

Fujikura 90S+ Fusion Splicer



 Bluetooth™ 90S+



In Work Tray



Wind Protector Open

The Fujikura 90S+ core alignment fusion splicer solves common problems seen in the field - from splicing poor quality legacy fibre to automated equipment maintenance and upkeep. The Fujikura 90S+ can be used in multiple field splicing applications including bend-insensitive fibres in drop cables, long-haul terrestrial and submarine LEAF® fibres, loose buffer fibre, 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.

When splicing loose buffer fibre, additional sheath clamps are not needed. The standard universal sheath clamp now handles both loose and tight buffer fibres. The new Active Fusion Control (AFC) technology improves splice losses for fibres 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 fibres 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 fibre 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

Fujikura 90S+ Fusion Splicer

Ordering Information

DESCRIPTION	AFL NO.
90S+ Fusion Splicer (machine only) Includes: ADC-20 AC Adapter, ACC-17 AC Cord, BTR-15 Battery, ELCT2-16B Spare Electrodes (pair), Sheath Clamps, SP-03 Fibre Holder Set Plates, USB-01-01 Cable, Alcohol Pot, Splicer Carrying Strap, Quick Reference Guide, SS03 Single Fibre Stripper and CC39 Transit Case with Carrying Strap, Cotton Tips, Safety Glasses, Screwdriver and Sharps Container.	FUJ90S-NC
90S+ Fusion Splicer Kit (with CT50 Cleaver) Includes: CT50 Cleaver, ADC-20 AC Adapter, ACC-17 AC Cord, BTR-15 Battery, ELCT2-16B Spare Electrodes (pair), Sheath Clamps, SP-03 Fibre Holder Set Plates, USB-01 Cable, Alcohol Dispenser, Splicer Carrying Strap, Quick Reference Guide, SS03 Single Fibre Stripper and CC39 Transit Case with Carrying Strap, Cotton Tips, Safety Glasses, Screwdriver and Sharps Container.	FUJ90S-CT50
90S+ Fusion Splicer Without Bluetooth (machine only) Includes: ADC-20 AC Adapter, BTR-15 Battery, ACC-17 AC Cord, ELCT2-16B Spare Electrodes (pair), Sheath Clamps, SP-03 Fibre Holder Set Plates, USB-01 Cable, Alcohol Pot, Splicer Carrying Strap, Quick Reference Guide, SS03 Single Fibre Stripper and CC39 Transit Case with Carrying Strap, Cotton Tips, Safety Glasses, Screwdriver and Sharps Container.	FUJ90S-NC-NW
90S+ Fusion Splicer Kit Without Bluetooth (with CT50 Cleaver) Includes: CT50 Cleaver, ADC-20 AC Adapter, ACC-17 AC Cord, BTR-15 Battery, ELCT2-16B Spare Electrodes (pair), Sheath Clamps, SP-03 Fibre Holder Set Plates, USB-01 Cable, Alcohol Pot, Splicer Carrying Strap, Quick Reference Guide, SS03 Single Fibre Stripper and CC39 Transit Case with Carrying Strap, Cotton Tips, Safety Glasses, Screwdriver and Sharps Container.	FUJ90S-CT50-NW

Recommended Products for the 90S+

DESCRIPTION	AFL NO.
Cleavers	
CT08 Cleaver	S017004
CT50 Cleaver	S017030
Fibre Holders (pair)	
FH-70-250 (250 µm coated fibre)	S017111
FH-70-900 (900 µm jacketed fibre)	S017113
FH-70-160 (160 µm coated fibre)	S017095
FH-70-200 (200 µm coated fibre)	S017711
FH-60-LT900 (Loose buffer 900 µm fibre)	S015181
FUSEconnect® Accessories	
FH-FC-20 (900 µm within 2.0 mm sheathing) (each)	S014696
FH-FC-30 (900 µm within 3.0 mm sheathing) (pair)	S014695
FH-FC-900 (900 µm cable) (each)	S014697
CLAMP-FC-2000 (pair)	S014705
CLAMP-FC-3000 (pair)	S014704
Power Supply Options and Equipment	
ADC-20 AC Adapter	S017513
ACC-14 AC Power Cord	S014536
BTR-15 Battery	S017512
DCC-20 Power Cord (connects AC Adapter to cigarette lighter socket)	S017527
DCC-21 Power Cord (connects AC Adapter to power source via alligator clips)	S017528

