



FSM-60R12



Detachable Work Table

# FSM-60R12 Fusion Splicer

The FSM-60R12 Fusion Splicer offers unmatched versatility and reliability. The new ribbon splicer withstands a drop test of up to 30" and continues to splice. And enhanced, robust features enable the FSM-60R12 to resist shock, dust, and rain so that unfortunate environmental conditions do not negatively impact productivity.

Equipped with a user-friendly interface and precision fixed V-groove, the FSM-60R12 offers 2 to 12 fiber ribbon splicing, as well as, single fiber splicing capability. Automated features such as auto-start splicing, auto-start tube heater operation, automatic ribbon fiber identification, and auto-arc calibration reduce operational steps and improve splicing performance. Additional improvements include automatic image orientation when switching the dual position monitor, a large capacity battery option and the ability to charge the battery during splicer operation.

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 ribbon fiber identification
- Auto-start tube heater
- Color LCD display with anti-reflective coating for excellent visibility in bright sunlight
- Simultaneous battery charge and splicer operation
- Long life battery (up to 90 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	AFL NO.
<b>FSM-60R12 Fusion Splicer (machine only)</b> <b>Includes:</b> FH-50-12 Fiber Holders (pair), ADC-13 AC Adapter, ACC-14 AC Cord, Magnifier, JP-05 Splice Sleeve Cooling Tray, USB Cable, Splicer Carrying Strap, Spare Electrodes (pair), Quick Reference Guide, Video Instruction Manual, and Transit Case with Carrying Strap	S014533
<b>FSM-60R12 Fusion Splicer Kit (with cleaver and stripper)</b> <b>Includes:</b> CT-30 Cleaver, HJS-02 Hot Jacket Stripper, FH-50-12 Fiber Holders (pair), ADC-13 AC Adapter, ACC-14 AC Cord, Magnifier, JP-05 Splice Sleeve Cooling Tray, USB Cable, Splicer Carrying Strap, Spare Electrodes (pair), Quick Reference Guide, Video Instruction Manual, and Transit Case with Carrying Strap	S014534
FSM-60R12 Fusion Splicer Kit (with cleaver, stripper, battery and cord) Includes: CT-30 Cleaver, HJS-02 Hot Jacket Stripper, FH-50-12 Fiber Holders (pair), BTR-08 Battery, DCC-14 Battery Charge Cord, ADC-13 AC Adapter, ACC-14 AC Cord, Magnifier, JP-05 Splice Sleeve Cooling Tray, USB Cable, Splicer Carrying Strap, Spare Electrodes (pair), Quick Reference Guide, Video Instruction Manual, and Transit Case with Carrying Strap	S014563



# FSM-60R12 Fusion Splicer

#### Accessories Recommended for the FSM-60R12

DESCRIPTION	AFL NO.
Cleavers and Strippers	
CT-30 Cleaver	S014076
HJS-02 Hot Jacket Stripper	S010340
Batteries and Power Cords	
ADC-13 AC Adapter	S014535
BTR-08 Battery	S014540
DCC-14 Battery Charge Cord (BTR-08)	S014541
DCC-12 Power Cord (connects ADC-13 to cigarette lighter socket)	S013552
DCC-13 Power Cord	S013556
(connects ADC-13 to power source via alligator clips)	
ACC-14 AC Power Cord	S014536
Fiber Holders (pairs)	
FH-50-12	S013828
FH-50-10	S013824
FH-50-8	S013820
FH-50-6	S013816
FH-50-4	S013812

DESCRIPTION	AFL NO.
Fiber Holders (pairs) – continued	
FH-50-2	S013808
FH-50-250 (250µm coated single fiber)	S013800
FH-50-900 (900µm jacketed single fiber)	S013804
Miscellaneous	
ELCT2-20A Electrodes	S013532
Portable Tripod Workstation (see product profile for more detail)	S014733
ASW-02 Splicing Workstation (see product profile for more detail)	S010532
JP-05 Splice Sleeve Cooling Tray	S014537
MGS-06 Magnifier (with bracket)	S014555
FST-12 Fiber Separation Tool	S014012
FAT-04 Fiber Arrangement Tool	S010212
FAA-03A Ribbon Forming Adhesive (4 oz. bottle)	S008720
FAA-03A Ribbon Forming Adhesive (0.5 liter bottle)	S008622
CC-24-60R Transit Case (fits FSM-60R12 only)	S014558
One Year Extended Warranty	S012996
Two Year Extended Warranty	S013000

### **Specifications**

PARAMETER	VALUE
Model	FSM-60R12 Fusion Splicer
Applicable Fibers	Single-mode (G.652 & G.657), Multimode (G.651), DS (G.653), NZDS (G.655)
Fiber Count	Single, 2, 4, 5, 6, 8, 10, 12
Cladding Diameter	125µm
Coating Diameter	Ribbon: 0.25mm to 0.4mm, Single: 250µm and 900µm
Fiber Cleave Length	10mm
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 20 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 alignment data
Storage of Splice Result	Last 2000 splice results stored in the internal memory
Fiber Display	X or Y, or both X and Y simultaneously; front or rear monitor display options with automatic image orientation
Magnification	35X to 90X
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, 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 50 seconds with FP-5 sleeve, 40 seconds with FP3 (40), 35-55 seconds with Fujikura micro sleeves
Protection Sleeve Length	60mm, 40mm, Micro
Splice/Heat Cycles with Battery	Typical 90 cycles with power save functions activated
Power Supply	Auto voltage selection from 100 to 240V AC or 10 to 15V DC with ADC-13, 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-13; 2.5kg (5.5 lbs) with BTR-08 battery