TFN S5 Six-Motor Fully Automatic Fiber Optic Fusion Splicer

Product Features

1. Six-Motor Core Alignment System: Specifically designed for long-distance backbone lines (80KM-class) to achieve high-precision splicing.
2. Dual Operating Modes: Supports touchscreen operation and physical button controls to accommodate different user preferences.
3. Efficient Splicing & Heating: Splicing time as low as 6 seconds, heating time 18 seconds (typical), with adjustable settings from 10 to 900 seconds.
4. Extended Battery Life: 5200mAh lithium battery supports over 240 fusion + heating cycles.
5. High-definition display and observation: 5-inch color LCD screen with dual cameras and 500x fiber magnification (X/Y/XY modes).
6. Universal Clamping Fixture: 3-in-1 fixture supports patch cords, pigtails, and bare fibers without accessory changes.
7. High-Adaptability Design: Triple-proof (rainproof/dustproof/drop-proof) chassis, ideal for base station emergency repairs, field operations, and similar scenarios.

Core Selling Points (Addressing Customer Pain Points)

1. Ultra-Fast High-Precision Splicing:
   Six-motor fiber core alignment system achieves loss as low as 0.01dB with a fusion time of just 6 seconds, meeting stringent backbone network requirements.
2. Dual-mode flexibility:
   Touchscreen + physical button design accommodates both traditional operating habits and modern interaction, enhancing adaptability for engineering teams.
3. Extended Battery Life & Power Monitoring:
   5200mAh high-capacity battery supports over 240 operations, with real-time power display preventing fieldwork interruptions.
4. Universal Compatibility:
   The three-in-one clamp accommodates all common fiber types (0.25mm, 3.0mm, and flat cables), reducing tool carrying costs.
5. Professional-Grade Reliability:
   Triple-proof design + lifetime technical support + three-year warranty ensure long-term, high-intensity use.

6. Efficient Maintenance & Documentation:

Built-in storage for 2000 fusion records, 41 preset modes, and high-precision mode (7-second heating) for rapid operations.

7. Language:

The fusion splicer features built-in Chinese and English interfaces, with additional languages available upon customer request; manuals are provided in English, Russian, Spanish, and Portuguese.

Technical Specifications

Item	Parameter Details
Average Fusion Loss	SM: 0.02dB / MM: 0.01dB / DS: 0.04dB / NZDS: 0.04dB / G657: 0.02dB
Return Loss	>60dB
Splicing Time	Standard 7 seconds (SM), FAST mode 6 seconds
Electrode Life	5000 discharges
Applicable Fiber Types	SM/MM/NZDS/G657 fibers and 0.25mm-3.0mm fibers, flat indoor cables
Fiber cutting length	8-16mm
Heater Heat Shrink Tubing Support	40mm/60mm/SOC-3.0/SOC-0.9
Heating time	Typical 18 seconds (adjustable 10-900 seconds), High Precision Mode 7 seconds
Splicing Modes	41 preset modes, stores 100 custom modes
Data Storage	Internal storage for 2000 latest fusion records
Battery Capacity & Runtime	5200mAh lithium battery, typically supports 240 welds + heating cycles
Display and Observation	5-inch touchscreen, dual cameras, 500x magnification (X/Y/X-Y modes)
Power Input	AC 100-240V or DC 9-14V
Protection Rating	Rainproof, dustproof, shockproof and drop-resistant (rubber protective case)

Market Demand Integration

With the large-scale deployment of 5G networks and the surge in demand for metropolitan backbone upgrades, medium-to-long-distance fiber optic projects (such as 80KM provincial trunk lines and large campus core networks) face dual challenges of high-precision splicing and cost control. Featuring a six-motor fiber core alignment system and ultra-low 0.01dB loss performance, it precisely meets 80KM backbone splicing standards. Its triple-proof design, multi-scenario clamps, and extended battery life reduce overall O&M costs. Its combination of professional-grade precision and high cost-effectiveness makes it an ideal choice for telecom operators, mid-sized engineering firms, and base station maintenance teams. It is particularly suited for trunk upgrades and emergency repairs where balancing budget and performance is essential.

Product Configuration

1. Fiber Splicing Machine Host *1
2. Fiber Cleaver *1
3. Battery of Fiber Splicing Machine *1
4. Fusion Splicing Machine Box *1
5. Electrode Rod *2
6. OPM F1M *1
7. VFL G10 *1
8. CFS3 Fiber Stripper *1
9. Leather Wire Stripper *1
10. Kevlar Scissors *1
11. Wet & Dry Cleaning Sponge *1
12. Screwdriver Set *1
13. Electrode Grinder *1
14. Cleaning Kit *1
15. Cleaning Swabs *1
16. Air Blow *1
17. Mini Alcohol Bottle *1
18. Brush Set *1
19. Heat Shrink Wire Tubing *1 Pack