# AI-12

# OPTICAL FIBER FUSION SPLICER

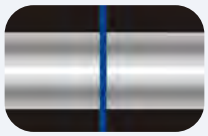
Suitable for medium to long-distance trunk fiber optic cable fusion projects

## 3 golden standards




**1.The fiber core is "visible":**

Fiber core is visible durng the whole process
Alignment effect is visible to the naked eye



**2."True Fiber Core" Display:**

Splicing loss can be verified

**0.01db**

**3."Accurate" core alignment:**

Stable output under all operating conditions
Accuracy remains unaffected in extreme environments

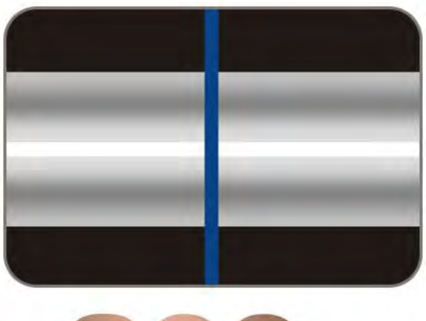
**H 5000m**
**-25℃**

| 0.05μm | Six motors | Fiber core alignment | 6s | 15s | OPM | VFL |
|---|---|---|---|---|---|---|
| Core alignment accuracy | Six motors | Fiber core alignment | 6s splicing | 15s heating | Built-in OPM function | Built-in VFL function |

From the signal station on the summit of Mount Everest to the construction site in the South American rainforest, and then to the private network communication in the Gobi oilfield in the Middle East, the AI-12 has witnessed the most extreme working environments for humans. It is not merely a 6-motor fusion splicer, but also a pioneer in bridging the digital divide. The core alignment accuracy of 0.05μm is our ultimate respect for every fiber optic signal.

# CAN SEE CLEARLY, ACCURATELY AND SPLICE STEADILY

Splice once and 'become' once, Almost zero rework, Work harder and earn more money, and pass the inspection of the main line once!



