





FSM-18S

FSM-18S Fusion Splicer

The FSM-18S Fusion Splicer is a low cost, fixed V-groove, single fiber fusion splicer with the same robust features offered in other high end models. The new rugged construction adds improved reliability by resisting shock, dust and rain, and withstands a 30" drop test.

New features such as automatic tube heater operation, user-selectable clamping method (sheath clamp or fiber holder system), automated monitor image orientation and battery charge capability during splicer operation provide the end user a reliable productivity tool. New software is included with each splicer and provides the user with the ability to download splice data to a PC for splice data reporting, download splicer operating software via the internet to maintain peak performance and download video images from the splicer to enhance technical support.

Features

- Rugged construction providing shock, dust and moisture resistance
- Dual monitor position with automatic image orientation
- Automatic arc calibration
- User-selectable fiber clamping method sheath clamp or fiber holders
- Auto-start tube heater
- Color LCD display and anti-reflective coating for excellent visibility in bright sunlight
- Simultaneous battery charge and splicer operation
- Long life battery (up to 150 splice/heat cycles per charge)
- Detachable work table incorporated into the transit case
- Data and video download software and splicer upgrade software included; software upgrades through PC application via the internet
- Green friendly RoHS and WEEE compliant



Ordering Information

| DESCRIPTION | AFL NO. |
|---|---------|
| FSM-18S Fusion Splicer (machine only) Includes: ADC-13 AC Adapter, ACC-14 AC Cord, Spare Electrodes (pair), S60A Sheath Clamp, USB Cable, Splicer Carrying Strap, Quick Reference Guide, Video Instruction Manual, JP-05 Splice Sleeve Cooling Tray and Transit Case with Carrying Strap | S014527 |
| FSM-18S Fusion Splicer Kit (with cleaver) Includes: CT30A Cleaver, ADC-13 AC Adapter, ACC-14 AC Cord, Spare Electrodes (pair), S60A Sheath Clamp, USB Cable, Splicer Carrying Strap, Quick Reference Guide, Video Instruction Manual, JP-05 Splice Sleeve Cooling Tray and Transit Case with Carrying Strap | S014528 |
| FSM-185 Fusion Splicer Kit (with cleaver, battery and cord) Includes: BTR-08 Battery, DCC-14 Battery Charge Cord, CT30A Cleaver, ADC-13 AC Adapter, ACC-14 AC Cord, Spare Electrodes (pair), S60A Sheath Clamp, USB Cable, Splicer Carrying Strap, Quick Reference Guide, Video Instruction Manual, JP-05 Splice Sleeve Cooling Tray and Transit Case with Carrying Strap | S014560 |
| One Year Extended Warranty | S012996 |
| Two Year Extended Warranty | S013000 |



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Accessories Recommended for the FSM-18S

| DESCRIPTION | AFL NO. |
|---|---------|
| Cleavers | |
| CT-30A Cleaver | S014080 |
| Fiber Holders (pairs) | |
| FH-60-250 Fiber Holder | S014548 |
| FH-60-900 Fiber Holder | S014549 |
| FH-60-160 Fiber Holder | S014690 |
| FH-60-LT900 Fiber Holder | S015181 |
| Batteries and Power Cords | |
| ADC-13 AC Adapter | S014535 |
| ACC-14 AC Power Cord | S014536 |
| BTR-08 Battery (160 splice/heat cycles) | S014540 |
| DCC-14 Battery Charge Cord (BTR-08) | S014541 |
| DCC-12 Power Cord | S013552 |
| (connects ADC-13 to cigarette lighter socket) | |
| DCC-13 Power Cord | S013556 |
| (connects ADC-13 to power source via alligator clips) | |

| DESCRIPTION | AFL NO. |
|---|---------|
| Sheath Clamps | |
| CLAMP-S60A Sheath Clamp | |
| (8 mm min. cleave for 250 μm, 16 mm min. cleave for 900 μm) | |
| CLAMP-S60B Sheath Clamp | S014551 |
| (8 mm min. cleave for 250 μm and 900 μm) | |
| CLAMP-S60C Sheath Clamp | S014552 |
| (16 mm cleave for 900 μm loose tube fiber) | |
| CLAMP-S60D Sheath Clamp | S014750 |
| (8 mm - 16 mm cleave for 900 μm loose tube fiber) | |
| Miscellaneous | |
| ELCT2-20A Electrodes | S013532 |
| Portable Tripod Workstation (see product profile for more detail) | S014773 |
| ASW-02 Splicing Workstation (see product profile for more detail) | S010532 |
| JP-05 Splice Sleeve Cooling Tray | S014537 |
| CC-24-18S Transit Case | S014557 |

Specifications

| PARAMETER | VALUE |
|-----------------------------|---|
| Model | FSM-18S Fusion Splicer |
| Applicable Fibers | Single-mode (G.652 & G.657), Multimode (G.651), DS (G.653), NZDS (G.655) |
| Cladding Diameter | 125 µm |
| Coating Diameter | 100 µm to 1000 µm |
| Fiber Cleave Length | 8 to 16 mm with 250 µm coating diameter, 16 mm with 900 µm coating diameter |
| Typical Average Splice Loss | 0.05 dB with SM, 0.02 dB with MM, 0.08 dB with DS, 0.08 dB with NZDS, measured by cut-back method relevant to ITU-T and IEC standards |
| Splicing Time | Typical 11 seconds with standard single-mode fiber |
| Arc Calibration Method | Automatic, real-time by using results of previous splice when in AUTO mode; manual arc calibration function available |
| Splicing Modes | 100 preset and user programmable modes |
| Splice Loss Estimate | Based upon dual camera cladding axis alignment data |
| Storage of Splice Result | Last 2000 results to be stored in the internal memory |
| Fiber Display | X or Y, or both X and Y simultaneously; front or rear monitor display options with automated image orientation |
| Magnification | 300X for single X or Y view, or 187X for X and Y view |
| Viewing Method | Dual cameras with 4.1 inch TFT color LCD monitor with anti-reflective coating |
| Operating Condition | 0 to 3,660m above sea level, 0 to 95% RH, -10 to 50°C respectively |
| Mechanical Proof Test | 1.96 to 2.25N |
| Tube Heater | Built-in tube heater with 30 heating modes; auto-start function |
| Tube Heating Time | Typical 30 seconds with FP-03 sleeve, 35 seconds with FP3 (40), 35-55 seconds with Fujikura micro sleeves |
| Protection Sleeve Length | 60 mm, 40 mm, micro |
| Splice/Heat with Battery | Typical 150 cycles with power save functions activated |
| Power Supply | Auto voltage selection from 100 to 240V AC or 10 to 15V DC with ADC-1, 13.2V DC with BTR-08 battery |
| Terminals | USB 1.1 (USB-B type) for PC communication, Mini-DIN (6-pin) for HJS-02/03 and SH-8 tube heater |
| Wind Protection | Maximum wind velocity of 15m/s (34 mph) |
| Dimensions | 136 W x 161 D x 143 H (mm) / 5.3 W x 6.3 D x 5.6 H (inches) |
| Weight | 2.1 kg (4.6 lbs) with AC adapter ADC-11; 2.5kg (5.5 lbs) with BTR-08 battery |