



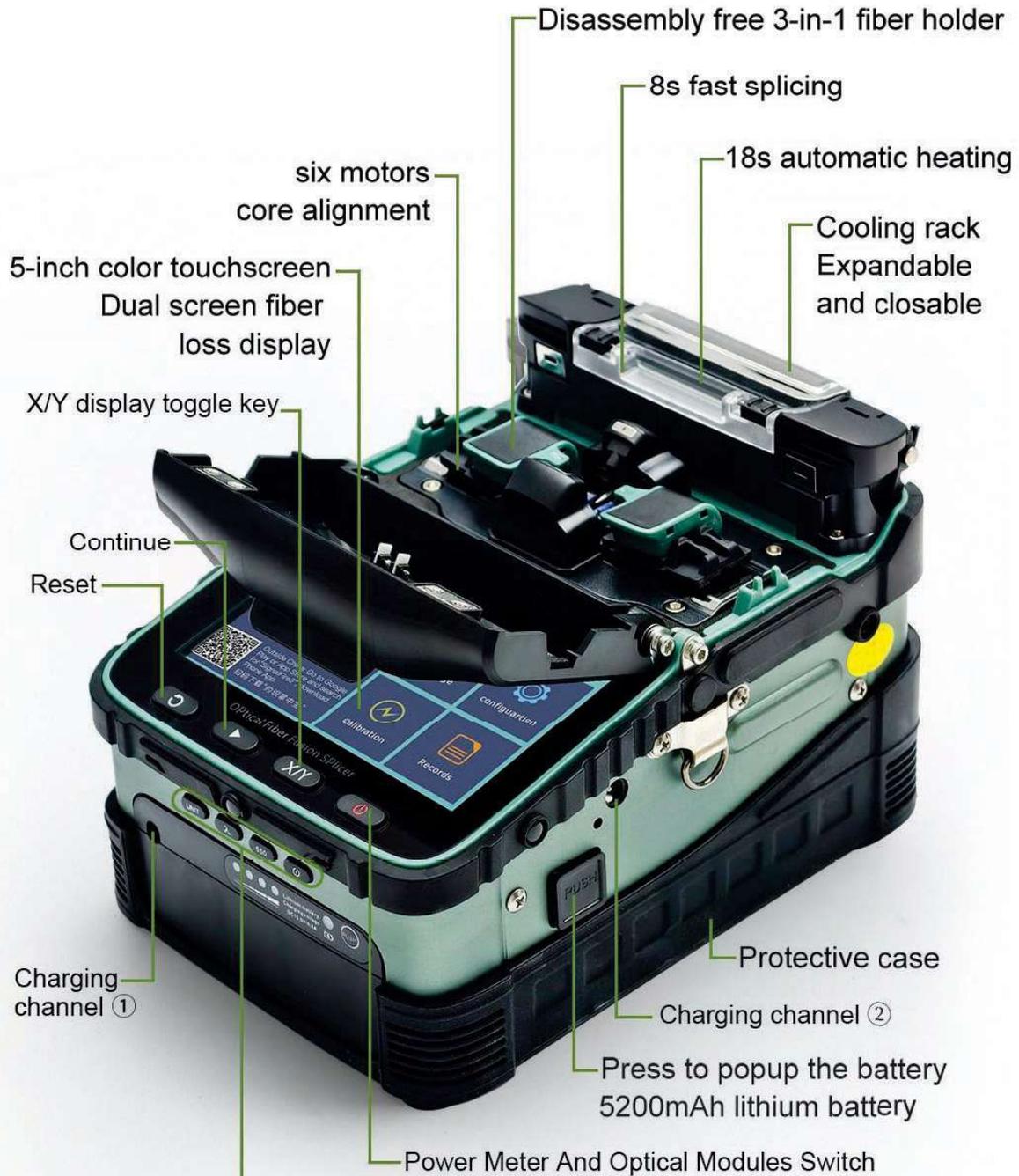
# AI-6A+

## OPTICAL FIBER FUSION SPLICER

**PROFESSIONAL DEDICATED!  
BEST SELLER GLOBALLY!  
SIGNAL FIRE TRUSTWORTHY!**

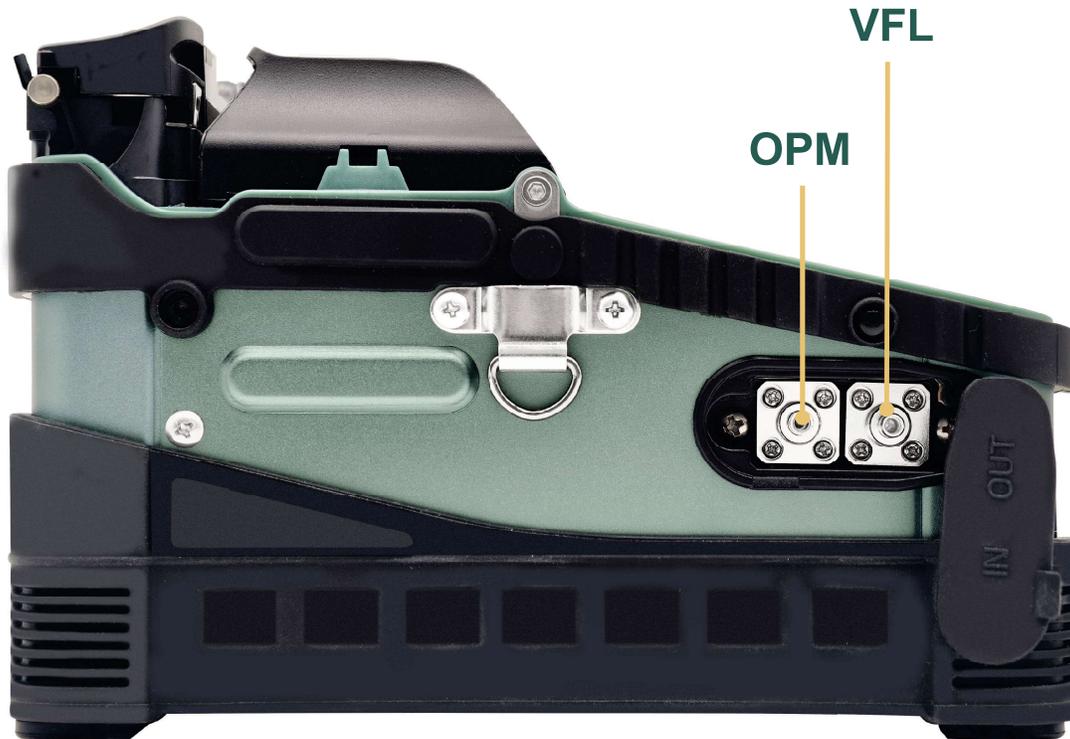


Signal Fire AI-6A+ optical fiber fusion splicer is an economical six motor machine, mainly suitable for security monitoring, FTTH entry, and short distance outdoor fiber fusion splicing. The machine adopts industrial CPU, which runs quickly; Adopting a 5-inch color touchscreen with a simple and intuitive interface, magnified 320 times, making it easy to observe the fiber core with the naked eye; 8 seconds high-speed splicing, 18 seconds heating; The machine comes with OPM and VFL functions, which make it more efficient compared to ordinary splicing machines; 5200mAh large capacity lithium battery, capable of splicing and heating around 160 cells, comes with a cooling rack that can be turned off or unfolded. The machine is equipped with 11 major global languages, allowing users to choose and remotely upgrade software systems. AI-6A+ will surely exceed your expectations!



Key for OPM & VFL

# Within VFL and OPM function



Effectively measure connection losses, verify continuity, and help evaluate fiber link transmission quality

**OPM**

### Switch between ten states

Wavelength: 850nm、1300nm、1310nm  
1490nm、1550nm、1625nm、980nm  
1270nm、1577nm、1650nm

