

## S153 Fusion Splicers

## Hand-Held Active Alignment Fusion Splicer

NEW



The FITEL® S153 Fusion Splicer is an obvious choice for low cost field splicing equipment. The Active V-Groove Technology used on the S153 Fusion Splicer delivers low loss splices while helping to eliminate common Fixed V-groove splicing errors. By combining speed, precision, durability and portability in one unit, the S153 Fusion Splicer ushers in an entirely new range of applications for active alignment splicing.

The S153A Fusion Splicer canopy design, durable metal body frame and rubber protection corners provide robust protection, enabling use in demanding environments without compromising splicer performance. The S153A is water resistant to IPX2 and dust resistant to IP5X.

Equipped with a new alignment system that can save up to 20% on splicing time, the S153 Splicer's improved heating mechanism can also reduce protection sleeve shrink time by more than 30%. In addition, a newly incorporated USB 2.0 interface speeds PC communication and image/video transfer, while enhancing reliability.

While the S153 Fusion Splicer is fast and durable, it continues the FITEL tradition of quality and excellence by delivering precise, accurate splices even under rigorous conditions in the field.

The S153 Fusion Splicer is your logical choice for a wide range of uses including FTTX, LAN, backbone, enterprise, long-haul installations, data-center and/or OEM applications. It is also an excellent option for use in the conventional telecommunications industry, along with other industries (including oil and gas).

### Key Features

- **Active V-groove design** helps to eliminate common fixed v-groove splicing errors
- **Rugged and compact hand held design** for demanding environmental conditions
- **Fast splice** (9 sec) with low loss and **fast heating** (25 sec)<sup>1</sup>
- **200 cycles** (splicing & heating) with FITEL series battery configuration<sup>2</sup>
- **Available for All METRO/LAN/FTTX fibers** including ultra bend-insensitive fibers (e.g. EZ-Bend® Fiber)

<sup>1</sup> By using semi-auto mode for splicing and pre-heating mode for heating

<sup>2</sup> By using 2-batteries, semi-auto mode for splicing and regular mode for heating



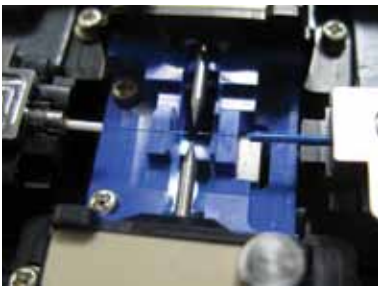
- **Splicer is compatible with the Seikoh Giken<sup>3</sup> and Diamond<sup>4</sup> Splice-on-connector (SOC)**
- **Easy maintenance** – Toolless electrode replacement and mirror free alignment system
- **Easy Software upgrade** via the Internet
- **Easily exchanged fiber holder systems** (tight holder/fiber holder/SOC holder)
- **PC interface software** provides for user management of splicing programs and results

<sup>3</sup> Seikoh Giken is a registered trademark of SEIKOH GIKEN CO., LTD

<sup>4</sup> Diamond is a registered trademark of Diamond SA

- **Auto-start** shrink sleeve oven feature
- **Auto-start** splicing
- **Improved GUI** to further enhance ease-of-use
- **Large memory** for storing data (2,000 splice data) and image (100 images)
- **RoHS compliant**

## Compatible with Splice-on-Connectors



### FITEL Splicer SOC partners



## Under Tough Environments



*Drop Resistant*



*Water Resistant*



*Dust Resistant*

The S153A passed testing based on criteria below <sup>5</sup> :

- **Drop resistant** – 76 cm drops from 5 different angles
- **Water resistant** – IPX2 rating drip proof <sup>6</sup>
- **Dust resistant** – IP5X rating dust proof <sup>7</sup>

<sup>5</sup> Above tests were performed at Furukawa Electric Co. Labs, and do not guarantee that the machine will be undamaged under these conditions

<sup>6</sup> IPX2 rating drip proof means that the machine can be exposed to 3 mm/min drip from 4 different angles with 15° tilt for 2.5 min each and still functions

<sup>7</sup> IP5X rating dust proof means that the machine can be exposed to dust particles with a diameter of 0.1 to 25 µm for 8 hours and still functions

