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 60 mm 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.

FSM-60S

Detachable Work Table

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 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-60S 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	S014531
FSM-60S 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	S014532
FSM-60S 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	S014562
One Year Extended Warranty	S012996
Two Year Extended Warranty	S013000

FSM-60S Fusion Splicer

Accessories Recommended for the FSM-60S

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 (connects ADC-13 to cigarette lighter socket)	S013552
DCC-13 Power Cord (connects ADC-13 to power source via alligator clips)	S013556

DESCRIPTION	AFL NO.
Sheath Clamps	
CLAMP-S60A Sheath Clamp (8 mm min. cleave for 250 µm, 16 mm min. cleave for 900 µm)	S014550
CLAMP-S60B Sheath Clamp (8 mm min. cleave for 250 µm and 900 µm)	S014551
CLAMP-S60C Sheath Clamp (16 mm cleave for 900 µm loose tube fiber)	S014552
CLAMP-S60D Sheath Clamp (8 mm - 16 mm cleave for 900 µm loose tube fiber)	S014750
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-24-60S Transit Case	S014559
WPM-08 Wind Protector Mirror	S014547

Specifications

PARAMETER	VALUE
Model	FSM-60S Fusion Splicer
Applicable Fibers	Single-mode (G.652 & G.657), Multimode (G.651), DS (G.653), NZDS (G.655)
Cladding Diameter	80 µm to 150 µm
Coating Diameter	100 µm to 1,000 µm
Fiber Cleave Length	8 to 16 mm with 250 µm coating diameter, 16 mm with 900 µm coating diameter
Typical Average Splice Loss	0.02 dB with SM, 0.01 dB with MM, 0.04 dB with DS, 0.04 dB 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 5,000 m 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	60 mm, 40 mm, micro
Splice/Heat Cycles with Battery	Typical 160 cycles with power save functions activated
Power Supply	Auto voltage selection from 100 to 240 V AC or 10 to 15 V DC with ADC-11, 13.2 V 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 15 m/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; 2.7 kg (5.9 lbs) with BTR-08 battery