

# Fujikura 90S+ Fusion Splicer

The Fujikura 90S+ core alignment fusion splicer solves common problems seen in the field—from splicing poor quality legacy fiber to automated equipment maintenance and upkeep. The Fujikura 90S+ can be use in multiple field splicing applications including bend-insensitive fibers in drop cables, long-haul terrestrial and submarine LEAF® fibers, loose buffer fiber, splice-on connectors, and the list goes on. The speed and accuracy of the 90S+ make it suitable for certain production and specialty environments where high output, tight packaging, and low loss requirements are required.

Regardless of your scenario, the Fujikura 90S+ is designed to keep you in the field with an extended battery life of 300 splice and heat cycles. With its multiple automated and easy-to-use features, the 90S+ alleviates the need for traditional operation tasks such as frequent arc calibrations, cleaver blade rotations, cleaver usage tracking, and manual splicing operations. A redesigned work tray, cooling tray, and optional cable clamp make the 90S+ kit more versatile than its predecessors in adapting to varying work conditions and environments.

With the AFL Tote Solution installed, the 90S+ transit case securely integrates with Milwaukee's PACKOUT™ system, offering faster transport, stability, and time-savings for contractors and technicians.

When splicing loose buffer fiber, additional sheath clamps are not needed. The standard universal sheath clamp now handles both loose and tight buffer fibers. The new Active Fusion Control (AFC) technology improves splice losses for fibers that possess a poor cleave angle. Combined with Active Blade Management between the splicer and cleaver, the Fujikura 90S+ contains a robust set of splicing features that will reduce the likelihood of poor splice installations or repairs.

## Features

- Cleaver tracking and upkeep with wireless communication
- Improved real-time arc control for fibers with poor cleave angles
- Automated wind protector, sheath clamps and splice operation
- Loose and tight buffer with same sheath clamp
- Lithium-ion battery with 300 splices/shrinks per charge
- PC software and 90S+ manual downloaded from splicer
- Multi-function transit case with integrated workstation

## Applications

- Distribution fiber repair
- Long-haul network installation
- Field termination with splice-on connectors
- Access network installation
- Fanout kits, pigtails and splice cassettes
- OSP cable installation and repair
- Optical modules – splitters, couplers, MUXs, EDFAs and attenuators



Bluetooth®

90S+



In Work Tray



Wind Protector Open

STOCK ITEM

# Fujikura 90S+ Fusion Splicer

## Ordering Information

DESCRIPTION	AFL NO.
<b>Fujikura 90S+ Fusion Splicer (machine only)</b> <b>Includes:</b> ADC-20 AC Adapter, ACC-14 AC Cord, BTR-15 Battery, ELCT2-16B Spare Electrodes (pair), Sheath Clamps, SP-03 Fiber Holder Set Plates, USB-01 Cable, Alcohol Dispenser, Screwdriver, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Work Tray J-Plate, SS03 single fiber stripper, CC39 Transit Case with Carrying Strap and Two-Year Warranty	S017519
<b>Fujikura 90S+ Standard Fusion Splicer Kit (with cleaver)</b> <b>Includes:</b> CT50 Cleaver, ADC-20 AC Adapter, ACC-14 AC Cord, BTR-15 Battery, ELCT2-16B Spare Electrodes (pair), Sheath Clamps, SP-03 Fiber Holder Set Plates, USB-01 Cable, Alcohol Dispenser, Screwdriver, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Work Tray J-Plate, SS03 single fiber stripper, CC39 Transit Case with Carrying Strap and Two-Year Warranty	S017521
<b>Fujikura 90S+ Fusion Splicer without Bluetooth (machine only)</b> <b>Includes:</b> ADC-20 AC Adapter, BTR-15 Battery, ACC-14 AC Cord, ELCT2-16B Spare Electrodes (pair), Sheath Clamps, SP-03 Fiber Holder Set Plates, USB-01 Cable, Alcohol Dispenser, Screwdriver, Splicer Carrying Strap, Quick Reference Guide, TS-03 Tripod Screw, Work Tray J-Plate, SS03 Single Fiber Stripper, CC39 Transit Case with Carrying Strap and Two-Year Warranty	S017520
<b>Fujikura SpliceReady 90S+ Splicer Kit includes:</b> Fujikura 90S+ Standard Kit (S017521), FP-60 60 mm (single splice) protection sleeve (pack of 100), FCC2 fiber cleaning fluid (3 oz.), AFL WFW wipes mini tub (90 wipes), Kevlar scissors, FH-70-900 fiber holders (pair), FH-70-250 fiber holders, Mechanical Splice Fiber Holder (250 µm), Sharpie, Splicer V-groove cleaning kit, FH-FC-900 fiber holder (900 µm cable)	S018582
One-Year Extended Warranty	S012996
Two-Year Extended Warranty	S013000