320X
MAGNIFICATION

Automatic fiber type identification

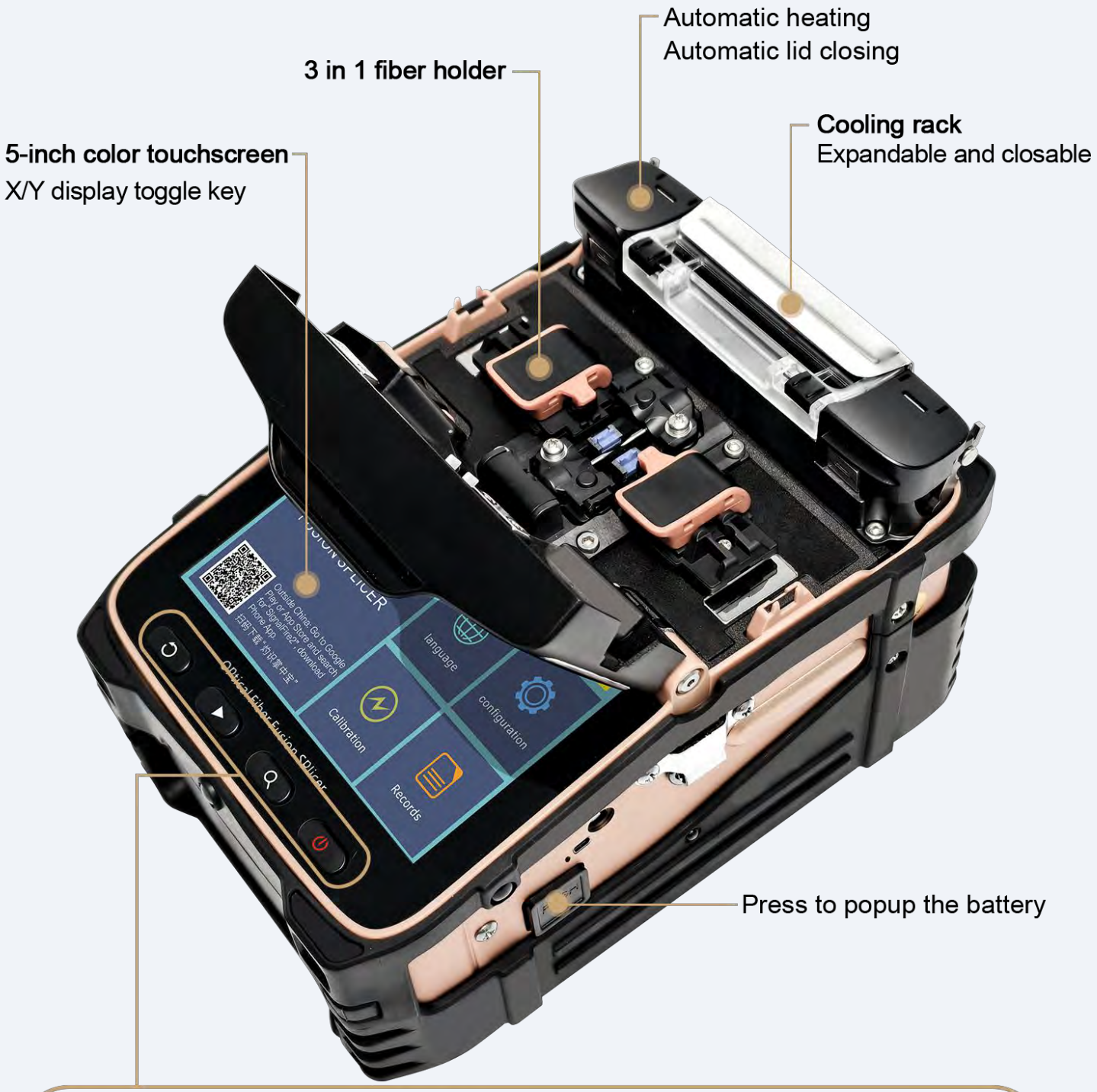
The fiber core can be seen very clearly

One thousandth of a hair gap can be recognized at a glance! Accurate, visible!



# MAKE EVERY INFORMATION ARTERY RUN ROBUSTLY

Fully independent and self-controllable



# SPLICING AND TESTING ARE COMPLETED IN ONE MACHINE

making on-site construction more efficient

## Built-in VFL and OPM function




Less equipment to carry, fewer tools to switch, fewer missed checks, less rework.

**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

# One click switch to local language

## Zero obstacles, reduced labor costs

5-inch color touchscreen




language

configuartion

calibration

records

**12 LANGUAGES TO SWITCH FREELY**

Multilingual Settings, covering the global market

Chinese · English · Spanish · French

Italian · Portuguese · Turkish · Arabic

Russian · Polish · Ukrainian · Thai



The power supply is sufficient

# project schedule will be stable

Charging time ≤3.5 hours

7800mAh lithium battery

260

In full state, 260 cores can be continuously fused and heated



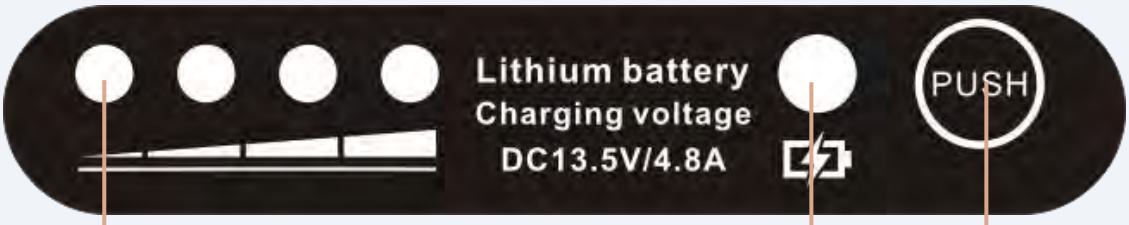

Charging channel ①

Charging channel ②

Charging channel ③ (Type-C)

## Three charging ports

The battery can be removed for charging, Type-C supports bidirectional charging and discharging (can charge mobile phones), with a maximum power of 45W.




Power indicator light

Charge indicator light
Indicator light turns off when fully charged

Press to check the power level

## HEATING PART AUTOMATIC LID CLOSING
## ACTIVATE PREHEATING FUNCTION IN WINTER

The fiber fusion is successful. At the same time as opening the windproof cover, the heating tank automatically starts preheating for 6 seconds.



