



SPTK-4106S

Optical Fiber Fusion Splicer



Product overview

Obtaining 16 patents of invention and 58 technical innovations, a brand-new product —SPTK-4106S Optical Fiber Fusion Splicer is launched, thanks to 5 years of painstaking research of 28 engineers.

SPTK-4106S implements industrial-grade CPU+FPGA structure of high-performance, completely fresh HD optical fiber microscope, imported high-speed motor and aluminum-magnesium alloy materials extensively. Compared with SPTK-4106, our start product, SPTK-4106S lowers the size by 38%, the weight by 52%, the power consumption by 57%, but improves the speed by 60%, the environment adaptability by 80% and the reliability (MTBF) by 200%. You can get unprecedented fusion splicing experience.

Main characteristic

- Precise fiber core alignment, ultra-low fiber fusion splicing consumption
- 7s fast fusion splicing, 18s highly efficient heating.
- 320 times image magnification, 5mm fusion splicing for fibers of ultra-short cutting length
- 300 groups of fusion splicing modes, 100 groups of heating modes
- 10000 groups of fusion records, 64 images storage
- Ceramic presser foot, ceramic V-block, all-in-one fixture
- Dual-direction splicing, automatic splicing, intelligent pyrocondensation
- USB and SD card interfaces, U-disk automatic software upgrade



- Built-in modular lithium battery, supports 220 times of splicing and heating cycles.

Small and light

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

Water-resistant, dust-resistant and shock-resistant in design

Water-resistant and dust-resistant can meet IP52 requirements.

The all-in-one fixture meet fusion splicing demands of multiple fibers, jumpers and rubber-insulated wires with a cladding diameter of 80~ 150um.

Graphical interfaces and touch screen

SPTK-4106S uses entirely new GUI graphical interfaces 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.

Intelligent heat shrinkage

A detection unit is embedded in the heater. The heating function will only be enabled when the thermal shrinkage tube is put in the heater, to avoid misoperation.



Large-capacity pluggable lithium battery

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

Ceramic V-block and ceramic presser foot

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

Multi-functional carrying case

The multi-functional 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.

Technical specifications



Model	SPTK-4106S
Alignment method	Precise core alignment and cladding alignment
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: 80~150um, coating layer: 0.1~3mm
Cutting length	5~16mm (coated optical fiber diameter<250um) 10mm (coated optical fiber diameter: 0.25~3mm)
Fusion splicing consumption (typical value)	0.02dB (SMF) ; 0.01dB (MMF) ; 0.04dB (DSF) ; 0.04dB(NZDSF)
Return loss	Better than 60dB
Fusion splicing time (typical value)	7s
Heating time (typical value)	18s
Pulling force test	1.96~2.25N
Thermal shrinkage tube	60mm, 40mm and a series of thermal shrinkage tubes
Graphical display	High-performance 4.3 inch LCD
Magnification time	320 times/88 times
Fusion splicing record	10000 groups
Battery capacity	11.1V, 6400mAh, typical value of fusion splicing and thermal cycle is 220 times
Battery service life	Cycle charging times reach 300~500, can be replaced by customers
Electrode service life	Typical value is 4000 times, can be replaced by customers
Construction lighting	Built-in lights with high-brightness and wide lighting area
Working environment	Temp: -10~50°C; hum: 0~95°C; height above sea level: 0~6000m
Operation interfaces	GUI graphical operation interfaces
External power	AC: AC100~240V, 60Hz, 0~1.5A; DC: DC10~15V



External port	USB / SD
Dimensions	120mm (W) x 130mm (H) x 154mm (D) (without rubber anti-vibration pad)
Weight	1.59kg (host engine) , 0.37kg (battery)

Ordering information

- Standard configuration:

No.	Name	Qty/unit/set
1	Main engine	1
2	Optical fiber cutter	1
3	Miller clamp	1
4	AC power cord	1
5	AC power adapter	1
6	Spare electrode	1
7	Cooling pallet	1
8	Cleanup set	1
9	User Manual	1
10	Multi-functional carrying case	1

- Options:

No.	Name	Model
1	Lithium battery	BTR-81
2	U-disk	ADATA C008/4G
3	Vehicle cigarette lighter wire	DC-72
4	Suspended working bench	HST-81



Note: If you need more customized services, please contact us.

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