**VFL**

### Switch between three states

power: 15mW, 2Hz flashing and steady on mode

# EXQUISITE DETAILS



Optical Fiber Fusion SPlicer



# 5-inch color touchscreen

Intuitive operation, easily accessible with just one touch



## Industrial-grade CPU

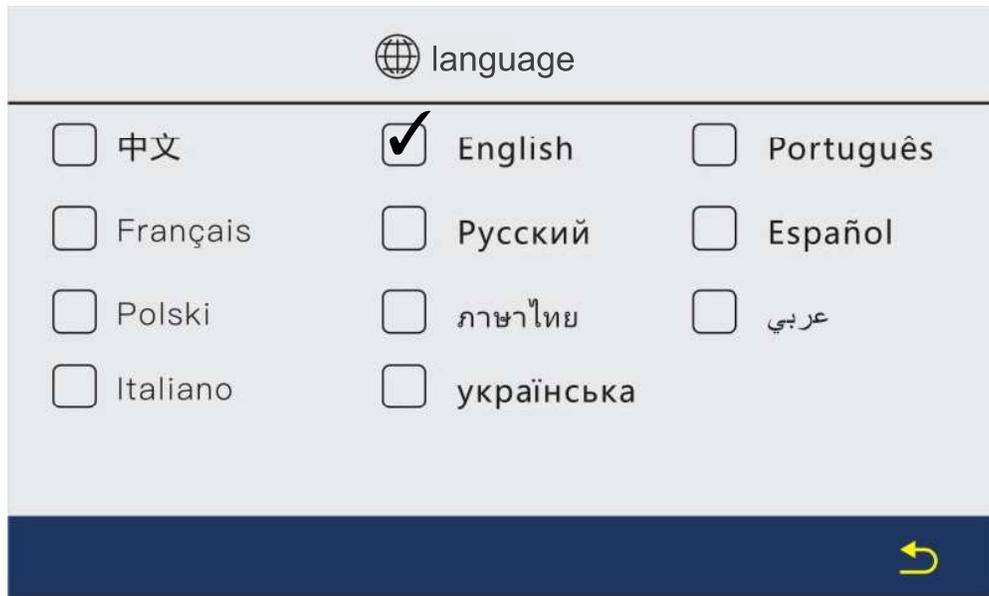
### 1 second startup

Sensitive response/Smooth experience

# Touch screen menu



11 languages to switch freely



Chinese



English



French



Russian



Italian



Ukrainian



Portuguese



Polish



Spanish



Thai



Arabic



### Configuration

Fiber type

SM    MM    AUTO    G654E  
 BIF    80um    NZ    DS

Auto power off    15min  

Heating time    15S  

Heater Pre-heating  

Pause splicing process  

Auto-focus  

Activate battery  

Self test  

Angle check    3.0°  

Endface check  

Basic    Standard    Precision

Tensile test  

Factory restoration  

Cleaver adjustment  

Replace blade assembly  

Screen brightness    10  

**Help**  

Whatsapp:+86 191\*\*\*\* \*\*\*\*\*  
Skype: live:.cid.2\*\*\*\*\*  
Email:technicalsupport@\*\*\*\*\*

This account only for after sales,technical support and Using guide.  
Refuse any questions about the selling, if you wanna buy machine,  
please ask your machine provider.

For more support:  
Go to Google Play or App Store and search for“SignalFire2”,download Phone  
App.

Firmware version: Main:v12 Fpga:V12 Ctrl:V12



### Records

No	Time	loss
000007	2025-11-10 14:26	0.00 dB
000006	2025-11-10 14:25	0.01 dB
000005	2025-11-10 14:24	0.01 dB
000004	2025-11-10 14:22	0.00 dB
000003	2025-11-10 14:22	0.02 dB
000002	2025-11-10 14:21	0.01 dB
000001	2025-11-10 14:20	0.00 dB