## Recommended Products for the 90S+

DESCRIPTION	AFL NO.	DESCRIPTION	AFL NO.
<b>Cleavers</b>		<b>Miscellaneous</b>	
CT-16 Cleaver	S018330	SS03 Single fiber stripper (3 hole)	S017098
CT-50 Cleaver	S017030	SS01 Single fiber stripper (1 hole)	S017099
<b>Fiber Holders (pair)</b>		ELCT2-16B Electrodes	S017103
FH-70-250 (250 µm coated fiber)	S017111	SP-03 Fiber Holder Set Plates	S017518
FH-70-900 (900 µm jacketed fiber)	S017113	S90 Universal Sheath Clamps	S017696
FH-70-160 (160 µm coated fiber)	S017095	Portable Tripod Worktray Kit (see product profile for more detail)	S014773
FH-70-200 (200 µm coated fiber)	S017711	ASW-02 Splicing Workstation (see product profile for more detail)	S010532
FH-60-LT900 (Loose buffer 900 µm fiber)	S015181	WT-09R Transit Case - Work Tray Right (90 Series)	S017515
<b>FUSEConnect® Accessories</b>		WT-09L Transit Case - Work Tray Left (90 Series)	S017516
FH-FC-20 (900 µm within 2.0 mm sheathing) (each)	S014696	JP-09 Work Tray J-Plate	S017517
FH-FC-30 (900 µm within 3.0 mm sheathing) (pair)	S014695	JP-10 J-Plate (Cooling tray attaches to splicer)	S017522
FH-FC-900 (900 µm cable) (each)	S014697	JP-10-FC J-Plate with Fiber Clamps	S017523
CLAMP-FC-2000 (pair)	S014705	TS-03 Tripod Screw (90 Series)	S017524
CLAMP-FC-3000 (single holder)	S014704	ST-02 Fusion Splicer Strap	S017525
<b>Power Supply Options and Equipment</b>		CLAMP-DC-12 (Drop cable clamp for work tray)	S017550
ADC-20 AC Adapter	S017513	USB-01 Cable	S014777
ACC-14 AC Power Cord	S014536	CC39 Transit Case	S017514
BTR-15 Battery	S017512	Splicer V-Groove Cleaning Kit	S014397
DCC-20 Power Cord	S017527	ST-03 Case and Work Tray Strap	S017549
(connects AC Adapter to cigarette lighter socket)		AFL Tote Solution - Cleat Installation Service	S018623
DCC-21 Power Cord	S017528		
(connects AC Adapter to power source via alligator clips)			



### Fiber Holders

- Wide range of sizes for various applications
- Loose & Tight Buffer options available



### Portable Splicing Worktray Kit

- Large, sturdy work tray supports the splicer, cleaver and accessories with plenty of working room
- Tripod supports a load capacity of up to 20 pounds



### V-Groove Cleaning Kit

- Removes environmental contamination from the v-groove of the splicer
- Maintains performance and ensures fiber alignment

# Fujikura 90S+ Fusion Splicer

## Specifications

PARAMETER		VALUE	
Fiber Alignment Method		Active core alignment	
Fiber Count Can Be Spliced		Single fiber	
Applicable Fiber	Fiber Type	Single-mode optical fiber	
	Cladding Diameter	Multimode optical fiber	
Applicable Coating	Sheath Clamp	Coating dia.: Max. 3,000 μm	
		Cleave length: 5 to 16 mm	
Fiber Splice Performance	Splice Loss	ITU-T G.652: Avg. 0.02 dB	
		ITU-T G.651: Avg. 0.01 dB	
		ITU-T G.653: Avg. 0.04 dB	
		ITU-T G.654: Avg. 0.04 dB	
		ITU-T G.655: Avg. 0.04 dB	
		ITU-T G.657: Avg. 0.02 dB	
Applicable Protection Sleeve	Splice Time	SM FAST mode: Avg. 8 to 10 sec.	
		SM AUTO mode: Avg. 11 to 13 sec.	
		AUTO mode: Avg. 14 to 16 sec.	
Sleeve Heat Performance	Sleeve Type	Heat-shrinkable sleeve	
	Sleeve Length	Max. 66 mm	
	Sleeve Dia.	Max. 6.0 mm before shrinking	
Fiber Tensile Test Force	Heat Time	60 mm slim mode: Avg. 9 to 10 sec.	
		60 mm mode: Avg. 13 to 15 sec.	
Electrode Life		Approx. 2.0 N	
Physical Description	Dimensions W Dimensions D Dimensions H Weight	Approx. 5,000 splices	
		Approx. 170 mm without projection	
		Approx. 173 mm without projection	
		Approx. 150 mm without projection	
Environmental Condition	Temperature	Approx. 2.8 kg including battery	
		Operate: -10 to 50°C	
		Storage: -40 to 80°C	
AC Adaptor	Humidity	Operate: 0 to 95% RH non-condensing	
		Storage: 0 to 95% RH non-condensing	
		Max. 5,000 m	
Battery Pack	Altitude	AC 100 to 240 V, 50/60 Hz, Max. 1.5 A	
	Type	Rechargeable Lithium Ion	
	Output	Approx. DC14.4V / 6,380 mAh	
	Capacity	Approx. 300 splice and heat cycles	
	Temperature	Recharge: 0 to 30°C	
	Battery Life	Storage: -20 to 30°C	
Display	Recharge Time	Approx. 500 recharge cycles	
		Approx. 5-8 hours from empty	
		TFT 5 inches with touch screen	
Illumination	LCD Monitor	200 to 320x	
		Magnification	200 to 320x
Interface	V-Grooves	LED lamp	
		PC	USB2.0 Mini B type
		External Led Lamp	USB2.0 A type, Approx. DC5V, 500 mA
		Ribbon Stripper	Mini DIN 6 pin, DC12V, Max. 1A
Data Storage	Wireless	Bluetooth 4.1 LE	
		Splice Mode	100 splice modes
		Heat Mode	30 heat modes
		Splice Result	20,000 splices
Screw Hole For Tripod	Splice Image	100 images	
		1/4-20 UNC	
		Other Features	Automatic Functions
Other Features	Reference Guide	Discharge power calibration	
		Wind protector: open/close	
		Sheath clamp: open	
		Heater lid: open/close	
		Heater clamp: open/close	
Other Features	Sheath Clamp	Video and PDF file stored in splicer	
		Easy sleeve positioning clamp	
		Replaceable without tool	