## SPECIFICATIONS

<b>Applicable Fibers</b>	SM (ITU-T G.652), MM (ITU-T G.651), DSF (ITU-T G.653), NZD (ITU-T G.655), BIF/UBIF (Bend insensitive fiber, ITU-T G.657)
<b>Cladding Diameter</b>	80 ~ 150 $\mu\text{m}$
<b>Coating Diameter</b>	160 ~ 900 $\mu\text{m}$
<b>Fibers Cleave Length</b>	5 ~ 16 mm
<b>Typical Splice Loss</b>	SM: 0.04 dB, MM: 0.02 dB, DSF: 0.06 dB, NZD: 0.06 dB
<b>Splice Time</b>	9 seconds (semi-auto mode), 11 seconds (regular mode)
<b>Heat Time</b>	25 seconds (S922: 40 mm Sleeve, S921: 60 mm Sleeve) (Pre-heat mode) 31 seconds (S922: 40 mm Sleeve, S921: 60 mm Sleeve) (regular mode)
<b>Splice Programs</b>	Up to 150
<b>Heat Programs</b>	Up to 18
<b>Automatic Heating Start</b>	Available
<b>Applicable Sleeves</b>	20/40/60 mm
<b>Fiber Holding</b>	Tight holder (Loose tube applicable) or Fiber Holder System
<b>Tension Test</b>	1.96 N
<b>Fiber Image Magnification</b>	76X, 235X
<b>Splice Memory</b>	Max. 2,000
<b>Image capture Capacity</b>	Last 100 images to be automatically captured + Up to 24 images to be stored permanently
<b>Dimension</b>	127W $\times$ 199D $\times$ 105H mm (not including shock absorber) 159W $\times$ 231D $\times$ 130H mm (including shock absorber)
<b>Weight</b>	1.7 kg (without battery), 2.1 kg (with two batteries)
<b>Monitor</b>	3.5" color LCD monitor
<b>Data Output</b>	USB ver. 2.0 mini
<b>Displaying Language</b>	20 languages (e.g. English, Spanish, Japanese, Chinese)
<b>Battery Capacity</b>	Typical 80 splice/heat cycles with single battery <sup>8</sup> Typical 200 splice/heat cycles with 2 batteries <sup>9</sup>
<b>Altitude</b>	5,000 m
<b>Operating Temperature</b>	-10° to +50° C (without excessive humidity)
<b>Storage Temperature</b>	-40° to +60° C (without excessive humidity)
<b>Power Source</b>	AC Input 100 to 240 V (50/60 Hz), DC Input 11 to 17 V

<sup>8</sup> The number of the splicing and heating cycles the machine can produce using a fully charged brand new battery at room temperature of 20 °C, semi-auto mode for splicing and regular mode for heating. Depending upon the condition of the batteries and operation environment, the number can vary.

<sup>9</sup> The number of the splicing and heating the machine can produce using 2 fully charged brand new batteries at room temperature of 20 °C. Depending on the condition of the batteries and operation environment, the number can vary.

## STANDARD PACKAGE

Item	P/N	Quantity
① S153A Main Body	S153-A-A-0001	1
② Hard Carrying Case	HCC-01	1
③ Battery Pack Depending on the package	S943B	0, 1 or 2
④ Battery Charger	S958B	1
⑤ Spare Electrodes	S969	1 pair
⑥ AC Adaptor for S153A	S976A	1
⑦ AC Adaptor for S958B	S977A	1
⑧ AC Cable Cord For S976A/S977A	—	2
⑨ Electrode Sharpener	D5111	1
⑩ Cleaning Brush	VGC-01	1
User Manual	FTS - 351	1





## OPTIONAL COMPONENTS

Item	P/N	Quantity
① Soft Carrying Case	SCC-01	1
② Cooling Tray	CTX-01	1
③ Angled Stand	AGS-01	1
④ Working Belt	WBT-01	1
⑤ USB Cable	USB-01	1
⑥ Car Cigarette Cable	CDC-01	1
⑦ Tight Holder		
16 mm Cleave length	S712T-016	1 pair
10 mm Cleave length	S712T-010	1 pair
⑧ Fiber Holder		
160 μm coated fiber	S712S-160	1 pair
250 μm coated fiber	S712S-250	1 pair
500 μm coated fiber	S712S-500	1 pair
900 μm coated fiber	S712S-900	1 pair
⑨ SOC Holders		
<For Ferrule>		
Seiko Giken FC/SC connector (9 mm)	S712C-SGS9-L	1
Seiko Giken FC/SC connector (5 mm)	S712C-SGS5-L	1
Seiko Giken LC connector (9 mm)	S712C-SGL9-L	1
Seiko Giken LC connector (5 mm)	S712C-SGL5-L	1
Diamond E-2000/F-3000 connector	S712C-DM25-L	1
<For Cordage>		
Seiko Giken Cordage (5 mm)	S712C-SGC5-R	1
Seiko Giken Cordage (9 mm)	S712C-SGC9-R	1
Diamond Cordage (5 mm)	S712C-DMC5-R	1
Smart Fuse		
Software Interface for Machine	SF-01	1



③ Angled Stand in Action



④ Working Belt in Action



④ Working Belt as Shoulder Pack

## Ordering Number Form: Code Syntax: S153A-X-Y

Variable	Category	Code	Description
<b>X</b>	<b>Fiber Holder Type</b>	1	16 mm Tight Holder S712T-016
		2	10 mm Tight Holder S712T-010
		3	Fiber Holder System (Fiber Holders sold separately)
<b>Y</b>	<b>Number of Battery Packs (S943)</b>	0	Without battery pack
		1	1 pack (with 1 S958 battery charger and 1 S977 AC adapter)
		2	2 packs (with 1 S958 battery charger and 1 S977 AC adapter)

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For additional information please contact your sales representative. You can also visit our website at:

<http://www.ofsoptics.com>.

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