# AI-9
# PRODUCT MANUAL

SIGNAL FIRE TECHNOLOGY CO., LTD.

# OPTICAL  FIBER  FUSION  SPLICER
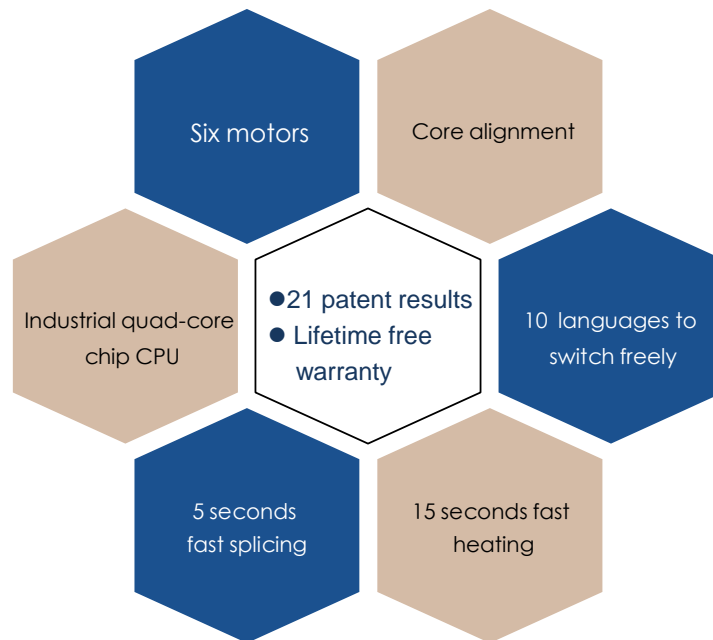
# NEW PRODUCT LAUNCH
## CLASSIC MASTERPIECE

OPTICAL FIBER FUSION SPLICER

Signal Fire AI-9 use the latest core alignment technology with auto focus and six motors, it is a new generation of fiber fusion splicer. It is fully qualified with trunk construction of medium and short distance, FTTH project, security monitoring and other fiber cable splicing projects. The machine uses industrial quad-core CPU, fast response, is currently one of the fastest fiber splicing machine in the market; with 5-inch 800X480 high-resolution screen, the operation is simple and intuitively; and up to 300 times focus magnifications, making it is very easy to observe the fiber with naked eyes. 5 seconds speed core alignment splicing, 15 seconds heating, the working efficiency increased by 50% compared to ordinary splicing machines. Under the conditions of rigorous testing, the performance is still outstanding; toolbox is small, exquisite, durable, and with unique bench design. The design of operating platform reflects the humanistic care; unique lighting design, it is convenient for night construction or repair. Screen brightness is adjustable and it is convenient for outdoor sunshine environment operation. The core parts are using imported brands, aviation metal body material with exquisite details. With the combination of advanced technology and design, the new generation of optical fiber fusion splicer will bring you a reliable and comfortable user experience.

# MASTERPIECE
## HIGH-END LUXURY

Six motors

Core alignment

Industrial quad-core chip CPU

- 21 patent results
- Lifetime free warranty

10 languages to switch freely

5 seconds fast splicing

15 seconds fast heating

- Once splicing reaches to 50,000 times free replacement a new machine

# METAL BODY
## AESTHETIC DETAILS

Power   VFL
Meter

**VFL：** Always on / flashing / off

**Power Meter：**

850nm/1300nm/1310nm/1490nm

/1550nm/1625nm Six states

# BUILT-IN POWER METER AND VFL

Effectively measure connection loss, verify continuity, and help assess fiber link transmission quality.

# 10 LANGUAGES TO SWITCH FREELY

Covers the global major user market
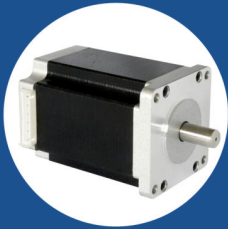
CHINESE

ENGLISH

FRENCH

RUSSIAN

ITALIAN

PORTUGUESE

POLISH

SPANISH

THAI

ARABIC

# CORE PARTS  QUALITY ASSURANCE

| Siemens stepper motor | Roth ROUST linear guide | Sanyo lithium battery | Aviation metal material |

# THE TOOLBOX
COMES WITH A STOOL TO FACILITATE
THE CONSTRUCTION WORKERS.

OPTICAL FIBER FUSION SPLICER

Do not need to take out the splicer machine from the toolbox while working.