# 5200mAh lithium battery

### Dual charging channel

Even if a fault occurs, another channel can be used for charging



# Charging time $\leq 3.0$ hours

In full state, 160 cores can be continuously fused and heated



The battery can be removed and charged separately

### Charging mouth

Input voltage :  $13.5 \pm 0.5V$

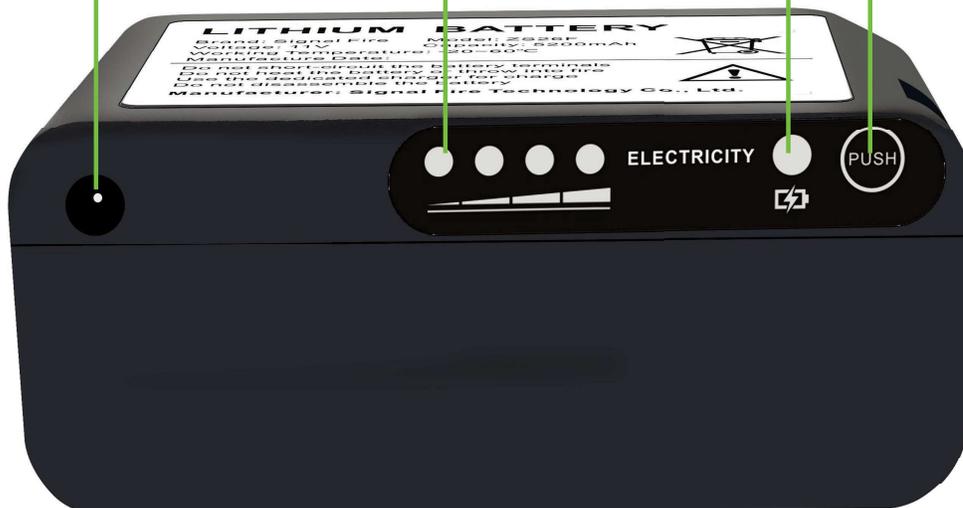
Input current : 4.8A

### Power indicator light

indicator light

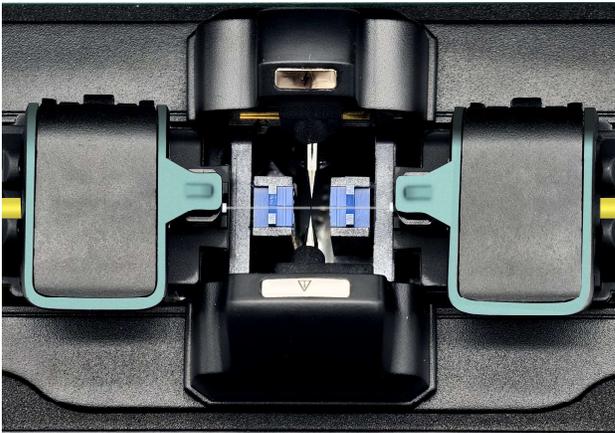
### Charge indicator light

Press to check the power level

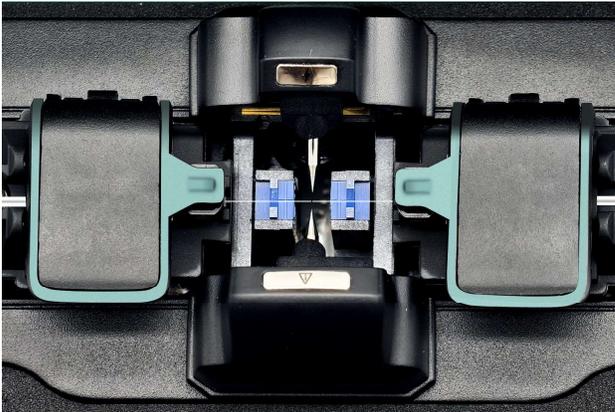


# 3 in 1 fiber holder

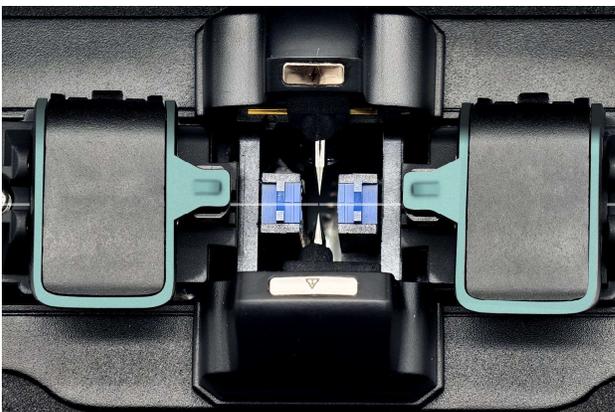
SM, MM, bare fiber, pigtail, Drop cable, multi fiber cable



**Jumper(pigtail)**



**Drop Cable Fiber**



**Bare Fiber**

# 18s automatic heating



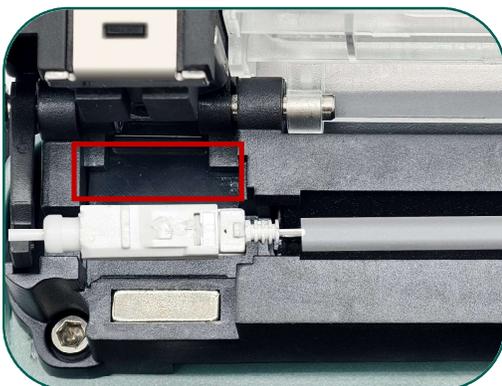
### Preheating

Successful fiber melting. When opening the windproof cover to take out the fiber, the machine turns on pre heating for up to 8 seconds



### Cooling rack

Expandable and closable



### Heating part compatible with SC fiber

SC Fiber: Push up

Ordinary fiber: Push down

**Dust prevention**  
**Fall prevention**  
**Shock prevention**



**Thickened buffer structure**

Don't be afraid to knock! Touch! Fall!

