

Trunk Fiber Optic Fusion Splicing Equipment



Overview

Fiber fusion splicers, fiber cleavers, six-motor trunking machines. It offers various models of fusion splicers, including six-motor trunk fusion splicer.

Key Takeaways

Trunk fiber optic fusion splicers are specialized machines designed for high-volume, long-distance fiber optic cable splicing with fast, precise, and reliable performance.

Trunk fiber optic fusion splicers are engineered for medium- to long-distance fiber optic networks, including telecom trunk lines, FTTH projects, and security monitoring systems. They use core alignment technology to ensure minimal splice loss and high repeatability, making them ideal for large-scale network construction and maintenance .

Key Features

- Core Alignment and Motors: Many trunk splicers, such as Signal Fire AI-5/6C/7C/8C/9 and HOC models, feature six-motor core alignment for rapid and precise fiber alignment, reducing splice time to as little as 5-6 seconds .
- Splice and Heat Time: Typical splicing takes 5-6 seconds, with heating cycles around 15 seconds, improving efficiency by up to 50% compared to standard splicers



- **High-Resolution Display:** Machines often include 5-inch or larger screens with up to 300x magnification for easy fiber observation, even in outdoor sunlight .
 - **Battery and Portability:** Large-capacity lithium batteries allow splicing and heating of up to 240 fibers per charge, with some models capable of charging mobile devices during fieldwork .
 - **Durability and Design:** Aviation-grade metal bodies, adjustable screen brightness, and ergonomic platforms support outdoor and night-time operations .
- Performance Specifications
- **Splice Loss:** Advanced models like FiberMASTER S60 achieve splice loss as low as 0.01 dB, exceeding ISO/EN/TIA standards .
 - **Repeatability:** High repeatability ensures consistent performance across multiple splices, critical for trunk networks .
 - **Compatibility:** Supports SM, MM, bare fiber, pigtail, rubber-insulated, and multi-fiber cables .

Supporting Tools

Trunk splicers are often sold with complete toolkits, including fiber cleavers, strippers, holders, and stools for field operation. This ensures a fully integrated solution for fiber optic construction and maintenance .

Popular Models

- **Signal Fire AI Series:** AI-5/6C/7C/8C/9 for trunk lines, AI-20/AI-30 with advanced CPU and algorithms for higher precision .
- **FiberMASTER S60/S40:** S60 optimized for trunk networks, S40 for FTTH and enterprise networks, both offering fast, precise splicing .
- **Jilong Mid-Trunk and Six-Motor Machines:** Designed for medium- and long-distance trunk lines with robust construction tools .
- **HOC Fusion Splicer:** 5-second auto core alignment, suitable for trunk construction and security monitoring projects .

Conclusion

Trunk fiber optic fusion splicers are essential for high-volume, long-distance fiber network deployment, offering fast splicing, low loss, high repeatability, and field-ready durability. Selecting a model depends on project scale, fiber type, and operational environment, with leading options including Signal Fire, FiberMASTER, Jilong, and HOC machines .

Article Content

Fiber fusion splicers, fiber cleavers, six-motor trunking machines ...

It offers various models of fusion splicers, including six-motor trunk fusion splicers, FTTx fiber fusion splicers, and drop cable splicers,

Optical fiber fusion splicing-Optical fiber fusion splicer, fiber ...

JILONG has multi-purpose and multi-model optical fiber fusion splicers, 500E FTTx fusion splicer, 280E trunk line machine, KL-360T

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Fusion splicing is used to physically join together two optical fiber ends. The process may vary, depending on the type of fusion

Signal Fire Technology Co., Ltd.,

Signal fire new generation fiber fusion splicer has significantly reduced the actual weight and volume of the entire equipment by

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Splicing Machine | Fiber Fusion Splicer | Fiber Optics

Fiber Fusion Splicers GAO's fiber fusion splicers are used in the field of fiber optics to join or splice two optical fibers together. Our

THE FOURTH GENERATION OF OPTICAL FIBER FUSION

THE FOURTH GENERATION TRUNK LINE OPTICAL FIBER FUSION SPLICER SOFTEL AI-10A optical fiber fusion splicer uses a

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We offer fiber optic materials from Test Equipment, Bulk Cable and Fusion Splicers to Tools, Patch Cables and Consumables.

Optical fiber fusion splicer, fiber fusion machine, optical fiber ...

Located in the forefront of the industry, it has various types of fusion splicers such as medium trunk line machines, long-distance

Fusion Splicers | Telecommunication Systems Business Unit

We offer a range of equipment necessary for splice various special optical fibers, including polarization-maintaining fibers such as

FX39 6 Motors Fiber Fusion Splicer Optical Welding Machine for

About this item 6-Motor Core Alignment System: Adopts six-motor precise core-alignment positioning, delivers average 0.01dB

Fusion Splicer Buyer's Guide 2026 | Heather Tech

Yet selecting the right fusion splicer—and deploying it correctly—requires understanding splice loss budgets, fiber type compatibility,

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

