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MULTI-FUNCTION FUSION SPLICER

Features

- 6-motor accurate core to core alignment
- Identifies fiber types (SM/MM) automatically
- 6 seconds for splicing and 18 seconds for heating
- Automatic & real-time ARC calibration
- Real-time heating temperature monitoring
- Anti-shock, anti vibration, dust proof & water resistant (Ingress Protection Rating IP52)
- Applicable to 250 um / 0.9 mm / 2.0 mm / 3.0 mm fibers

Applications

- Permanently splicing two fibers together
- Temporary splicing of connectorized patch cords to fiber under test
- Quick repairs to broken fibers

FSP 100-S/M Multi-function fusion splicer

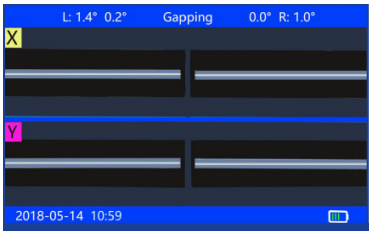
Product Description

The FSP-100 is a complete kit, containing everything that is needed to create reliable, long-lasting fiber optic splices, for both singlemode and multimode fibers. The kit includes an advanced fusion splicer, a fiber cleaver, a fiber stripper, spare electrodes, fiber cleaning supplies, a power adaptor, and other accessories, along with a carrying case for easy transportation and storage. A built-in heating compartment allows heat shrinkable sleeves to be installed around the spliced region, to provide added strength and protection to the splice. A dual high-sensitivity camera and a large 5 inch LCD allows the user to closely monitor every step of the fiber alignment and fusion process.

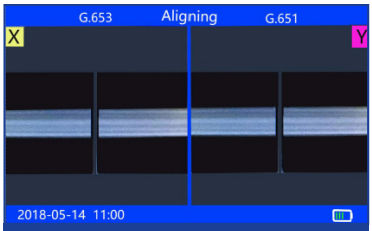
Precise structural design, core to core alignment

Inductive automatic heater, fast heating

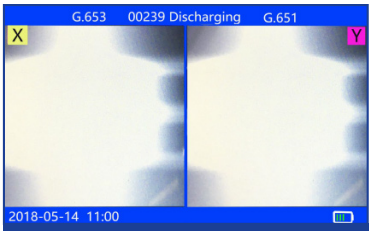
Anti-shock, dust-proof and water-proof



Clear fiber image and fast fiber gapping



Identify fiber types automatically



Stable splicing and low splicing loss

Specifications

Part number: FSP-100-S/M	
Alignment method	6-motor core to core alignment
Applicable fiber	SM(G.652), MM(G.651), DS(G.653), NZDS(G.655)
Cladding diameter	80 -150 μm
Coating diameter	160–3000 μm
Cleaved length	5-16 mm (coating diameter < 250 um), 16 mm (coating diameter:250-1000 um)
Typical splice loss	SM: 0.02 dB; MM: 0.01 dB; DS: 0.04 dB; NZDS: 0.04 dB
Return loss	>60 dB
Splicing program	100 groups
Operation mode	Manual / Automatic
Auto- heating	Available
Typical splice time	6 seconds
Typical heating time	18 seconds for 60 mm and 40mm shrinkable sleeves, can work with 20 mm sleeves
Fiber magnification	400X (X or Y view), 200X (X and Y view)
Viewing display	Dual high sensitivity camera, 5 inch 800*480 LCD Monitor, touch screen
Data storage	10000 groups data records and 100 images
Loss evaluation	Available
Tension test	1.8 ~ 2.25 N
Interface	GUI menu interface, easy for operation
Battery capacity	5200 mAh Li-battery, 300 cycles splicing and heating
Power supply	Adaptor, input: AC 100-240 V(50/60 HZ), output: DC11-13.5 V
Electrode life	5000 ARC discharges, easy to replace
Terminals	USB 2.0 port, for software upgrading, records exporting
Operating condition	Altitude: 0-5000 m,Humidity:0-95%,Temperature:-10°C; +50°C; Wind: max 15 m/s
Dimensions/Weight	156 mm (L)×141 mm (W)×156 mm (H) /2.45 kg (including battery)

Ordering Example For Standard Parts

A customer needs to evaluate spools of fiber which will be used in sensing applications. To do this, he wants to splice short patch cords onto the spools so that the spools can be connected to his distributed sensing system, which has FC/APC receptacles. Since the sensing fiber has a 9 micron core and a 0.9 mm jacket, he can splice a short patch cord onto his spool, as long as the patch cord has a similar fiber type and an FC/APC connector on one end.

Bar Code	Part Number	Description
77982	FSP-100-S/M	Multi-Function Fusion Splicer

Questionnaire

1. What is the fiber type that you want to splice? Single-mode or multimode?
2. What are the core/cladding/jacket diameters of the fibers that you will be using?
3. What is the application?
4. Do you need to splice PM fiber?

Frequently Asked Questions (FAQs)

Q. Can I splice fibers with different core sizes together?

A. You can, but you may see significant losses if the light passes from a large core to a smaller core. In such a case, a lot of the light from the larger core will miss the smaller core. If the light is passing from the smaller core into the larger core, then the losses will be minimal.

Q. Can I splice PM fibers using the FSP-100-S/M?

A. No. In order to splice PM fiber properly, you need to align the stress rods of the two fibers, in order to maintain the polarization. The FSP-100-S/M is for single-mode and multimode fiber only.

Q. I have fusion spliced an FC/SPC patch cord onto a spool of fiber. When I test the fiber, I am now seeing a high level of backreflection. Why?

A. The backreflection might be coming from the connector rather than the splice. FC/SPC connectors typically have a backreflection on the order for -40 dB, while the return loss from the splice should be on the order of >-60 dB. Also, there could be a reflection from the far end of the fiber that you are testing.

Q. Why am I seeing a lot of scattering at the location of the splice?

A. It could be caused by contamination on one or both of the endfaces when you made the splice. In order to get a good splice, the endfaces must be clean. When cleaving the end of the fiber, make sure that nothing comes into contact with the endface, as this may leave contamination which will degrade the quality of the splice.

Kit includes the following


Fusion Splicer


Fiber Cleaver


Fiber Stripper


Cooling Tray


Spare Electrodes


Drop Cable Stripper

Screw Driver


Cleaning Fluid


Carrying Box


Power Adapter


Power Cable


USB User Manual


Strap


Alcohol Pump


Cleaning Kit


Lint Free Wipes