



AI-5 Pro

OPTICAL FIBER FUSION SPLICER

Suitable for security monitoring projects

SIGNAL FIRE INTELLIGENT MANUFACTURING



SIX MOTORS



CORE ALIGNMENT



8S SPLICING



18S HEATING

Signal Fire AI-5Pro is mainly suitable for security monitoring and other engineering projects. six motors、 core alignment, Adopting a 5-inch color screen, the operation graphics are simple and intuitive; Up to 320x focusing magnification, 8 seconds high-speed splicing, 18 seconds heating, with a 50% increase in work efficiency compared to ordinary fusion machines; The 5200mAh lithium battery can fuse and heat about 160 cells when fully charged. Its unique lighting design makes it convenient for night construction or emergency repairs.

SUPER COST-EFFECTIVE



METAL BODY

BEAUTIFUL DETAILS



11 languages available

Multilingual Settings, covering the global market



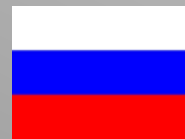
Chinese



English



French



Russian



Italian



Ukrainian



Portuguese



Polish



Spanish



Thai



Arabic

5200mAh lithium battery

Charging time ≤ 3.0 hours

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

Charging channel

The battery can be removed and charged separately



Press to pop up the battery

Charging port

Input voltage : $13.5 \pm 0.5V$
Input current : 4.8A

Power indicator light

Charge indicator light

Indicator light turns off when fully charged

Press to check the power level



3 in 1 fiber holder

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



Jumper fiber
(pigtail)



Drop cable



Bare fiber

Dust prevention fall prevention shock prevention



Thickened buffer structure

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

Lighting for splicer

Convenient for night operation



Basic parameter

Fiber alignment	Core/cladding
Motor number	Six motors (accurate of fiber alignment: 0.5μm)
Splicing time	8s
Heating mode	18s, 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), 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)
Splicing mode	Automatic focusing core 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
Battery capacity	5200mAh large capacity lithium battery charging time ≤3.0 hours; It can continuously weld and heat about 160 cores
Magnification	320x (X or Y axis single display) , 160x (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 TFT color display screen
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
Software 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.
interface	USB2.0 (Type A) can be used to connect external LED lights and charge mobile devices
Return loss	Better than 60 db
Product protection	Waterproof, dustproof and fall proof
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

STANDARD CONFIGURATION



- ① Fusion Splicer ② Toolkit ③ S07 Fiber Cleaver
- ④ Alcohol Bottle ⑤ Wire stripping pliers ⑥ Miller stripper
- ⑦ Belt ⑧ Toolbox strap ⑨ Power Adapter ⑩ User's manual /
Quality Certificate / Fiber for ARC calibration / Warranty Card

Size and weight



Machine weight

1.91kg (with battery)

1.55kg (without battery)



Toolkit weight

3.50kg

(including machine and
accessories)



Total weight

4. 20kg

SERVICE COMMITMENT

Three 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.



Signal Fire Technology Co., Ltd. is a high-tech joint-stock enterprise specializing in the research and development, production, and sales of communication equipment, with a registered capital of 10 million. It is a national high-tech enterprise. Our main products include fiber optic fusion splicers, electric fiber cleaver, OTDR (Optical Time Domain Reflectometer), and 9-in-1 optical fiber stripper. They are widely used in the construction, maintenance, emergency repair, security monitoring, and research and teaching of optical cable lines in telecommunications, mobile, China Unicom, radio and television operators, post and telecommunications, railway, engineering companies, and public institutions.





The factory is located in Chengdu High tech International Enterprise Port, with a modern production factory and standardized office buildings. We have passed the ISO9001 international quality management system certification, and our products have passed the EU CE, ROHS. International certifications such as FCC in the United States and UKCA in the United Kingdom have been passed by the National Institute of Quality Supervision and Inspection, China Academy of Information and Communications Technology.







The qualified testing of Taier Laboratory has obtained nearly a hundred domestic and international patents at the same time. The "Signal Fire" series products have been sold to over 100 countries and regions including North America, South America, Europe, Africa, and Asia, and have received unanimous praise from customers.