# Basic parameter

<b>Fiber alignment</b>	Core/cladding
<b>Motor number</b>	6 motors (accurate of fiber alignment: 0.3 $\mu$ m)
<b>Splicing time</b>	8s
<b>Heating mode</b>	18s, can be customized according to the external environment
<b>Fiber type</b>	Single-mode fiber (SMF/G.652), multimode fiber (MMF/G.651), dispersion-shifted fiber(DSF/G.653), non-zero dispersion-shifted fiber (NZ-DSF/G.655), and bend-insensitive fiber (BIF/G.657); suitable for splicing bare fiber, pigtail, drop fiber, patch cord, and invisible fiber.
<b>The cladding diameter</b>	80-150 $\mu$ m
<b>Splicing loss</b>	0.02dB (SM) 、0.01dB (MM) 0.04dB (DS/NZDS)
<b>Splicing mode</b>	Automatic focusing core alignment, conventional/high precision welding
<b>Splicing way</b>	Automatic, semi-automatic
<b>Fiber holder</b>	Three in one fixture, no need to change, suitable for single/multi-mode, multi-core cable/bare fiber, tail fiber, jumper fiber,drop cable
<b>VFL</b>	The machine comes with: power: 15mW, 2Hz flashing and steady on mode
<b>OPM</b>	Wavelength: 850nm、1300nm、1310nm、1490nm、1550nm、1625nm、980nm、1270nm、1577nm、1650nm/Measurement range: -50+26dbm Absolute error: <0.3dB (-50dbm ~+3dBm range)
<b>Machine system languages</b>	11 languages available (Chinese、English、French、Russian、Ukrainian、Italian、Portuguese、Polish、Spanish、Thai、Arabic)
<b>Battery capacity</b>	5200mAh large capacity lithium battery charging time $\leq$ 3.0 hours; It can continuously weld and heat about 160 cores
<b>Magnification</b>	320x (X or Y axis single display) , 200x (x and Y axis dual display)
<b>Fiber diameter</b>	Coating diameter: 80-150 $\mu$ m/Coating diameter: 100-1000 $\mu$ m
<b>Cutting length</b>	Coating layer 250 $\mu$ m below: 8-16mm/coating layer 250-1000 $\mu$ m: 16mm
<b>Heat shrink tube</b>	60mm、50mm、40mm、25mm
<b>Tensile testing</b>	standard 2N
<b>display</b>	5-inch color touchscreen
<b>Boot time</b>	1s, boot can enter the working mode
<b>Data is stored</b>	Unlimited, machine storage 1000 groups, the excess part can be stored in the server, can export data.
<b>Wireless communication</b>	Based on bluetooth 4.2 protocol standard, the working band is 2.4GHz, the maximum transmission range is 60m
<b>Software upgrade</b>	Mobile phone APP Internet update, enable Bluetooth synchronization upgrade machine software
<b>Management function</b>	The equipment owner can be bound as the highest authority, and can remotely view the welding records, welding time, loss, etc. through the mobile phone APP. The number of welding times or working time of the equipment can be set. The manager can effectively manage a single or multiple equipment.
<b>Return loss</b>	Better than 60 db
<b>Product protection</b>	Waterproof, dustproof and fall proof
<b>Power supply</b>	Input AC100-240V 50/60Hz, output DC13.5V/4.8A, the current power mode can be identified, real-time monitoring of the current battery level
<b>The work environment</b>	Temperature: -15 ~ +50 $^{\circ}$ C, humidity: < 95%RH (no condensation), working altitude: 0 ~ 5000m, maximum wind speed: $\leq$ 15m/s

# Standard Configuration



**Fusion splicer**



**Fiber cleaver**



**Strap**



**User's manual  
Quality Certificate  
Warranty Card**



**wire  
stripping  
pliers**



**Miller  
stripper**



**Fiber for ARC  
calibration**



**Alcohol  
Bottle**



**Brush**



**Power Adapter**

# Size and weight



### Machine weight

1.99kg (with battery)

1.63kg (without battery)



### Toolbox weight

4.70kg

(including machine  
and accessories)



### Total weight

5.90kg