

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.
Fujikura 90S+ Fusion Splicer (machine only) Includes: 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
Fujikura 90S+ Standard Fusion Splicer Kit (with cleaver) Includes: 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
Fujikura 90S+ Fusion Splicer without Bluetooth (machine only) Includes: 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
Fujikura SpliceReady 90S+ Splicer Kit includes: 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.
Cleavers		Miscellaneous	
CT-16 Cleaver	S018330	SS03 Single fiber stripper (3 hole)	S017098
CT-50 Cleaver	S017030	SS01 Single fiber stripper (1 hole)	S017099
Fiber Holders (pair)		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
FUSEConnect® Accessories		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
Power Supply Options and Equipment		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

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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	Electrode Life	Approx. 5,000 splices	
		Dimensions W	Approx. 170 mm without projection
		Dimensions D	Approx. 173 mm without projection
		Dimensions H	Approx. 150 mm without projection
Environmental Condition	Weight	Approx. 2.8 kg including battery	
		Temperature	Operate: -10 to 50°C
		Humidity	Storage: -40 to 80°C
		Altitude	Operate: 0 to 95% RH non-condensing
AC Adaptor	Input	Storage: 0 to 95% RH non-condensing	
		Max. 5,000 m	
Battery Pack	Type	AC100 to 240 V, 50/60 Hz, Max. 1.5 A	
	Output	Rechargeable Lithium Ion	
	Capacity	Approx. DC14.4V / 6,380 mAh	
	Temperature	Approx. 300 splice and heat cycles	
	Battery Life	Recharge: 0 to 30°C	
	Recharge Time	Storage: -20 to 30°C	
Display	LCD Monitor	Approx. 500 recharge cycles	
		Approx. 5-8 hours from empty	
Illumination	Magnification	TFT 5 inches with touch screen	
		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	
	Other Features	1/4-20 UNC	
		Automatic Functions	Splice mode select by fiber type analysis
Discharge power calibration			
Wind protector: open/close			
Sheath clamp: open			
Heater lid: open/close			
Reference Guide	Heater clamp: open/close		
Sheath Clamp	Video and PDF file stored in splicer		
Electrode	Easy sleeve positioning clamp		
		Replaceable without tool	