Operator winning bid brand



Telecom installation and maintenance skills competition, Signal fire fusion splicer excellent performance, won the group first prize



Exhibition photos



Product testing certificate

Signal Fire Technology Co., Ltd. has passed the ISO9001 international quality management system certification. The product has passed international certifications such as the CE, RoHS, the United States FCC, and UKCA in the United Kingdom, and passed the qualified test through National Quality Supervision Institute, China Xintong Institute, and Tel Laboratory. At the same time, we obtained nearly 100 patents.

CERTIFICATE



CERTIFICATE
Of Conformity
Directive 2014/53/EU
On The Radio Equipment Directive

Certificate No.: AT18220WC202819
Certificate Holder: SIGNAL FIRE TECHNOLOGY CO., LTD.
Address: Building 18, Chengdu Hi-Tech International Enterprise Park, Liansu U Valley, 1111 Changsheng Bridge, Pidu District, Chengdu China
Manufacturer: SIGNAL FIRE TECHNOLOGY CO., LTD.
Address: Building 18, Chengdu Hi-Tech International Enterprise Park, Liansu U Valley, 1111 Changsheng Bridge, Pidu District, Chengdu China
Product Name: OPTICAL FIBER FUSION SPLICER
Model No.: AI-9, AI-6C, AI-6V, AI-7C, AI-8C, AI-8X, AI-7V, AI-X, S9
Trade Mark: Signal fire
Rating: Input: 13.5V/4.8A DC (with DC 11V, 7800mAh Battery inside)

The radio equipment meets the following essential requirements	Complied	
Article 3(1)(a) ■ Safety	EN IEC 62368-1:2020+A11:2020	Yes
Article 3(1)(a) ■ Health	EN 50663:2017, EN 62479:2010	Yes
Article 3(1)(b) ■ EMC	ETSI EN 301 488-1 V2.3.2 (2019-11) ETSI EN 301 488-17 V3.2.4 (2020-08)	Yes
Article 3(2) ■ Radio	ETSI EN 300 328 V2.2.2 (2019-07)	Yes

Note: The attached Annex forms part of this certificate which consists of 2 pages.


 Certified by

 Kingkong Jin
 Date: Jan. 03, 2023



The CE Marking may only be used if all relevant and effective EU Directives are complied with

Shenzhen Anbotek Compliance Laboratory Limited
1/F, Building D, Sogood Science and Technology Park, Sannan community, Hangzhong Street, Bao'an District, Shenzhen, Guangdong, China 518128
Tel: (86)755-26066440
http://www.anbotek.com



CERTIFICATE



CERTIFICATE
Of Conformity
Radio Equipment Regulations 2017
(SI 2017 No. 1206)

Certificate No.: AT18220WC202820
Certificate Holder: SIGNAL FIRE TECHNOLOGY CO., LTD.
Address: Building 18, Chengdu Hi-Tech International Enterprise Park, Liansu U Valley, 1111 Changsheng Bridge, Pidu District, Chengdu China
Manufacturer: SIGNAL FIRE TECHNOLOGY CO., LTD.
Address: Building 18, Chengdu Hi-Tech International Enterprise Park, Liansu U Valley, 1111 Changsheng Bridge, Pidu District, Chengdu China
Product Name: OPTICAL FIBER FUSION SPLICER
Model No.: AI-9, AI-6C, AI-6V, AI-7C, AI-8C, AI-8X, AI-7V, AI-X, S8
Trade Mark: Signal fire
Rating: Input: 13.5V/4.8A DC (with DC 11V, 7800mAh Battery inside)

The radio equipment meets the following essential requirements	Complied	
CHAPTER 1 (General) ■ Safety	BS EN IEC 62368-1:2020+A11:2020	Yes
CHAPTER 1 (General) ■ Health	BS EN 50663:2017, BS EN 62479:2010	Yes
CHAPTER 1 (General) ■ EMC	ETSI EN 301 488-1 V2.3.2 (2019-11) ETSI EN 301 488-17 V3.2.4 (2020-08)	Yes
CHAPTER 1 (General) ■ Radio	ETSI EN 300 328 V2.2.2 (2019-07)	Yes

Note: The attached Annex forms part of this certificate which consists of 2 pages.