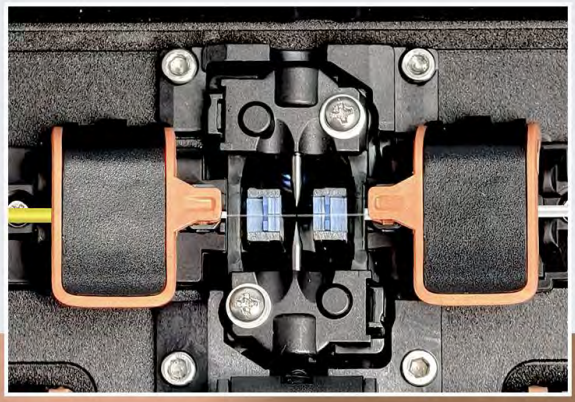

## COOLING RACK INTEGRATION
## NO NEED TO SEARCH AROUND

Expandable and closable



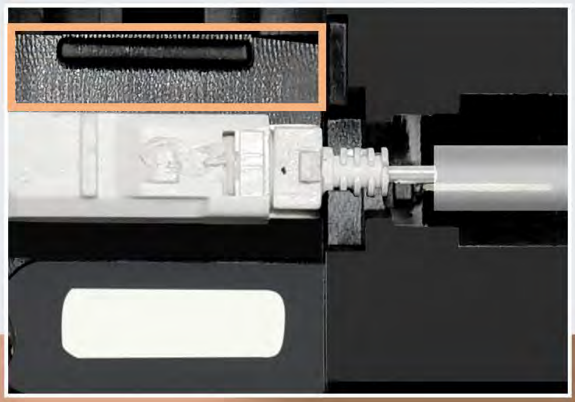

## 3 IN 1 FIBER HOLDER

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



## HEATING PART COMPATIBLE WITH SOC FIBER

SOC Fiber: Push up
Ordinary fiber: Push down



# In every corner of the world, connecting the globe

At an altitude of 5000 meters, it is not just a connection, but a conquest.





# Respecting "engineers" is the greatest guarantee for engineering

The thoughtful design that has obtained patents reflects respect and care for workers



Stool can bear:**100KG**






***During work, there is no need to remove the fusion splicer. The splicer machine and tools are all stored together. You can sit down if you want, so you don't have to keep squatting all the time.***

## Toolbox with stool

Patent no.ZL 2016 3 0402585.X

# Basic parameter

| | |
|---|---|
| **Fiber alignment** | Core/cladding |
| **Motor number** | 6 motors （accurate of fiber alignment：0. 05μm） |
| **Splicing time** | 6s |
| **Heating mode** | 15s， can be customized according to the external environment |
| **Fiber type** | Single-mode fiber (SMF/G.652), multimode fiber (MMF/G.651), dispersion-shifted fiber (DSF/G.653), G.654 fiber, 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. |
| **The cladding diameter** | 80-150 μm |
| **Splicing loss** | 0.02dB（SM）、0.01dB（MM）0.04dB（DS/NZDS） |
| **Fiber identification** | Automatic fiber recognition (in AUTO mode) |
| **Splicing mode** | Automatic focusing core alignment, Cladding alignment， conventional/high precision welding |
| **Splicing way** | Automatic, semi-automatic |
| **Fiber holder** | Three in one fixture, no need to change, suitable for single/multi-mode, multi-core cable/bare fiber, tail fiber, jumper fiber,drop cable |
| **VFL** | The machine comes with: power: 15mW, 2Hz flashing and steady on mode |
| **OPM** | Wavelength: 850nm、 1300nm、 1310nm、 1490nm、 1550nm、 1625nm、 980nm、 1270nm、1577nm、1650nm/Measurement range: -50+26dbm Absolute error: <0.3dB (-50dbm ~+3dBm range) |
| **Battery capacity** | 7800mAh large capacity lithium battery charging time ≤3.5 hours; It can continuously weld and heat about 260 cores |
| **Magnification** | 320x (X or Y axis single display)，200x (x and Y axis dual display) |
| **Fiber diameter** | Coating diameter: 80-150μm/Coating diameter: 100-1000μm |
| **Cutting length** | Coating layer 250μm below: 8-16mm/coating layer 250-1000μm: 16mm |
| **Heat shrink tube** | 60mm、50mm、40mm、25mm |
| **Tensile testing** | standard 2N |
| **Display** | 5-inch color touchscreen |
| **Boot time** | 1s, boot can enter the working mode |
| **Data is stored** | Unlimited, machine storage 1000 groups, the excess part can be stored in the server, can export data. |
| **Wireless communication** | Based on bluetooth 4.2 protocol standard, the working band is 2.4GHz, the maximum transmission range is 60m |
| **hardware upgrade** | Mobile phone APP Internet update, enable Bluetooth synchronization upgrade machine software |
| **Management function** | 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. |
| **Return loss** | Better than 60 db |
| **Product protection** | Waterproof, dustproof and fall proof |
| **Charging method** | Three charging ports: The battery can be removed for charging, Type-C supports bidirectional charging and discharging (can charge mobile phones), with a maximum power of 45W. |
| **Power supply** | 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 |
| **The work environment** | Temperature: -15 ~ +50℃, humidity: < 95%RH (no condensation), working altitude: 0 ~ 5000m, maximum wind speed: ≤15m/s |

