

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

Hand-Held, Core Alignment



### Features and Benefits

- Fast and consistent fiber splicing for exceptional performance
- NEW design features enhanced ease of use, maintenance, speed and shock resistance (see page 2)
- Large capacity, internal battery charging system allows 200 splicing cycles (splicing/heating) in one charge<sup>1</sup>
- Wide splicing chamber for easy fiber loading
- Lower profile, lighter weight design enhances portability
- Powerful, high-propulsion motor (8N) for stable splicing
- Compatible with Splice-On-Connectors (SOC)

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### Overview

The powerful FITEL S179 Hand-Held, Core Alignment Fusion Splicer delivers fast and reliable optical fiber splicing even under harsh environmental conditions. Offering a wide range of capabilities, this fusion splicing machine opens the door to an entirely new range of applications.

### Applications

- Fiber sensors
- Manufacture of optical components
- FTTx
- LAN
- Backbone
- Enterprise
- Long-haul
- Data Centers

### Product Description

Designed with end users and rugged field use in mind, the FITEL S179 Fusion Splicer delivers rapid splicing and heating for consistent results, splice after splice. Suitable for use with ultra-bend insensitive and large area effective fibers, this fusion splicing machine is an excellent choice for a variety of deployments including data centers, Metro and FTTx.

A broad range of new features that enhance communication, ease of use, portability and field durability combine to make the S179 Fusion Splicer one of the most powerful and user-friendly fusion splicing machines available today.

<sup>1</sup> In semi-auto splicing mode and regular heating mode



A Furukawa Company

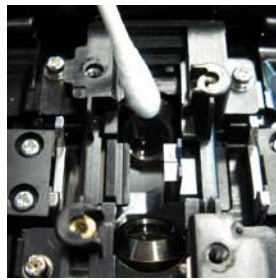
Authorized Distributor of FITEL Products  
in the Americas

### NEW Features

- **Touch Screen:** 4.3-inch wide LCD screen with touch panel for easy, intuitive operation
- **Illumination Lamp:** 3 upper + 1 lower LED lights illuminate the entire splicing chamber
- **Detachable V-Groove:** Easy maintenance and lens cleaning
- **Near Field Communication (NFC):** Lock and unlock splicer via smartphone (only for Android phones, ver. 4.1 or later)
- **Wi-Fi Networking:** Communication between splicer and smartphone
- **High Speed:** 6 seconds of splicing time and 9 seconds of heating time



ILLUMINATION LAMP:  
3+ 1 LED LIGHTS



DETACHABLE V-GROOVE  
FOR EASY CLEANING



NFC:  
LOCK AND UNLOCK

### Under Tough Environments

- **Shock Resistant:** Equivalent to IK07 rating Mechanical impact<sup>2</sup>
- **Drop Resistant:** 76 cm drop tests from 5 different angles<sup>3</sup>  
120 cm drop tests with hard carrying case<sup>3</sup>
- **Water Resistant:** Equivalent to IPX2 rating drip proof<sup>4</sup>
- **Dust Resistant:** Equivalent to IP5X rating dust proof<sup>5</sup>



SHOCK RESISTANT



DROP RESISTANT



WATER RESISTANT



DUST RESISTANT

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

<sup>3</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 result does not guarantee that the machine will always be undamaged under these conditions.

<sup>4</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>5</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.

# FITEL® S179 Fusion Splicer

Product Specifications	
Applicable Fibers	SM (ITU-T G.652, G.657A1 and G.657A2), MM (ITU-T G.651), DSF (ITU-T G.653), Cut-off Shifted Fiber (ITU-T G.654, Large Area type), 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:0.02 dB, MM:0.01 dB, DSF:0.04 dB, NZD:0.04 dB
Splice Time	6 seconds (Semi-auto mode) 9 seconds (Regular mode)
Heat Time <sup>6</sup>	9 (60 mm, Tyco SMOUV1120-01, coating diameter 250-900 µm, Power mode) 13 (60 mm, FITEL S921, coating diameter 250 µm, Power mode) 15 (60 mm, FITEL S921, coating diameter 900 µm, 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	70 dB or more
Attenuation Splice Function	Intentional high splice loss of 0.1 dB to 15 dB (0.1 dB step) can be made for an inline fixed attenuator
Fiber Image Magnification	104X, 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	139 W x 209 D x 114 H mm (not including shock absorber) 179 W x 246 D x 131 H mm (including shock absorber)
Weight	1.7 kg (without battery), 2.0 kg (with battery)
Monitor	4.3-inch wide color LCD monitor with touch screen
Propulsion (motor)	8 N (designed value)
Data Output	USB ver. 2.0 mini B x 1 port, Standard A x 1 port
Battery Capacity <sup>7</sup>	Typical 200 splice/heat cycles, 90 second/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 240 V (50/60Hz), DC Input 11 to 24 V

<sup>6</sup> The heating time may vary depending on the type of sleeve. In addition, the first heating time after turning the power on can be longer than the standard heating time.

<sup>7</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



Accessories

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)

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**Standard Package**

Item	P/N	Quantity
FITELE S179 Fusion Splicer	S179A	1
Built-in Battery Pack	S947A	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
Cleaning Brush	VGC-01	1
Electrode Sharpener	D5111	1
Tool Case	TCC-01	1
LCD anti-reflective sheet	ARS-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	
Heater Clamp Base for SOC	HBS-01	1	
Tight Holder	16 mm Cleave Length	S712-T-016	1 pair
	10 mm Cleave Length	S712T-010	1 pair
	Universal	S712T-UN	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
	Seiko Giken FC/SC ferrule (9 mm)	S712C-SGS5-L	1
	Seiko Giken FC/SC ferrule (5 mm)	S712C-SGL9-L	1
	Seiko Giken LC ferrule (9 mm)	S712C-SGL5-L	1
	Seiko Giken LC ferrule (5 mm)	S712C-DM25-L	1
	Seiko Giken TOUCH Plus SC (9 mm)	S712C-SGC5-R	1
	Diamond E2000™/E3000™ ferrule	S712C-SGC9-R	1
	Seiko Giken Cordage (5 mm)	S712C-DMC5-R	1
	Seiko Giken Cordage (9 mm)	S712C-SGC9-R	1
	Diamond Cordage (5 mm)	S712C-DMC5-R	1
	Wi-Fi dongle	WFD-01	1

**Ordering Information**

Code	Description
S179A-21	S179A splicer with 10mm Fiber Holder S712T-010
S179A-31	S179A splicer without any Fiber Holders
S179A-EX-10	S179A splicer with S712T-010 holder, S211B stripper, cleaver, wipes and fluid
S179A-EX-900	S179A splicer with S712S-250 and S712S-900 holder, S211B stripper, cleaver, wipes and fluid