FITEL®
FUSION SPLICERS

ofs
A Furukawa Company

S123 Fusion Splicers

Hand-Held Clad Alignment Fusion Splicer

NEW

With its low profile and new super rugged body, the FITEL® S123 Series Fusion Splicer offers speedy operation for FTTX, LAN, backbone or long-haul installations. The lightweight, durable metal body frame and rubber protection corners provide robust protection, enabling use in challenging locations without compromising splicer performance. The S123 Splicer is water resistant to IPX2 and dust resistant to IP5X.

eFriendly

RoHS IP52 5 Axis Shock

A large battery capacity makes it possible to perform up to 70 cycles of splicing and heating for the S123C/M4 models with a single battery, and 160 cycles for the S123M8/M12 models with a dual battery configuration.

Combining portability, power flexibility and field ruggedness, the S123 Splicer delivers fast and consistent splicing with outstanding mobility and extreme ease-of-use. It also offers a splice-on-connector (SOC) solution.

PRODUCT LINE-UP

Model	Application
S123C-A	Splicing for single fiber (with soft case)
S123C-B	Splicing for single fiber (with hard case)
S123M4-A	Splicing for single to 4 ribbon fiber (with soft case)
S123M4-B	Splicing for single to 4 ribbon fiber (with hard case)
S123M8	Splicing for single to 8 ribbon fiber
S123M12	Splicing single to 12 ribbon fiber

NEW

S123M4

S123M8

S123C

S123M12

Bound to Innovate

Key Features

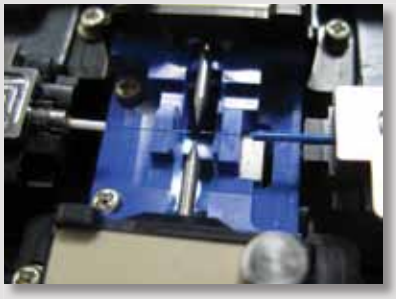
- **Rugged and compact hand held design** for demanding environmental conditions
- **Fast splice** (13 sec) at low loss and **fast heating** (25 sec) for single fiber [1]
- **Simple operation** with fixed V-groove
- Splicer is **compatible** with **Seikoh Giken** [2] and **Diamond** [3] SOCs
- **70 cycles** for S123C/M4 models with a single battery, and 160 cycles for S123M8/M12 models with two batteries [4]
- **Available for all METRO/LAN/FTTX fibers** including ultra bend-insensitive fibers (e.g. EZ-Bend® Fiber)
- **Easy maintenance** – Toolless electrode replacement/mirror free alignment system
- **Easy software upgrade** via the Internet
- **Easily exchanged fiber holder systems** (tight holder/fiber holder/SOC holder)
- **PC interface software** to allow user management of splicing programs and results
- **Auto-start** shrink sleeve oven feature
- **Improved GUI** to further enhance ease-of-use
- **Large memory** for storing data (2,000 splice data) and image (100 images)
- **RoHS compliant**

Under Tough Environments

The S123 passed manufacturer testing based on criteria below [5] :

- **Drop resistant** – 76 cm drops from 5 different angles
- **Water resistant** – IPX2 rating drip proof [6]
- **Dust resistant** – IP5X rating dust proof [7]

Compatible with Spice-on -Connectors (SOC)



FITEL Splicer SOC Partners

SEIKOH GIKEN CONNECTORS

DIAMOND

Drop Resistant

Water Resistant

Dust Resistant

[1] By using semi-auto mode for splicing and pre-heating mode for heating

[2] Seikoh Giken is a registered trademark of SEIKOH GIKEN CO., LTD

[3] Diamond is a registered trademark of Diamond SA

[4] By using semi-auto mode for splicing and regular mode for heating

[5] Above tests were performed at the manufacturer's Furukawa Electric Co. Labs, and do not guarantee that the machine will be undamaged under these conditions.

[6] 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.

[7] 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

Applicable Fibers	SMF(ITU-T G.652), MMF(ITU-T G.651), DSF(ITU-T G.653), NZDSF(ITU-T G.655), BIF/UBIF (Bend insensitive fiber, ITU-T G.657)
Cladding Diameter	125 μm
Coating Diameter	250 to 900 μm for single fiber; 280 to 400 μm for ribbon (thickness) (S123M4, S124M8, S123M12)
Fibers Cleave Length	5 to 10 mm (S123C); 10 mm (S123M4, S124M8, S123M12)
Average Splice Loss	SM: 0.05 dB, MM: 0.03 dB, DSF: 0.08 dB, NZDSF: 0.08 dB
Splice Time	Single fiber: 13 seconds; Ribbon fiber: 15 seconds
Heat Time	Single fiber: 25 seconds (S922: 40 mm sleeve, S921: 60 mm sleeve) (Preheat mode) [7] (S123C, S124M4) Ribbon fiber: 35 seconds (S924: 40 mm sleeve) (Preheat mode) [8]
Splice Programs	Max. 150
Heat Programs	Max. 18
Automatic Heating Start	Available
Applicable Sleeves	20/40/60 mm
Fiber Holding	Tight holder (Loose tube applicable) or Fiber Holder System (S213C) Fiber holder system (S123M4, S124M8, S123M12)
Tension Test	1.96 N
Return Loss of Splice	60 dB or more
Fiber Image Magnification	58X (S123C), 48X (S123M4), 28X (S123M8), 20X (S123M12)
Splice Memory	Max. 1500 splices (S123C, S123M4); Max. 1000 splices (S123M8, S123M12)
Image Capture Capacity	Last 100 images to be automatically captured + Up to 24 images to be stored permanently
Dimension	S123, S123M4: 127W × 199D × 81H mm (not including shock absorber) 159W × 231D × 104H mm (including shock absorber) S123M8, S123M12: 127W × 199D × 105H mm (not including shock absorber) 159W × 231D × 130H mm (including shock absorber)
Weight	S123C, S123M4: 1.4 kg (without battery), 1.6 kg (with S943B battery) S123M8, S123M12: 1.6 kg (without battery), 2.0 kg (with two S943B batteries)
Monitor	3.5” color LCD monitor
Data Output	USB ver.2.0 mini
Displaying Language	20 languages (e.g. English, Spanish, Japanese, Chinese)
Battery Capacity	Typical 70 splice/heat cycles with S943B battery (S123C, S124M4) [9] Typical 160 splice/heat cycles with two S943B batteries (S123M8, S124M12) [10]
Wind Protection	Max. wind velocity of 15 m/s
Operating Temperature	-10 to +50 °C (without excessive humidity)
Storage Temperature	-40 to +60 °C (without excessive humidity)
Power Source	AC Input 100 to 240 V (50/60 Hz), DC Input 11 to 17 V without any change of hardware