Remove the stool

Fiber cleave operator station

Two layers

Stool can bear
**100**kg

INDUSTRIAL QUAD-CORE CHIP CPU

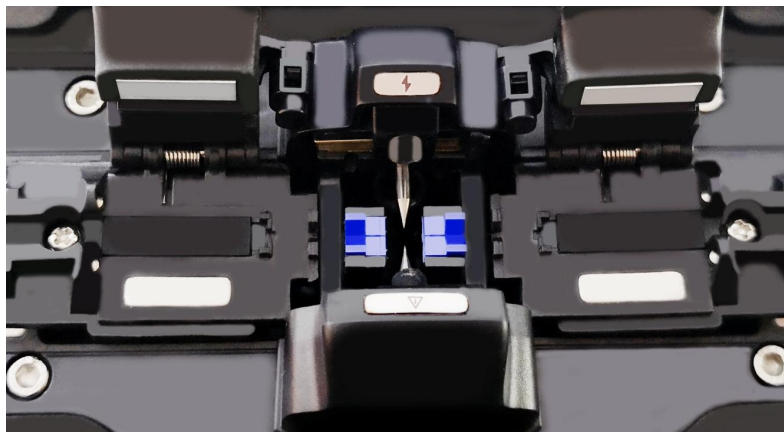Synchronous operation | speed response | no jammed | super experience

# 3 IN 1 FIBER HOLDER

SM, MM, bare fiber, pigtail, rubber-insulated, multi fiber cable

# THE BATTERY POPUP AUTOMATICALLY

## 7800 mA high-capacity lithium battery

- charging time ≤ 3.5 hours
- continuous splicing and heating about 200 times

Press to popup the battery

# Show good performance in plateau, desert, and extreme cold environment

# BASIC  PARAMETER

**Signal fire**

OPTICAL  FIBER  FUSION  SPLICER

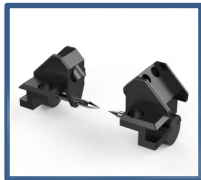| | | | |
|---|---|---|---|
| Fiber alignment | Core/cladding alignment  / Manual alignment | Built-in lighting | easy for night operation |
| Splicing time | 5S | Tension Test | Standard 2N |
| Heating time | 15S | Fiber holders | 3 in 1 fiber holder, SM, MM, bare fiber, pigtail, rubber-insulated, multi fiber cable |
| Heating mode | Automatic heating（Preheating） | Magnification | 300 for X or Y view, 150 for X or Y view |
| Focus mode | Six motors  Auto focus | Screen | 5 inch TFT color display |
| Applicable Fibers | SM(G.652&G.657)、MM（G.651）、DS(G.657)、NZDS（G.655） | Splicing Mode | Normal / high precision splicing |
| Splice Loss | 0.025dB（SM）、0.01dB（MM）0.04dB（DS/NZDS） | Splicing method | Fully automatic、Step by step splicing |
| Control technology | Real-time control and calibration of fusion ARC | Splicing record storage | Synchronize to the phone, the server to cloud storage unlimited |
| Return loss | Better than 60DB | Built-in battery | 7800 mA high-capacity lithium battery, charging time ≤ 3.5 hours, continuous splicing and heating about 200 times |
| Fiber diameter | Cladding Diameter：80-150µm Coating Diameter：100-1000µm | Power supply | Input AC100-240V 50 / 60HZ, output DC13.5V / 4A, the current power mode can be identified, real-time detection of battery power |
| Fiber Cleave Length | Coating less than 250µm：8-16mm Coating less than 250-1000µm:16mm | Operating Conditions | Temperature -15 ~ +50 ℃, humidity: <95% RH (no condensation) Working altitude: 0 ~ 5000m. Resist max. wind speed: ≤ 15m / s |
| Software updates Length | Automatically update、 Update by a key | Shrinkable tube | 60mm、50mm、40mm、25mm |
| Boot time | 1 second | Product protection | Waterproof, dust proof, shock-resistant |
| Visual Fault Locator | Power:15mw,2hzflashing And Constantly Bright Mode | Optical Power Meter | Wavelength:850nm、1300nm、1310nm、1490nm、1550nm、1625nm Measuring Range:-70 ~ +6db Absolute Error:<0.3db(-50dbm ~ +3dbm Range) |

# Accessories in the tool box

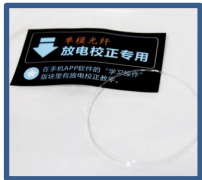| | | |
|---|---|---|
| Fiber Cleaver | Spare electrode | Wire stripping pliers |
| Miller stripper | Hex key | carrying case |
| Fiber for ARC calibration | Strap | Power Adapter |
| Alcohol Bottle | Brush | User's manual Quality Certificate Warranty Card |

# SIZE

148mm
130mm
122mm

293mm
237mm
270mm

390mm
360mm
335mm