



FSM-60S Fusion Splicer

The FSM-60S fusion splicer sets the standard for core alignment fusion splicing by incorporating a user-friendly interface with enhanced features to provide the most rugged and reliable fusion splicer in the market today. The new rugged construction adds improved reliability by resisting shock, dust, and rain, and can withstand a 30" drop test.

The FSM-60S splices a fiber in 9 seconds and heats a 60mm splice sleeve in 30 seconds, for a total cycle time of only 39 seconds. 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 productivity tool they can count on.

New software included provides 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 and fiber identification
- User-selectable fiber clamping method – sheath clamp or fiber holders
- Auto-start tube heater feature
- Color LCD display with anti-reflective coating for excellent visibility in bright sunlight
- Simultaneous battery charge and splicer operation
- Long life battery (up to 160 splice/heat cycles per charge)
- Detachable work table incorporated into the transit case
- Data and video download software included; software upgrade available via the internet
- Green friendly – RoHS & WEEE compliant

Ordering Information

| DESCRIPTION | PART # |
|--|---------|
| FSM-60S 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 | S014531 |
| FSM-60S 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 | S014532 |
| FSM-60S 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 | S014562 |

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Accessories Recommended for the FSM-60S

| 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 (160 splice/heat cycles) | 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-24-60S Transit Case (fits only FSM-60S) | S014559 |
| One Year Extended Warranty | S012996 |
| Two Year Extended Warranty | S013000 |

Specifications

| PARAMETER | VALUE |
|---------------------------------|---|
| Model | FSM-60S 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 | 80µm to 150µm |
| Coating Diameter | 100µm to 1,000µm |
| Fiber Cleave Length | 8 to 16mm with 250µm coating diameter, 16mm with 900µm coating diameter |
| Typical Average Splice Loss | 0.02dB with SM, 0.01dB with MM, 0.04dB with DS, 0.04dB with NZDS |
| | Measured by cut-back method relevant to ITU-T and IEC standards |
| Splicing Time | Typical 9 seconds with standard single-mode fiber |
| Arc Calibration Method | Automatic, real-time and 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 core 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 |
| Operating Condition | 0 to 5,000m above sea level, 0 to 95%RH and -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 Cycles with Battery | Typical 160 cycles with power save functions activated |
| Power Supply | Auto voltage selection from 100 to 240V AC or 10 to 15V DC with ADC-11, 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 | 2.3 kg (5.1 lbs) with AC adapter ADC-11; 2.7kg (5.9 lbs) with BTR-08 battery |