# Configure Option A (recommended) and choose one of them










❶ Toolcase ❷ Fusion Splicer *❸ versatile fighter(Integrated fiber stripper and cleaver)

❹ 10 cleaning cotton balls ❺ Spare electrode ❻ Alcohol Bottle ❼ Brush

❽ Toolbox strap ❾ Belt ❿ Power Adapter ⓫ key ⓬ Allen key ⓭ Fiber for ARC

⓮ User's manual / packing list / Warranty Card / Quality Certificate

***❸ Versatile Fighter (Integrated fiber stripper and cleaver) Functions: Fiber cleaver / Three-port Miller Stripper / Fiber Pliers / Fiber Cleaning / Kevlar Fiber Scissors**

# Configure Option B
and choose one of them




❶ Toolcase ❷ Fusion Splicer *❸ Signal fire stripper ❹ 10 cleaning cotton balls

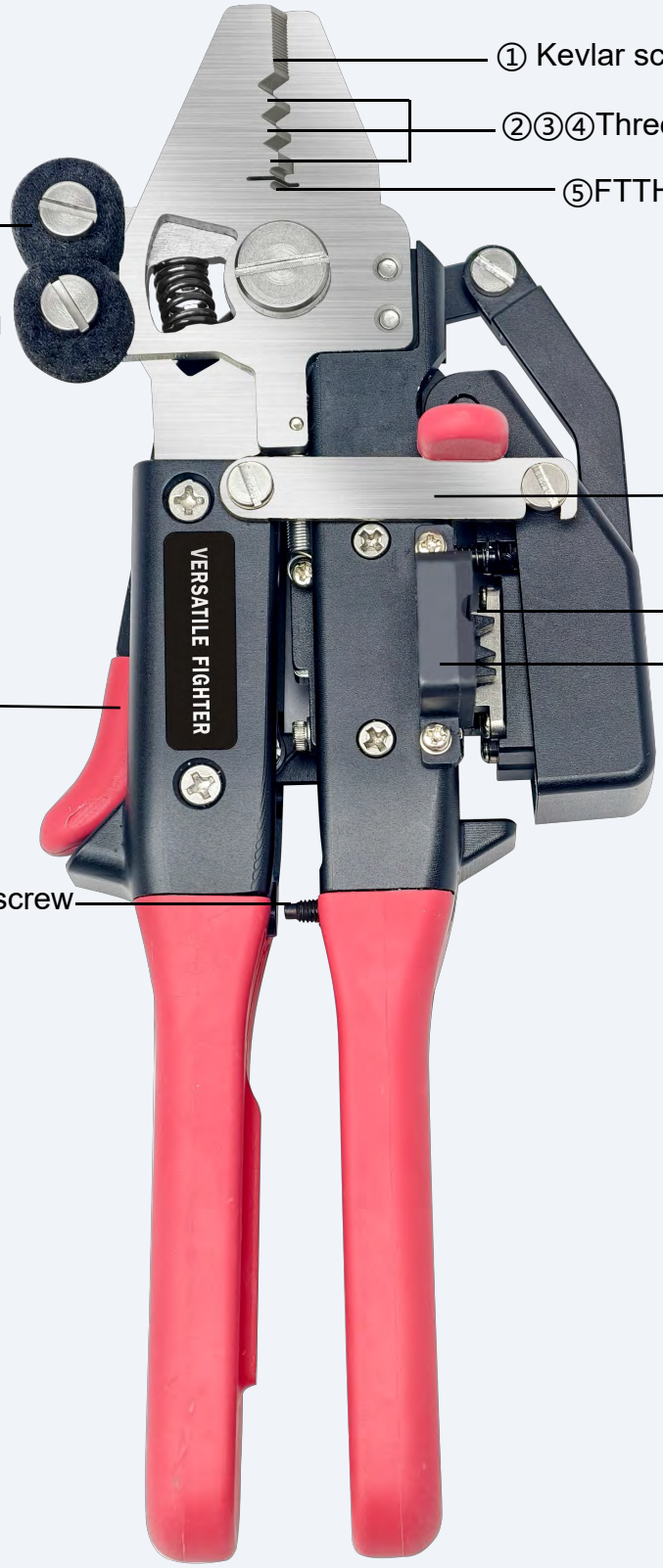
❺ S15 One-step Fiber Cleaver ❻ Spare electrode ❼ Alcohol Bottle ❽ Brush

