FITEL®
FUSION SPLICERS

ofs
A Furukawa Company

S178
Fusion Splicers

Hand-Held Core-Alignment Fusion Splicer

NEW

RoHS

e Friendly

The FITEL® S178 Hand-Held Core-Alignment Fusion Splicer is the latest, state-of-the art addition to the S17X series of splicers. By combining speed, precision, durability and portability in one unit, the S178 Fusion Splicer ushers in an entirely new range of applications for core alignment splicing.

Equipped with a new alignment system that can save up to 20% on splicing time, the S178 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.

Although the S178 Fusion Splicer is significantly smaller and lighter in weight than previous models, its canopy design, durable metal body frame and rubber protection corners provide robust protection, enabling use in demanding environments without compromising splicing performance. Along with its rugged durability, the splicer also offers convenience. A new battery system allows up to 200 splicing cycles (splicing/heating) before additional batteries are needed, and an innovative, mirror-free alignment system makes maintenance work a snap.

While the S178 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 S178 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

- **Rugged and compact handheld design** endures harsh environmental conditions
- **Fast splicing** (7 seconds) at super low loss and **fast heating** (25 seconds) [1]
- **200 cycles** (splicing & heating) with new battery configuration
- **Available for all METRO/LAN/FTTX fibers** including ultra bend-optimized fibers (e.g. EZ-Bend® Fibers)
- **Splicer is compatible with** the OFS, Diamond[2] and Seikoh Giken[3] Splice-on-Connectors (SOC)

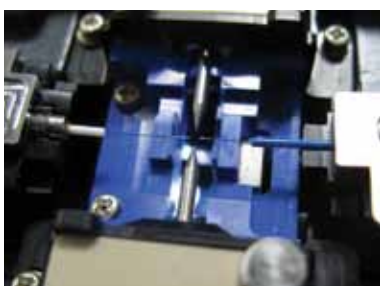[1] By using semi-auto mode for splicing and pre-heating mode for heating
[2] Diamond is a registered trademark of Diamond SA
[3] Seikoh Giken is a registered trademark of SEIKOH GIKEN CO., LTD

Bound to Innovate

- **Easy maintenance** – Easy 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** provides for user management of splicing programs and results

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

Compatible with Splice-on-Connectors

◙FITEL Splicer SOC partners

DIAMOND
the fiber meeting

SG SEIKOH GIKEN
CONNECTORS

Under Tough Environments

The S178A passed testing based on criteria below [4] :

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

---

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

[5] 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

[6] 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

Drop Resistant

Water Resistant

Dust Resistant

MTU
MITRA TELCO UTAMA
✉ sales@mitratelco.com ☏ 088980070047

SPECIFICATIONS

Applicable Fibers	SM, MM, DSF, NZD, EDF, BIF/UBIF (Bend insensitive fiber)
Cladding Diameter	80 ~ 150 μm
Coating Diameter	160 ~ 900 μm
Fibers Cleave Length	5 ~ 16 mm
Average Splice Loss	SM: 0.02 dB, MM: 0.01 dB, DSF: 0.04 dB, NZD: 0.04 dB
Splice Time	7 seconds (semi-auto mode), 9 seconds (regular mode)
Heat Time	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)
Splice Programs	Up to 150
Automatic Splicing Selection	SM: SM, DSF, NZD, BIF/UBIF, MM: MM
Heat Programs	Up to 18
Automatic Heating Start	Available
Applicable Sleeves	20/40/60 mm
Fiber Holding	Tight holder (Loose tube applicable) or Fiber Holder System
Tension Test	1.96 N
Fiber Image Magnification	304X, 608X
Splice Memory	Max. 2,000
Image capture Capacity	Last 100 images to be automatically captured + Up to 24 images to be stored permanently
Dimension	127W × 199D × 105H mm (not including shock absorber) 159W × 231D × 130H mm (including shock absorber)
Weight	1.9 kg (without battery), 2.3 kg (with two 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 80 splice/heat cycles with single battery [7] Typical 200 splice/heat cycles with 2 batteries [8]
Altitude	5,000 m
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

[7] 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 on the condition of the batteries and operation environment, the number can vary.

[8] 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
❶ S178A Main Body	S178-A-A-0001	1
❷ Hard Carrying Case	HCC-01	1
❸ Battery Pack Depending on the package	S943B	0, 1 or 2
❹ Battery Charger	S958B	1
❺ Spare Electrodes	S969	1 pair
❻ AC Adaptor for S178A	S976A	1
❼ AC Adaptor for S958B	S977A	1
❽ AC Cable Cord For S976A/S977A	—	2
❾ Electrode Sharpener	D5111	1
❿ Cleaning Brush	VGC-01	1
User Manual	FTS - 347	1

❺ Spare Electrodes

❾ Electrode Sharpener

❿ Cleaning Brush

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	1 pair
❽ 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
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 connector	S712C-DM25-L	1
<For Cordage>		
Seiko Giken Cordage (5 mm)	S712C-SGC5-R	
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

❸ Angled Stand in Action   ❹ Working Belt in Action   ❹ Working Belt as Shoulder Pack

Ordering Number Form: Code Syntax: S178A–X–Y

Variable	Category	Code	Description
X	**Fiber Holder Type**	1	16 mm Tight Holder S712T-016
		2	10 mm Tight Holder S712T-010
		3	Fiber Holder System (Fiber Holders sold separately)
Y	**Number of Battery Packs (S943)**	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)

Contact Us:

Fusion Splicer Customer Service, Training and Service Center
Toll Free: 866-452-9516
Phone: 678-783-1090
Fax: 678-783-1093
Email: splicers@ofsoptics.com

OFS Corporate Headquarters
2000 Northeast Expressway
Norcross, Georgia 30071, USA
Toll Free: 888-Fiber-Help
Intl. Phone: 770-798-5555
Email: ofs@ofsoptics.com

For additional information please contact your sales representative. You can also visit our website at:
   http://www.ofsoptics.com.

OFS reserves the right to make changes to the prices and product(s) described in this document at any time without notice.

EZ-Bend is a registered trademark of OFS FITEL, LLC. FITEL is a registered trademark of Furukawa Denki Kogyo Kabushiki Kaisha DBA The Furukawa Electric Co., Ltd Corporation.

This document is for informational purposes only and is not intended to modify or supplement any OFS warranties or specifications relating to any of its products or services.

OFS
Marketing Communications
FITEL-S178-0610

eFriendly Logo Mark
This logo mark indicates that the products and services satisfy the standards of environmentally friendly products of the Furukawa Electric Group.

THINK GREEN
Use electronic files, available at:
www.ofsoptics.com - Use less paper

sales@mitratelco.com   088980070047