 Certified by

 Kingkong Jin
 Date: Jan. 03, 2023



The UKCA Marking may only be used if all relevant and effective UK Regulations are complied with

Shenzhen Anbotek Compliance Laboratory Limited
1/F, Building D, Sogood Science and Technology Park, Sannan community, Hangzhong Street, Bao'an District, Shenzhen, Guangdong, China 518128
Tel: (86)755-26066440
http://www.anbotek.com



TCB

GRANT OF EQUIPMENT AUTHORIZATION

Certification
Issued Under the Authority of the
Federal Communications Commission
By:

LGAI Technological Center S.A. (APPLUS)
Ronda de la Font del Carme, s/n
P.O.
Box 98183,
Barcelona,
Spain

Date of Grant: 01/17/2024
Application Dated: 01/17/2024

TCB

Signal Fire Technology Co., Ltd.
No.8-4 Qingyang Zama, Jiaolong Industrial Park
Qingyang District, Chengdu, China
Chengdu,
China

Attention: Jason Yang

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified herein for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: ZAB98-AI-10A
Name of Grantee: Signal Fire Technology Co., Ltd.
Equipment Class: Digital Transmission System
Notes: OPTICAL FIBER FUSION SPLICER

Grant Notes	FCC Rule Parts	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission Designator
	15C	2402.0 ~ 2480.0	0.06-193		

Output power listed is conducted. The antenna(s) used for this transmission must be installed to provide a separation distance of at least 20cm from all persons. End-users must be provided with operating procedures for satisfying RF exposure compliance.





QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificate No.: 11423Q45347R2M

This is to certify that the Quality Management System of

SIGNAL FIRE TECHNOLOGY CO., LTD.

Unified Social Credit Code: 9151010072411028D

Registered Address: No.111 Changsheng Bridge, Honggang Town, Small and Micro Enterprise Innovation Park, North Area of Chengdu Modern Industrial Port, Pidu District, Chengdu
Production Office Address: Building 18, Chengdu Hi-tech International Enterprise Park, Liansu U Valley, No.1111 Changsheng Bridge Road, Pidu District, Chengdu City, Sichuan Province, China

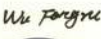
Has been audited to conform to the following Quality Management System standard

GB/T19001-2016/ISO9001:2015

The Applicable Scope

The production of optical fiber fusion splicer

Date of initial issuance: Aug. 22, 2017
Date of issuance: Jul. 11, 2023
Date of expiry: Jul. 20, 2025

Issued by:  Beijing East Allreach Certification Center Co., Ltd.







International Patent

United States of America



To Promote the Progress of Science and Useful Arts

The Director

of the United States Patent and Trademark Office has received an application for a patent for a new, original, and ornamental design for an article of manufacture. The title and description of the design are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the design shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the design throughout the United States of America or importing the design into the United States of America for the term set forth by law.

Coleman M. Smith
ACTING DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



EUROPÄISCHES PATENT | EUROPEAN PATENT

BREVET EUROPÉEN

Hiemit wird bescheinigt, dass für die in der Patentschrift beschriebene Erfindung ein europäisches Patent für die in der Patentschrift bezeichneten Vertragsstaaten erteilt worden ist.

It is hereby certified that a European patent has been granted in respect of the invention described in the patent specification for the Contracting States designated in the specification.

Il est certifié par la présente qu'un brevet européen a été délivré pour l'invention décrite dans le fascicule de brevet, pour les États contractants désignés dans le fascicule.

