



FSM-18S



Detachable Work Table

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 & WEEE compliant

Ordering Information

| DESCRIPTION | PART # |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| FSM-18S Fusion Splicer (machine only) <i>Includes:</i> ADC-13 AC Adapter, ACC-14 AC Cord, Spare Electrodes (pair), 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) <i>Includes:</i> CT30A Cleaver, ADC-13 AC Adapter, ACC-14 AC Cord, Spare Electrodes (pair), 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-18S Fusion Splicer Kit (with cleaver, battery and cord) <i>Includes:</i> BTR-08 Battery, DCC-14 Battery Charge Cord, CT30A Cleaver, ADC-13 AC Adapter, ACC-14 AC Cord, Spare Electrodes (pair), 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 |



FSM-18S Fusion Splicer

Accessories Recommended for the FSM-18S

| DESCRIPTION | PART # |
|----------------------------------------------------------------------------|---------|
| Cleavers | |
| CT-30A Cleaver | S014080 |
| Fiber Holders (pairs) | |
| FH-60-250 Fiber Holder | S014548 |
| FH-60-900 Fiber Holder | S014549 |
| Batteries and Power Cords | |
| ADC-13 AC Adapter | S014535 |
| BTR-08 Battery | S014540 |
| DCC-14 Power Cord (connects ADC-13 to BTR-08) | S014541 |
| DCC-12 Power Cord (connects ADC-13 to cigarette lighter socket) | S013552 |
| DCC-13 Power Cord (connects ADC-13 to power source via alligator clips) | S013556 |

| DESCRIPTION | PART # |
|------------------------------------------------------------------------------------|---------|
| Miscellaneous | |
| ELCT2-20A Electrodes | S013532 |
| ASW-02 Splicing Workstation | S010532 |
| JP-05 Splice Sleeve Cooling Tray | S014537 |
| CLAMP-S60A Sheath Clamp (8mm min. cleave for 250µm, 16mm min. cleave for 900µm) | S014550 |
| CLAMP-S60B Sheath Clamp (8mm min. cleave for 250µm and 900µm) | S014551 |
| CLAMP-S60 Sheath Clamp (For 900µm loose tube fiber) | S014552 |
| CC-24-18S Transit Case (fits only FSM-18S) | S014557 |
| One Year Extended Warranty | S012996 |
| Two Year Extended Warranty | S013000 |

Specifications

| PARAMETER | VALUE |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Model | FSM-18S Fusion Splicer |
| Applicable Fibers | Single-mode (ITU-T G.652), multimode (ITU-T G.651), DS (ITU -T G.653), NZDS (ITU-T G.655) |
| Cladding Diameter | 125µm |
| Coating Diameter | 100µm to 1000µm |
| Fiber Cleave Length | 8 to 16mm with 250µm coating diameter, 16mm with 900µm coating diameter |
| Typical Average Splice Loss | 0.05dB with SM, 0.02dB with MM, 0.08dB with DS, 0.08dB 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 | 60mm, 40mm, 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 | 136W x 161D x 143H (mm) / 5.3W x 6.3D x 5.6H (inches) |
| Weight | 2.1 kg (4.6 lbs) with AC adapter ADC-11; 2.5kg (5.5 lbs) with BTR-08 battery |