DESCRIPTION	AFL NO.
Miscellaneous	
SS03 Single fibre stripper (3 hole)	S017098
SS01 Single fibre stripper (1 hole)	S017099
ELCT2-16B Electrodes	S017103
SP-03 Fibre Holder Set Plates	S017518
S90 Universal Sheath Clamps	S017696
Portable Tripod Workstation (see product profile for more detail)	S014773
ASW-02 Splicing Workstation (see product profile for more detail)	S010532
WT-09R Work Tray Right	S017515
WT-09L Work Tray Left	S017516
JP-09 Work Tray J-Plate	S017517
JP-10 J-Plate (Cooling tray attaches to splicer)	S017522
JP-10-FC J-Plate with Fibre Clamps	S017523
TS-03 Tripod Screw (90 Series)	S017524
ST-02 Fusion Splicer Strap	S017525
CLAMP-DC-12 (Drop cable clamp for work tray)	S017550
USB-01 Cable	S014777



Fibre Holders

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



Portal Tripod Work Station

- Sturdy work tray supports the splicer, cleaver and accessories
- Tripod supports a load capacity of up to 5 kg



V-Groove Cleaning Kit

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

Specifications

PARAMETER		VALUE
Fibre Alignment Method		Active core alignment
Fibre Count Can Be Spliced		Single fibre
Applicable Fibre	Fibre type	Singlemode optical fibre Multi-mode optical fibre
	Cladding Dia.	80 to 150 µm
Applicable Coating	Sheath Clamp	Coating dia.: Max. 3,000 µm
		Cleave length: 5 to 16 mm
Fibre 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	
Splice Loss	SM FAST mode: Avg. 8 to 10 sec	
	SM AUTO mode: Avg. 11 to 13 sec	
	AUTO mode: Avg. 14 to 16 sec	
Applicable Protection Sleeve	Sleeve Type	Heat-shrinkable sleeve
	Sleeve Length	Max. 66 mm
	Sleeve Dia.	Max. 6.0 mm before shrinking
Sleeve Heat Performance	Heat Time	60 mm slim mode: Avg. 9 to 10 sec
		60 mm mode: Avg. 13 to 15 sec
Fibre Tensile Test Force		Approx. 2.0 N
Electrode Life		Approx. 5,000 splices
Physical Description	Dimensions W	Approx. 170 mm without projection
	Dimensions D	Approx. 173 mm without projection
	Dimensions H	Approx. 150 mm without projection
	Weight	Approx. 2.8 kg including battery
Environmental Condition	Temperature	Operate: -10 to 50°C
		Storage: -40 to 80°C
	Humidity	Operate: 0 to 95% RH non-condensing
Storage: 0 to 95% RH non-condensing		
Altitude	Max. 5,000 m	
Ac Adaptor	Input	AC100 to 240 V, 50/60 Hz, Max. 1.5A
Battery Pack	Type	Rechargeable Lithium-ion
	Output	Approx. DC14.4V / 6,380 mAh
	Capacity	Approx. 300 splices and heat cycles
	Temperature	Recharge: 0 to 30° C
		Storage: -20 to 30° C
	Battery Life	Approx. 500 recharge cycles
Recharge Time	Approx. 5 - 8 hours from empty	
Display	LCD Monitor	TFT 5 inches with touchscreen
	Magnification	200 to 320x
Illumination	V-Grooves	LED lamp
Interface	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
	Wireless	Bluetooth 4.1 LE
Data Storage	Splice Mode	100 splice modes
	Heat Mode	30 heat modes
	Splice Result	20,000 splices
	Splice Image	100 images
Screw Hole for Tripod		1/4-20 UNC
Other Features	Automatic Functions	Slice mode select by fibre type analysis
		Discharge power calibration
		Wind protector: open/close
		Sheath clamp: open
		Heater lid: open/close
	Heater clamp: open/close	
Reference Guide	Video and PDF file stored in splicer	
Sheath Clamp	Easy sleeve positioning clamp	
Electrode	Replaceable without tool	