



Bluetooth®

90S

Fujikura 90S Fusion Splicer

The 90S is the latest core alignment splicer from Fujikura. It's designed to give you high quality splices and to stay in the field. The 90S kit solves common problems seen in the field today, from splicing poor quality legacy fiber to automated equipment maintenance and upkeep. The 90S can be utilized in any field splicing application seen today: 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 even make it suitable for certain production and specialty environments, where high output, tight packaging, and low loss requirements are needed. Regardless your scenario, the 90S is designed to keep you going with an extended battery life of 300 splice and heat cycles, and by alleviating the need for traditional operation tasks such as; frequent arc calibrations, cleaver blade rotations, cleaver usage tracking, and manual splicing operations with its multiple automated and ease-of-use features. A redesigned work tray, cooling tray, and optional cable clamp make the 90S kit more versatile than any of its predecessors in adapting to varying work conditions and environments. In addition, if you are splicing loose buffer fiber, there is no longer a need to purchase and swap out with an additional sheath clamp. Now, a universal sheath clamp that handles both loose and tight buffer fiber is standard. Put our 90S to the test by contacting us to see its capabilities first-hand, 1-800-235-3423.



In Work Tray



Wind Protector Open

Features

- Cleaver tracking and upkeep with wireless communication
- 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
- Graphical User Interface with 5.0" Touchscreen
- 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



Fujikura 90S Fusion Splicer

Ordering Information

| DESCRIPTION | AFL NO. |
|---|---------|
| 90S Fusion Splicer (machine only) Includes: 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 and CC39 Transit Case with Carrying Strap | S017519 |
| 90S 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 and CC39 Transit Case with Carrying Strap | S017521 |
| 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 and CC39 Transit Case with Carrying Strap | S017520 |
| One Year Extended Warranty | S012996 |
| Two Year Extended Warranty | S013000 |

Recommended Products for the 90S

| DESCRIPTION | AFL NO. |
|--|---------|
| Cleavers | |
| CT08 Cleaver | S017004 |
| CT50 Cleaver | S017030 |
| Fiber Holders (pair) | |
| FH-70-250 (250 µm coated fiber) | S017111 |
| FH-70-900 (900 µm jacketed fiber) | S017113 |
| FH-70-160 (160 µm coated fiber) | S017095 |
| FH-60-LT900 (Loose buffer 900 µm fiber) | 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 |
| DCA-03 DC Adapter (Connect AC Adaptor without battery) | S017526 |

| DESCRIPTION | AFL NO. |
|---|---------|
| Miscellaneous | |
| SS03 Single fiber stripper (3 hole) | S017098 |
| SS01 Single fiber stripper (1 hole) | S017099 |
| ELCT2-16B Electrodes | S017103 |
| SP-03 Fiber Holder Set Plates | S017518 |
| 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 Fiber 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 |
| CC39 Transit Case | S017514 |
| Splicer V-Groove Cleaning Kit | S014397 |



Fiber 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 eleven 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 Dia. | Multi mode optical fiber | |
| Applicable Coating | Sheath Clamp | 80 to 150 μm | |
| | | Coating dia. : Max. 3,000 μm | |
| Fiber Splice Performance | Splice Loss | Cleave length : 5 to 16 mm | |
| | | 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 | |
| Applicable Protection Sleeve | Sleeve Type | ITU-T G.657 : Avg. 0.02 dB | |
| | | SM FAST mode : Avg. 8 to 10 sec. | |
| | | SM AUTO mode : Avg. 11 to 13 sec. | |
| Sleeve Heat Performance | Heat Time | AUTO mode : Avg. 14 to 16 sec. | |
| | | | |
| Sleeve Heat Performance | Heat Time | Heat-shrinkable sleeve | |
| | | Sleeve Length | Max. 66 mm |
| | | Sleeve Dia. | Max. 6.0 mm before shrinking |
| Fiber Tensile Test Force | | 60 mm slim mode : Avg. 9 to 10 sec. | |
| Electrode Life | | 60 mm mode : Avg. 13 to 15 sec. | |
| Fiber 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 | |
| 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 | |
| | Magnification | Approx. 5 – 8 hours from empty | |
| Illumination | V-Grooves | TFT 5 inches with touch screen | |
| | | 200 to 320x | |
| Interface | PC | LED lamp | |
| | External Led Lamp | USB2.0 Mini B type | |
| | Ribbon Stripper | USB2.0 A type, Approx. DC5V, 500 mA | |
| | Wireless | Mini DIN 6 pin, DC12V, Max. 1A | |
| Data Storage | Splice Mode | Bluetooth 4.1 LE | |
| | Heat Mode | 100 splice modes | |
| | Splice Result | 30 heat modes | |
| | Splice Image | 20,000 splices | |
| Other Features | Automatic Functions | 100 images | |
| | | Screw Hole For Tripod | 1/4-20 UNC |
| | | | Splice mode select by fiber 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 | |