# **AV6481B** Optical Fiber Fusion Splicer

#### **Product Overview**

AV6481B Optical Fiber Fusion Splicer is small size optical fiber fusions splicer, mainly used for fusion and protection of common communications fibers. The rich functionality and ultra-low splice loss make the splicer adaptive to fiber splicing in various environments. It is featured with small size, light weight, high reliability, greater environmental adaptability, dust-resistant, water-resistant and shock-resistant. Multiple fusion modes and heating modes are available to meet diversified customers' demands. Fiber loading becomes more convenient and accurate thanks to the ceramic V-groove of high precision, which is easy for clean and maintenance. The splicer is capable of dual-directional fusion. The monitor is a touch screen delivers fresh designed graphical interfaces, which are simple for operation. The modular pluggable lithium-ion battery of large-capacity ensures long-time field operations. The auto environment compensation system greatly improves adaptability of the splicer to hostile environments, so that low-loss splice can be remained consistent in various environments.



#### **Main Characteristics**

- Small size, light weight
- 7s fast splicing, 18s highly efficient heating
- 320 times image magnification, 5mm fusing for ultra-short cleave length
- 300 groups of splice modes, 100 groups of heating modes, 10000 groups of fusion records
   /64 images storage
- Ceramic presser foot, ceramic V-groove, all-in-one fixture
- Dual-directional fusing, auto fusing, intelligent heat shrink
- USB and SD card interface, auto update of U disk

- Built-in modular lithium-ion battery, at least 220 counts of splicing and heating cycles
- GUI (graphical user interface) and touch screen, convenient for operation
- Dust-resistant, water-resistant, shock-resistant, greater environment adaptability

#### Small and light

Small size and light weight, the splicer is easy to carry and can be lift by one hand.



Lift by one hand

## Water-resistant, dust-resistant, shock-resistant, greater environment adaptability

Meet IP52 requirements.



Water-resistant test

Dust-resistant test

#### All-in-one fixer

The all-in-one fixture meet fusion demands of multiple optical fibers, jumpers and rubber-insulted wires with a cladding diameter of  $80\sim150~\mu$  m.



All-in-one optical fiber fixture

## Graphical interfaces and touch screen

AV6481 uses entirely new GUI and touch screen in design. Operators can set up the splicer and get to know relevant information of it simply and directly by graphical interfaces.



Entirely new GUI graphical interfaces and touch screen

## Intelligent heat shrink

A detection unit is embedded in the heater. The heating function will only be enabled when the protection sleeve is put in the heater, to avoid mishandling.



Hear and detection unit

#### Pluggable lithium-ion battery of large-capacity

The built-in pluggable lithium-ion battery of large capacity can answer working demand lasting all day long (typical 220 counts of splicing and heating cycles).



Built-in pluggable lithium battery of large-capacity

## Ceramic V-groove and ceramic presser foot

Ceramic V-groove with high precision brings you convenient and accurate placement of optical fibers and makes cleanup easy.



High-precision ceramic V-groove and presser foot

## Carrying case

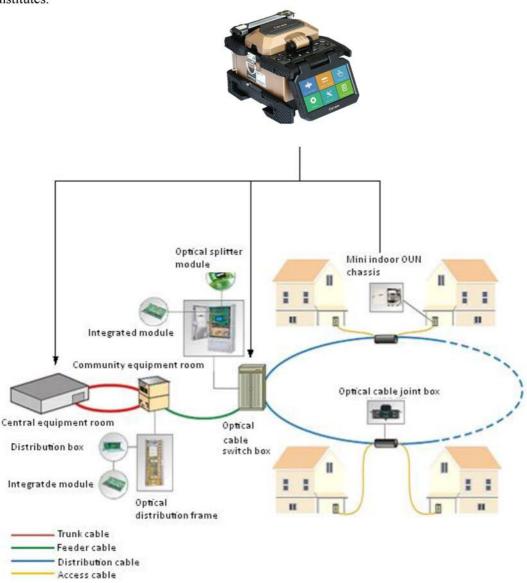
The carrying case is novel in design and light in weight, has built-in compact working bench. Open or close the cover can turn it to a working bench.



carrying case

## **Typical Applications**

AV6481B Optical Fiber Fusion Splicer is compact equipment deploying the design of ergonomics, which delivers convenient operation and handy carrying case. Event very short fibers can be spliced easily. It's capable of construction and maintenance of optical fiber line projects (including trunk), emergency repair, production and test of optical fiber devices and research and study in institutes.



Typical application of AV6481B Optical Fiber Fusion Splicer

# **Technical Specifications**

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Model

Motor qty

Dimensions

Weight

Alignment method

Applicable fibers	Any common optical fibers, rubber-insulated fibers and jumpers that meet requirements of ITU-TG.651~653, ITU-TG.655 and ITU-TG.657.	
Optical fiber diameter	Cladding: 80~150 µm, coating layer: 0.1~3mm	
Cleave length	5~16mm (coated optical fiber diameter≤250 μm); 10mm (coated optical fiber diameter: 0.25~3mm)	
Splice loss (typical)	0.02dB (SMF); 0.01dB (MMF); 0.04dB (DSF); 0.04dB (NZDSF)	
Return loss	Better than 60dB	
Splicing time (typical)	7s (Fast mode)	
Heating time (typical)	time (typical) 28s (60mm protection sleeve)	
Tension	1.96~2.25N	
Protection sleeve	60mm, 40mm and a series of protection sleeves	
Graphical display	High-performance 4.3 inch LCD	
Magnification time	320 times/88 times	
Fusion records	10000 groups	
Remote maintenance	e maintenance N/A	
Battery capacity	ttery capacity 11.1V, 5200mAh	
Battery service life	tery service life Cycle charging: 300~500 counts, can be replaced by customers	
Electrode service life	trode service life Typical: 4000 counts, can be replaced by customers	
Construction lighting	tion lighting Built-in lights with high-brightness and wide lighting area	
Working environment	ronment Temp:-10~50°C; Hum: 0~95%RH, height above sea level: 0~6000m	
Operation interfaces	GUI (graphical user interfaces)	
External power	AC: 100~240V, 60Hz, 0~1.5A; DC: 10~15V	
Port	USB / SD	

120mm (W) ×130mm (H) ×154mm (D) (without rubber anti-vibration pad)

1.7kg (the battery not included), 2.0kg (included the battery)

AV6481B Optical Fiber Fusion Splicer

Cladding alignment, manual alignment

## **Ordering information**

Main Unit: AV6481B Optical Fiber Fusion Splicer

Standard Package:

No.	Description	Remarks
1	Power cord	Standard tri-prong cord: 1 pc; Adapter: 1 pc; Input: AC100~240V, 50/60Hz, 0~1.5A; Output: DC13~14V, 0~4.44A
2	Primary coat stripper	1 pc
3	Jacket remover	1 pc
4	Spare electrode	1 pair
5	Cooling tray	1 pc
6	Cleanup set	1 set
7	User Manual	1 copy
8	Carrying case	1 pc
9	Cleaver	1 pc

## **Options:**

No.	Description	Functionality
6481B-001	U Disk	For program update and splice data output
6481B-002	Lithium-ion battery	Power supply of the main unit
6481B-003	Power cord of cigarette lighter	Connect to on-board battery, for power supply of the main unit
6481B-004	Fiber cleaver	To cleave fibers

## Foreign product substitutable:

Sumitomo TYPE-81C