

An expert resource for selecting the most reliable, accurate, and cost-effective fusion

Amazon : Fiber Optic Fusion Splicer

Shop fiber fusion splicers designed for FTTH and telecom applications. Get reliable equipment with fast splicing times and

FTTP Drop Installations: Fusion Splicing Versus Pre-terminated Costs

At $60-120/hr, a fusion splice in a drop location will cost $30-$60 labor plus the splicing cost. A mechanical splice would also require

Fusion Splicers | Fusion Splicer Store

Fusion splicer is a precision instrument used to join two optical fibers end-to-end using heat, typically

Fiber Optic Splicing Cost Per Splice (2025 Guide)

For most commercial projects, expect to pay $50–$150 per fusion splice point - but that number can swing in either direction based

FTTP Drop Installations: Fusion Splicing Versus Pre-terminated Costs

At $60-120/hr, a fusion splice in a drop location will cost $30-$60 labor plus the splicing cost. A mechanical splice would also require

Cost of Fiber Optic Cable: Pricing Guide (2026)

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

Fiber Optic Cable Cost Guide 2026

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Typical costs hinge on fiber count, indoor versus outdoor use, and whether trenching, splicing, or termination is

Fiber Optic Splicing Cost Per Splice (2025 Guide)

For most commercial projects, expect to pay $50–$150 per fusion splice point - but that number can swing in either direction based

FTTP Drop Installations: Fusion Splicing Versus Pre-terminated Costs

At $60-120/hr, a fusion splice in a drop location will cost $30-$60 labor plus the splicing cost. A mechanical splice would also require

Cost of Fiber Optic Cable: Pricing Guide (2026)

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

Fiber Optic Cable Cost Guide 2026

Typical costs hinge on fiber count, indoor versus outdoor use, and whether trenching, splicing, or termination is

Fusion Splicing Services

We use Fujikura, Sumitomo, and Precision Rated Optics fusion splicing equipment, as well as, EXFO and Viavi OTDR''s and OLTS

How Much Does Industrial Fiber Optic Installation Cost?

A straightforward question—"how much does it cost to install fiber optic cable?"—draws answers ranging from a few

Contact Us

Continue your research online:

Website: https://zithatech.co.za
Technical inquiry: https://zithatech.co.za/contact.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved