

# FITEL<sup>®</sup> S179 Fusion Splicer

Hand-Held, Core Alignment Fusion Splicer



## Features and Benefits

- Exceptional performance for fast and consistent fiber splicing
- Enhanced ease of use and portability
- High-speed splicing and heating<sup>1</sup>
- Ruggedized body design
- Easy, intuitive splicer operation
- Compatible with Splice-On-Connectors (SOC)
- State-of-the-art communication methods

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## Overview

The FITEL S179 Hand-Held, Core Alignment Fusion Splicer offers powerful performance, delivering fast and reliable optical fiber splicing even under harsh environmental conditions. By combining speed, precision, durability, portability and state-of-the-art communication methods in one unit, this fusion splicing machine opens the door to an entirely new range of applications. The FITEL S179 Fusion Splicer is completely suitable for use with all Metro, LAN and FTTx fibers, including ultra bend-insensitive fibers.

## Applications

- Fiber lasers
- Manufacture of optical parts
- FTTx
- LAN
- Backbone
- Enterprise
- Long-haul
- Data Centers

## Product Description

Designed with users in mind, the FITEL S179 Fusion Splicer delivers rapid splicing and heating with consistent results, splice after splice. A large-capacity battery system helps save time by allowing 200 splicing cycles (splicing/heating) in one charge.<sup>2</sup> While a 4.3-inch wide LCD screen with touch panel offers easy and intuitive operation, a proportionately wide splicing chamber makes optical fiber easier to load than previous and comparable splicers. For improved visibility in low-light conditions, 3+1 LED lights illuminate the entire splicing chamber. A detachable, left-side V-groove makes cleaning and maintenance a breeze.

The S179 Fusion Splicer was also designed to meet the rigors of use in the field. While a substantially lower profile and lighter weight enhance portability, this splicer's canopy design and ruggedized body provide resistance to shock, water and dust exposure. A powerful, high propulsion motor (8N) helps ensure stable splicing of even the most rigid indoor and drop cables. Internal battery charging, embedded Near Field Communication (NFC) and Smartphone readiness combine with other features to make the S179 one of the most powerful and user-friendly fusion splicing machines available today.

<sup>1</sup> High-speed splicing (6 seconds on semi-auto mode) and fast heating (9 seconds at power mode)

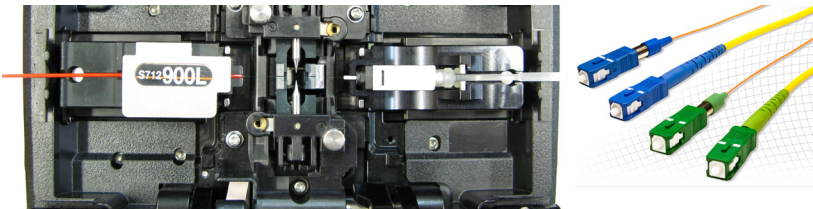
<sup>2</sup> In semi-auto splicing mode and regular heating mode



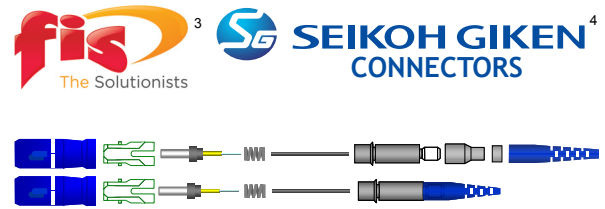
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Authorized Distributor of FITEL Products  
in the Americas

## Compatible with Splice-on Connectors



## FITEL Splicer SOC Partners



## Under Tough Environments

- **Shock Resistant:** Equivalent to IK07 rating Mechanical impact<sup>5</sup>
- **Drop Resistant:** 76 cm drop tests from 5 different angles<sup>6</sup>
- **Water Resistant:** Equivalent to IPX2 rating drip proof<sup>7</sup>
- **Dust Resistant:** Equivalent to IP5X rating dust proof<sup>8</sup>



SHOCK RESISTANT



DROP RESISTANT



WATER RESISTANT



DUST RESISTANT

<sup>3</sup> "fis" is a registered trademark of Fiber Instrument Sales, Inc.

<sup>4</sup> Seikoh Giken is a registered trademark of SEIKOH GIKEN CO., LTD.

<sup>5</sup> IK07 rating Mechanical impact means that the machine protects against 2 jour impact, it is equivalent to 500g force from 40cm. This does not guarantee that the machine will always be undamaged under these conditions.

<sup>6</sup> Standard operations could be carried out after conducting the above tests. These tests were performed at the Furukawa Electric Co., Ltd. laboratories with no significant damage resulting. This does not guarantee that the machine will always be undamaged under these conditions.

<sup>7</sup> IPX2 rating drip proof means that the machine can be exposed to 3 mm/min drips for 10 minutes with 15 degree tilt and still function.