❾ Toolbox strap ❿ Belt ⓫ Power Adapter ⓬ key ⓭ Allen key ⓮ Fiber for ARC

⓯ User's manual / packing list / Warranty Card / Quality Certificate

# Configure Option A

## Versatile fighter （Integrated fiber stripper&cleaver)




① Kevlar scissors

②③④Three-port Miller stripper

⑤FTTH Drop cable stripper

⑨Cleaning cotton

Wipe off the cladding of optical fiber, It can be cleaned, rotated and replaced.

⑥ Lock

⑦cleaver

⑧Three-in-one fiber holder

⑩ Trigger of the cleaver

⑪Miller stripper adjusting screw

# Configure Option B

## One-step fiber cleaver&SIGNAL FIRE stripper



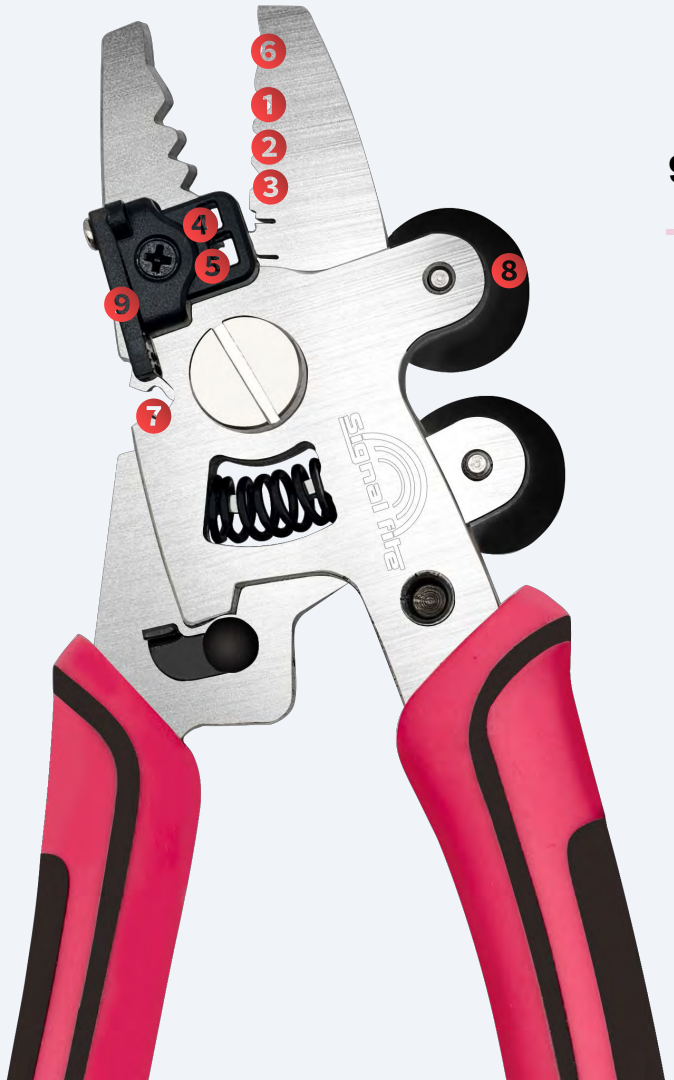

## ONE-STEP FIBER CLEAVER

Micron level cutting,Ten thousand times durable

24 cutting points

Can be cut approximately 48000 times

Average cutting angle: around 0.5°




## SIGNAL FIRE STRIPPER

### 9-IN-1 OPTICAL FIBER STRIPPER

1 2 3 Three-port Miller stripper

4 5G FTTH Drop cable
(Caliber: 2mm x 1.6mm)

5 Both regular FTTH Drop cable
(Caliber: 3mmx2mm)

6 kevlar scissors

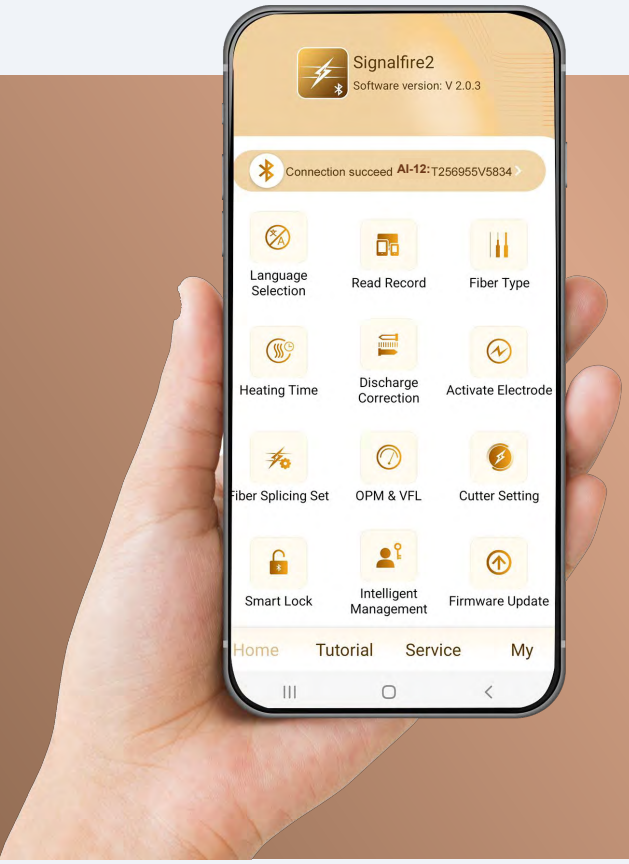
7 FTTH Drop cable steel wire pliers

8 Cleaning cotton

9 Rotary ruler

# SUPPORT BLUETOOTH
# BLUETOOTH CONNECTION

Remote management can be carried out for one or more devices.




## Intelligent interaction, avoid tedious

Scan the QR code of the welding machine startup screen to download the Mobile APP The phone connects to the splicer via Bluetooth



Bluetooth™

- ☑ Welding record can be read through mobile phone, and the data can be exported;
- ☑ You can set the parameters of the welding machine, such as selecting the machine language, changing the heating time, selecting the fiber optic alignment mode, etc;
- ☑ You can manage the welding machine, such as setting the use time of the machine, welding times, etc;
- ☑ Upgrade the phone APP, bluetooth connected to the machine to upgrade the machine software;
- ☑ The working hours and the number of working sessions can be set to facilitate the operation of the rental vehicle business.




Most of the menu settings for the fusion splicer can be operated through touch screen on the device Okay, but the mobile app has more comprehensive applications. Please download it!

# Size and weight




**Machine weight**

**2.10kg**(with battery)

**1.68kg**(without battery)




**Toolbox weight**

**6.95kg**

(including machine and accessories)




**Total weight**

**8.20kg**

# SERVICE COMMITMENT

**Five years warranty, but these circumstances are not within the scope of this provision.**

01.Except for the cleaver, miller clamp, stripping pliers, fiber holders and other tools whose life depends on the frequency of use and the use of the environment. Also electrodes are consumption material which are not in the warranty.

02.Battery and power adapter are warranty for one year, it is in free warranty where it is damaged or can not be charged in one year.