Europäisches Patent Nr.
European patent No.
Brevet européen n°

Tag der Bekanntmachung des Erfinders auf die Erteilung des europäischen Patents
Date of publication of the mention of the grant of the European patent
Date de la publication de la mention de la délivrance du brevet européen

EP4024101

14.08.2024

OPTICAL FIBER FUSION SPLICER

Patentinhaber / Proprietor(s) of the patent / Titulaire(s) du brevet

Signal Fire Technology Co., Ltd.
No 8-6 Qingyang Zone
Jiaolong Industrial Park
Qingyang District
Chengdu, Sichuan 610015
CN

Antônio Campinos
Antônio Campinos

Präsident des Europäischen Patentamts / President of the European Patent Office / Président de l'Office européen des brevets
München, den 14.08.2024 / Munich, 14.08.2024 / 14.08.2024

URKUNDE | CERTIFICATE | CERTIFICAT





European Patent Office
80239 MÜNCHEN
GERMANY

Questions about this communication?
Contact Customer Services at www.epo.org/contact



Lemmer, Christoph
 Nove Haus - Design Offices
 Luitpold-Straße 14
 80636 München
 ALLEMAGNE

Date: 03.09.2024

Reference: PWA98EUP Proprietor: Signal Fire Technology Co., Ltd.	Application No./Patent No.: 19945932.2 / 4024101
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European patent with unitary effect

Communication of the date of registration of unitary effect pursuant to Rule 7(1) UPR

The request for unitary effect received at the EPO on 21.08.24 meets the requirements of Rules 5(2) and 6 UPR.

The unitary effect of European patent No. EP4024101 was registered in the Register for unitary patent protection on 03.09.24.

Date of effect

Under Article 4(1) Regulation (EU) No 1257/2012, the European patent with unitary effect takes effect in the participating Member States on the date of publication of the mention of the grant of the above European patent in the European Patent Bulletin, i.e. on 14.08.24.

Territorial scope

Pursuant to Article 18(2) Regulation (EU) No 1257/2012, by way of derogation from Articles 3(1), 3(2) and 4(1), a European patent for which unitary effect is registered has unitary effect only in those participating Member States in which the United Patent Court has exclusive jurisdiction with regard to European patents with unitary effect at the date of registration. For the above European patent with unitary effect, the participating Member States at the date of registration are:

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT RO SE SI

For proprietor(s):

Signal Fire Technology Co., Ltd.
No 8-6 Qingyang Zone
Jiaolong Industrial Park
Qingyang District
Chengdu, Sichuan 610015
CN

Represented by:

Lemmer, Christoph
Nove Haus - Design Offices
Luitpold-Straße 14
80636 München
DE

The registration will be published in the European Patent Bulletin under Section IV.2(1).

Registered Letter
EPO Form 7250 01.22

The Executive Director / Der Exekutivdirektor

Christian Archambeau

Registered / Eingetragen 17/03/2023

No 015014933-0001



www.euipo.europa.eu

AMT DER EUROPÄISCHEN UNION FÜR GEISTIGES EIGENTUM

ENTRAUGHTUNGSRURKUNDE

Diese Entragungsurkunde wird als erstes Dokument eingetragen und ist das erste Dokument, das die Eintragung eines Europäischen Patents mit unitary effect in das Register für Einheitspatentschutz bestätigt.

EUROPEAN UNION INTELLECTUAL PROPERTY OFFICE

CERTIFICATE OF REGISTRATION

This Certificate of Registration is hereby issued for the Registered Community Design identified below. The corresponding entries have been recorded in the Register of Community Designs.

International trademark

United States of America
United States Patent and Trademark Office



Reg. No. 7,197,549
Registered Oct. 17, 2023
Int. Cl.: 7
Trademark
Principal Register

Signal Fire Technology Co., Ltd. (CHINA limited company (hd.))
No.1111, Changsheng Bridge, Hongguang Town,
Small and Micro Enterprise Innovation
Park, Pidu Dist., Chengdu, CHINA 611730

CLASS 7: Cutting machines; Electric arc cutting apparatus; Electric arc welding apparatus; Electric saws; Electric shearing machines; Electric welding machines; Excavators for welding machines; Gear cutting and finishing machines; Knives, electric; Soldering apparatus, electric;

FIRST USE 6-15-2014; IN COMMERCE 6-15-2014

The mark consists of the stylized wording "Signal fire" with a rainbow bridge above the stylized letters "Signal f".