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

## Product Specifications

Applicable Fibers	SM (ITU-T G.652, G.657A1 and G.657A2), MM (ITU-T G.651), DSF (ITU-T G.653), NZD (ITU-T G.655), BIF/UBIF (Bend Insensitive Fiber ITU-T G.657B3)
Cladding Diameter	80 - 150 µm
Coating Diameter	100 - 3000 µm
Fiber Cleave Length	5 - 16 mm
Average Splice Loss	SM:0.02dB, MM:0.01dB, DSF:0.04dB, NZD:0.04dB
Splice Time	6 seconds (Semi-auto mode) 9 seconds (Regular mode)
Heat Time	9 (60mm, Tyco SMOUV1120-1, coating diameter 250-900µm, Power mode) <sup>9</sup> 13 (60mm, FITEL S921, coating diameter 250µm, Power mode) 15 (60mm, FITEL S921, coating diameter 900µm, Power mode)
Splice Programs	Max. 300
Automatic Splicing Selection	Available
Heat Programs	Max. 100
Automatic Heating Start	Available
Applicable Sleeves	20/40/60 mm
Fiber Holder	Tight holder (loose tube applicable) or Removable Fiber Holder System
Tension Test	1.96 N
Splice Return Loss	60 dB or more
Attenuation Splice Function	Intentional high splice loss of 0.1dB to 15dB(0.1dB step) can be made for an inline fixed attenuator
Fiber Image Magnification	278X, 556X
Splice Result Storage	20,000
Image Capture Capacity	Last 100 images to be automatically captured + up to 100 images to be stored permanently
Dimension	138W x 211D x 114H mm (not including shock absorber) 170W x 238D x 122H mm (including shock absorber)
Weight	1.6 kg (without battery), 1.9 kg (with battery)
Monitor	4.3" wide color LCD monitor with touch screen
Propulsion (motor)	8 N (designed value)
Data Output	USB ver. 2.0 mini B
Battery Capacity <sup>10</sup>	Typical 200 splice/heat cycles, 120sec/cycle Typical 230 splice/heat cycles, 90sec/cycle
Altitude	5000 m
Wind Protection	15 m/s
Operating Temperature	-10 to + 50 °C (without excessive humidity)
Storage Temperature	-40 to +60 °C (without excessive humidity)
Humidity	0 to + 95% RH (non-condensing)
Power Source	AC Input 100 to 240V (50/60Hz), DC Input 11 to 24 V without any change of hardware

<sup>9</sup> The heating time may vary depending on the type of sleeve. In addition, the first heating cycle after turning the power on can be longer than the standard heating time.

<sup>10</sup> The number of splicing and heating cycles the machine can perform with a fully charged battery at 20 °C in semi-auto splicing mode and regular heating mode. The number of cycles may vary depending on the battery status and operating conditions.



Standard Package



Optical Components

For additional information please contact your sales representative.

You can also visit our website at [www.ofsoptics.com](http://www.ofsoptics.com) or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.

**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](mailto:splicers@ofsoptics.com)

**OFS Corporate Headquarters**

2000 Northeast Expressway  
 Norcross, Georgia 30071, USA  
 Toll Free: 888-Fiber-Help  
 Intl. Phone: 770-798-5555



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**Standard Package**

Item	P/N	Quantity
FITELE S179 Fusion Splicer	S179A	1
Hard Carrying Case	HCC-05	1
Spare Electrodes	ELR-01	1
AC Adapter	S979A	1
AC Power Cord	-	1
Cooling Tray	CTX-03	1
Electrode Sharpener	D5111	1
Cleaning Brush	VGC-01	1
Battery Pack	S947A	1
Tool Case	TCC-01	1
Instruction Manual	UMC-02	1
Quick Reference Guide	FTS-B526	1

**Optional Components**

Item	P/N	Quantity
USB Cable	USB-01	1
Battery Charger	S980A	1
Soft Carrying Case	SCC-01	1
Angled Stand	AGS-02	1
Working Belt	WBT-01	1
Car Cigarette Cable	CDC-04	1
Tight Holder 16 mm Cleave Length	S712-T-016	1 pair
10 mm Cleave Length	S712T-010	1 pair
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
Fiber Holder Loose Tube Fiber (Left side)	S712S-LT-L	1 pair
Loose Tube Fiber (Right side)	S712S-LT-R	1 pair
SOC Holder	S712C-SGS9-L	1
	S712C-SGS5-L	1
	S712C-SGL9-L	1
	S712C-SGL5-L	1
	S712C-DM25-L	1
	S712C-SGC5-R	1
	S712C-SGC9-R	1
	S712C-DMC5-R	1

**Ordering Information**

Code	Description
S179-2	S179 splicer with 10mm Fiber Holder S712T-010
S179-BK-250	S179 splicer with S712S-250 holder, S211B stripper and cleaver
S179-BK-900	S179 splicer with S712S-900 holder, S211B stripper and cleaver
S179-VK-900	S179 splicer with S712S-900 holder, S211B stripper, cleaver, wipes and fluid
S179-EX-900	S179 splicer with S712S-250 and S712S-900 holder, S211B stripper, cleaver, wipes and fluid