[8] The first heating after turning on the power can be longer that usual heating time

[9] The number of the splicing and heating cycles the machine can produce using a fully charged battery at room temperature of 20° C, semi-auto mode for splicing and regular mode for heating. Depending on the condition of the batteries and operation environment, the number can vary.

[10] The number of the splicing and heating cycles the machine can produce using a two fully charged battery at room temperature of 20° C, semi-auto mode for splicing and regular mode for heating. Depending on the condition of the batteries and operation environment, the number can vary.

STANDARD PACKAGE

Item	P/N	Quantity					
		S123C-A	S123C-B	S123M4-A	S123M4-B	S123M8	S123M12
❶ S123C Main body	S123-C-A-0001	1	1	—	—	—	—
❶ S123M4 Main body	S123-M4-A-0003	—	—	1	1	—	—
❶ S123M8 Main body	S123-M8-A-0003	—	—	—	—	1	—
❶ S123M12 Main body	S123-M12-A-0003	—	—	—	—	—	1
❷ Soft Carrying Case	SCC-01	1	—	1	—	—	—
❸ Hard Carrying Case	HCC-01	—	—	—	—	1	1
❸ Hard Carrying Case	HCC-02	—	1	—	1	—	—
❹ Battery Pack	S943B	1	1	1	1	1 or 2	1 or 2
❺ Battery Charger	S958B	1	1	1	1	1	1
❻ Spare Electrodes	S969	1	1	1	1	1	1
❼ AC Adaptor for S123/M4	S976A	1	1	1	1	1	1
❽ AC Adaptor for S958B	S977A	1	1	1	1	1	1
❾ AC Cable Cord	—	2	2	2	2	2	2
❿ Electrode Sharpener	D5111	1	1	1	1	1	1
⓫ Cleaning Brush	VGC-01	1	1	1	1	1	1
⓬ Fiber Reformer (4)	S122-X-A-0004	—	—	1 pair	1 pair	—	—
⓬ Fiber Reformer (8/12)	S122-X-A-0008	—	—	—	—	1 pair	1 pair
User Manual	—	1	1	1	1	1	1

❻ Spare Electrodes

❿ Electrode Sharpener

⓫ Cleaning Brush

⓬ Fiber Reformer

OPTIONAL COMPONENTS

Item	P/N	Quantity
❶ Soft Carrying Case	SCC-01	1
❷ Cooling Tray	CTX-01	1
❸ Angled Stand	AGS-01	1
❹ Working Belt	WBT-01	1
❺ USB Cable	USB-01	1
❻ Car Cigarette Cable	CDC-01	1
❼ Tight Holder		
16 mm Cleave length	S712T-016	1 pair
10 mm Cleave length	S712T-010	
❽ Fiber Holder		
250 μm coating diameter fiber	S712S-250	1 pair
500 μm coating diameter fiber [11]	S712S-500	1 pair
900 μm coating diameter fiber	S712S-900	1 pair
2 Ribbon Fiber Holder	S712A-002	1 pair
4 Ribbon Fiber Holder	S712A-004	1 pair
8 Ribbon Fiber Holder	S712A-008	1 pair
12 Ribbon Fiber Holder	S712A-012	1 pair
Loose Tube Fiber (left side)	S712A-LT-L	
Loose Tube Fiber (right side) [12]	S712A-LT-R	
❾ 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™ LC/SC connector [13]	S712C-DM25-L	1
<For Cordage>		1
Seiko Giken Cordage (5 mm)	S712C-SGC5-R	1
Seiko Giken Cordage (9 mm)	S712C-SGC9-R	1
Diamond Cordage (5 mm cleave, 1.8-3 mm cordage)	S712C-DMC5-R	
<Tool>		
Diamond Mount	WTX-01	1
<Smart Fuse>		
Software Interface for Machine	SF-01	1


❸ Angled Stand in Action


❹ Working Belt in Action


❹ Working Belt as Shoulder Pack

[11] Used for 400-500 μm coating diameter fiber.

[12] Also works as Diamond cordage holder.

[13] Also works as loose tube fiber holder (R). E-2000 and E-3000 are trademarks of Diamond SA

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ISO 14001

Our company has configured the environmental management system at each of our plants worldwide, and acquired ISO 14001 certification.

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eFriendly

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