SER. NO. 97,339,851, FILED 03-31-2022



Katherine Kelly Vidal
Director of the United States
Patent and Trademark Office



Registered / Eingetragen 04/12/2023
No. 018660238



The Executive Director / Der Exekutivdirektor
Jofa Negro

EU IPO
EUROPEAN UNION INTELLECTUAL PROPERTY OFFICE
CERTIFICATE OF REGISTRATION

This Certificate of Registration is hereby issued for the European Union trade mark identified below. The corresponding articles have been recorded in the Register of European Union trade marks.

AMT DER EUROPÄISCHEN UNION FÜR GEISTIGES EIGENTUM
EINTRAGSURKUNDE

Diese Eintragungsurkunde wird für die union angegebene Ursprungsbezeichnung. Die betreffenden Angaben sind in das Register der Union eingetragen worden.



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Australian Government
IP Australia

**CERTIFICATE OF REGISTRATION
TRADE MARK**

Trade mark number: 2341304

The Registrar of Trade Marks has registered the trade mark represented on this certificate on 23 October 2023 and certifies that the following particulars have been entered in the Register of Trade Marks.

Name and address of owner(s):
Signal Fire Technology Co., Ltd. of No.1111, Changsheng Bridge, Hongguang Town, Small and Micro Enterprise Innovation Park, Pidu Dist., Chengdu, Sichuan, 611730 China

The trade mark is registered in the following class(es):
7

Date of filing: 13 March 2023
Registered from: 13 March 2023
Registration expires on: 13 March 2033
Representation:



Goods and/or services, and other information relating to the registration of this trade mark are listed on the following pages

Issued this 23rd day of October 2023
Registrar of Trade Marks



TRADE MARKS ACT 1995
The Australian Trade Marks Register is the official record and should be referred to for the full details pertaining to this IP Right

РОССИЙСКАЯ ФЕДЕРАЦИЯ



СВИДЕТЕЛЬСТВО
на товарный знак (знак обслуживания)
№ 991737



Привоедатель: Сигнал Файер Текнолоджи Ко. Лтд., №1111, Чаншэнг Бридж, Хонгуанг Таун, Смл энд Микро Интерпрайз Инновейшн Парк, Пиду Дистрикт, Чэнду, Сычуань, Китай (CN)

Заявка № 2023720455
Принорет товарного знака 16 марта 2023 г.
Зарегистрировано в Государственном реестре товарных знаков и знаков обслуживания Российской Федерации 11 января 2024 г.
Срок действия регистрации истекает 16 марта 2033 г.

Руководитель Федеральной службы по интеллектуальной собственности
Ю.С. Лубов



[illegible][illegible]

TRADE MARKS
REGISTRY

REGISTRATION
CERTIFICATE

Trade Marks Act 1994 of

Great Britain and Northern Ireland

I certify that the mark shown below has been registered under No. UK00003888005 effective as of the date 13/03/2023 and has been entered in the register on 12/01/2024

Signed this day at my direction

Adam Williams

Adam Williams
REGISTRAR

Representation of Mark



The mark has been registered in respect of:
Class 7:
Cutting machines; Clippers [machines]; Splicing machines; Knives, electric; Hand-held tools, other than hand-operated; Electric arc welding apparatus; Electric arc cutting

Intellectual Property Office is an operating name of the Patent Office.

Registered / Eingetragen 21/04/2023

No 018802832

**EUROPEAN UNION INTELLECTUAL PROPERTY
OFFICE**

CERTIFICATE OF REGISTRATION

The Certificate of Registration is hereby issued by the
European Union trade mark identified below. The
corresponding services have been recorded in the
Register of European Union trade marks.

ZHUOSHUI

**AMT DER EUROPÄISCHEN UNION FÜR GEISTIGES
EIGENTUM**

EINTRAGUNGSSCHRIFT

Diese Eintragungsurkunde wird für die unten
angewiesene Unterrichtsart ausgestellt. Die Unterrichtsart
Angabe ist in der angegebenen Unterrichtsart
eingetragen worden.

Christian Archambeau

**The Executive Director / Der
Exekutivdirektor**

Christian Archambeau

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