

## Fiber Splice Machine AI-10

### Product Drawing



### Product Description

Signal fire fusion splicer AI-10A is the world's first fourth-generation optical fiber fusion splicer, it combines electric cleaver and fusion splicer as one, with 8-in-1 signal fire stripper, and can be combined with the work bench and table, making it is the world's first real sense, small size, light weight, easy to operate optical fiber fusion splicer.

Signal fire AI-10A optical fiber fusion splicer uses a number of patents, the full weight of the main machine, the toolbox and a complete set of accessories is only 4.5KG, and the toolbox size is 25.5cmx16.5cm x23cm. In such a small and compact case, the combined design of bench and bench is realized at the same time. Industrial CPU, running speed is super fast, 6 seconds fast splicing, 15 seconds heating, 5 inch color HD LCD screen, 320 times magnification, 7800mAh large capacity lithium battery can splice and heat 240 cores, in high altitude, dry, cold and other harsh environments still perform well.

### Product features

- By adopting advanced image recognition technology, AI10 can automatically recognize the type of fiber and quickly achieve precise alignment of the fiber end face, greatly improving the fusion efficiency and success rate.
- Equipped with a precision fusion welding system, ensuring that each fusion welding can achieve ultra-low loss, meet or even exceed industry standards, and ensure the quality of network transmission.
- Equipped with a built-in high-efficiency heating furnace, it achieves rapid heat shrink tube heating, and is equipped with intelligent temperature control and overcurrent protection mechanism to ensure safe and worry free operation.
- The intuitive and user-friendly touch screen interface, coupled with user-friendly operation logic, allows even first-time users to quickly get started. Support multiple language switching to meet the needs of global users.
- Adopting dust-proof and waterproof design, it can adapt to various harsh construction environments. Equipped with a large capacity battery, it supports long-term outdoor work without the need for frequent charging.

- Support welding record storage and data transmission, and easily perform data analysis and report generation through supporting software, providing strong support for project management.

## Application

Suitable for fiber optic fusion requirements in fields such as communication, data transmission, and fiber optic networks.

## Technical Specifications

### Product Parameters

Project	Technical indicators
Product name	Fiber Splice Machine AI-10
Fiber alignment	Core/cladding
Motor number	6 motors
Splicing time	6s
Heating mode	15s, can be customized according to the external environment
Fiber type	Single-mode fiber (SMF/G.652), BIF/G.657); Suitable for single mode, multi-mode, bare fiber, tail fiber, drop cable, jumper, invisible optical fiber.
The cladding diameter	80-150 $\mu$ m
Splicing loss	0.02dB(SM)、0.01dB(MM) 0.04dB(DS/NZDS)
Splicing mode	Automatic focusing core alignment, conventional/high precision splicing
Splicing way	Automatic, semi-automatic, manually
Fiber cleaver	Equipped with electric high-precision cleaver
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
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, leather cable
VFL	The machine comes with power: 15mW, 2Hz flashing and steady on mode
OPM	Wavelength:850nm; 1300nm,1310nm,1490nm,1550nm,1625nm/Measurement range:-50+30dbm Absolute error: <0.3dB (-50dbm ~+3dBm range)
Battery capacity	7800mAh large capacity lithium battery charging time $\leq$ 3.5; It can continuously weld and heat about 240 cores
Magnification	320x (X or Y axis single display) , 200x (x and Y axis dual display)
Fiber diameter	Coating diameter:80-150 $\mu$ m/Coating diameter:100-1000 $\mu$ m
Cutting length	Coating layer 250 $\mu$ m below: 8-16mm/coating layer 250-1000 $\mu$ m:16mm
Heat shrink tube	60mm、50mm、40mm、25mm
Tensile testing	Standard 2N
Display	5 inch TFT color display screen
External lighting	USB port can be connected with EXTERNAL LED light, convenient for night construction
Charge mobile device	The USB port can charge mobile devices such as mobile phones
Boot time	1s, boot can enter the working mode
Data is stored	Unlimited, machine storage1000 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 splicing records, splicing time, loss, etc. through the mobile phone APP. The number of splicing 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
Power supply	Input AC 100-240V 50/60Hz, output DC 13.5V/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 environment wind speed: ≤15m/s

