FAFL

FUSION SPLICING SYSTEMS

Fusion Splicers | Cleavers | Tools & Supplies | Software

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FSM-60S

Detachable Work Table

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 and splicer upgrade software included; software upgrades through PC application via the internet
- Green friendly – RoHS & 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

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
Batteries and Power Cords	
ADC-13 AC Adapter	S014535
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
ACC-14 AC Power Cord	S014536

DESCRIPTION	AFL NO.
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
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-S60C Sheath Clamp (16mm cleave for 900µm loose tube fiber)	S014552
CLAMP-S60D Sheath Clamp (8mm - 16mm cleave for 900µm loose tube fiber)	S014750
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 (G.652 & G.657), Multimode (G.651), DS (G.653), NZDS (G.655)
Cladding Diameter	80µm to150µm
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

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.

FSM-18S

Detachable Work Table

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

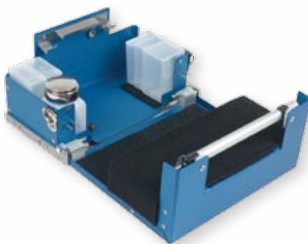| DESCRIPTION	AFL NO.
FSM-18S Fusion Splicer (machine only) **Includes:** ADC-13 AC Adapter, ACC-14 AC Cord, Spare Electrodes (pair), S60A Sheath Clamp, USB Cable, Splicer Carrying Strap, Quick Reference Guide, Video Instruction Manual, JP-05 Splice Sleeve Cooling Tray, and Transit Case with Carrying 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-18S 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

FSM-18S Fusion Splicer

Accessories Recommended for the FSM-18S

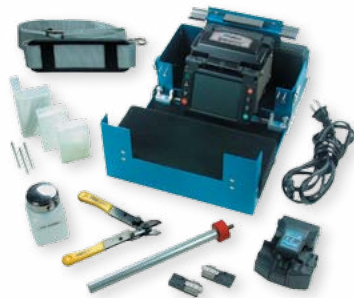| DESCRIPTION	AFL NO.
Cleavers	
CT-30A Cleaver	S014080
Fiber Holders (pairs)	
FH-60-250 Fiber Holder	S014548
FH-60-900 Fiber Holder	S014549
Batteries and Power Cords	
ADC-13 AC Adapter	S014535
BTR-08 Battery (160 splice/heat cycles)	S014540
DCC-14 Battery Charge Cord (BTR-08)	S014541
DCC-12 Power Cord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

DESCRIPTION	AFL NO.
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
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-S60C Sheath Clamp (16mm cleave for 900µm loose tube fiber)	S014552
CLAMP-S60D Sheath Clamp (8mm - 16mm cleave for 900µm loose tube fiber)	S014750
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-18S Fusion Splicer
Applicable Fibers	Single-mode (G.652 & G.657), Multimode (G.651), DS (G.653), NZDS (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

SpliceMate™
FSM-11S Fusion Splicer

SpliceMate (FSM-11) is the world's smallest and most portable fusion splicer and is designed to meet the challenges posed by today's fiber networks. SpliceMate fits in the palm of your hand, yet it's smart and reliable enough to be used with confidence by inexperienced operators.

SpliceMate's advanced intelligence features include two-camera fiber inspection to insure the splice is right and Auto Arc Calibration…an industry first. It's easy to operate and quickly makes low loss splices with all common types of optical fibers. SpliceMate is available with a variety of powering options including a battery pack and adapters to work with AC or DC power sources.

A workstation, specifically designed for the SpliceMate, is available for simplified splicing in the field. Whether splicing on a pole, in a bucket, or in a neighborhood…SpliceMate is the friend to have along on the job!

Portable Workstation

SpliceMate shown with Portable Workstation

Features

- Highly portable
- Dual camera inspection
- 3.5" dual direction monitor
- 40 second tube heater
- Auto arc calibration
- 30 mph wind protector

Specifications

PARAMETER	VALUE
Model	FSM-11S Fusion Splicer
Applicable Fibers	Single-mode (G.652 & G.657), Multimode (G.651), DS (G.653), NZDS (G.655)
Number of Fiber	Single fiber
Cladding Diameter	125µm
Coating Diameter	250µm and 900µm
Typical Average Splice Loss	SMF = 0.05dB / MMF = 0.02dB
Splicing Time	15 seconds
Arc Calibration Method	Automatic and manual methods
Splicing Modes (40)	Auto SM / NZ / DS Auto MM SM, MM, NZ-DSF, DSF
Splice Loss Estimate	Based on dual camera inspection
Monitor	3.5", adjustable monitor angle (front or top selectable)
Tube Heating Time	40 seconds
Number of Splice / Heat with Battery	30
Power Supply	AC, DC, Battery
Terminals	USB
Wind Protection	30 mph
Dimensions	110W x 80D x 100H (mm) / 4.33W x 3.14D x 3.94H (inches)
Weight with Battery	0.80kg / 1.76 lbs.

_Splice_Mate™
HANDHELD FUSION SPLICER

SpliceMate™
FSM-11S Fusion Splicer

Ordering Information

DESCRIPTION	ITEMS INCLUDED	AFL NO.
FSM-11S Fusion Splicer Kit	- FSM-11S Fusion Splicer - FH-50-250 Fiber Holders - BTC-04 Battery Charger - BTR-07 Battery - ADC-10 Adapter (for BTC-04) - ACC-09 Power Cord (for ADC-10) - Spare Electrodes (Pair) - Operation Manual - Transit Case	S013956
FSM-11S Fusion Splicer Kit with Cleaver	- FSM-11S Fusion Splicer - CT-30 Cleaver - FH-50-250 Fiber Holders - BTC-04 Battery Charger - BTR-07 Battery - ADC-10 Adapter (for BTC-04) - ACC-09 Power Cord (for ADC-10) - Spare Electrodes (Pair) - Operation Manual - Transit Case	S013988

Accessories & Supplies

DESCRIPTION	AFL NO.
Cleavers	
CT-30 Cleaver	S014076
FC-02 Fiber Collector	S014092
FDB-02 Fiber Collector Scrap Box	S014104
FDB-03 Large Fiber Collector Scrap Box	S014483
Batteries and Power Cords	
BTC-04 Battery Charger for SpliceMate (charges BTR-07)	S014000
BTR-07 Battery for SpliceMate	S014004
ACC-09 Power Cord (for ADC-10)	S014390
DCA-02 DC Adaptor for SpliceMate (needed for AC operation)	S014008
ADC-10 AC Adapter (for BTC-04)	S012548
Miscellaneous	
FH-50-250 Fiber Holders (250µm single fiber)	S013800
FH-50-900 Fiber Holders (900µm single fiber)	S013804
SpliceMate Portable Workstation	S014052
NID Mounting Kit	S014108
LC-01 Leather Case for SpliceMate	S014024
Electrodes: FSM-11S/R	S014028
Data Download Software	S014415
CC-17 Transit Case for SpliceMate	S013984

SpliceMate™
HANDHELD FUSION SPLICER
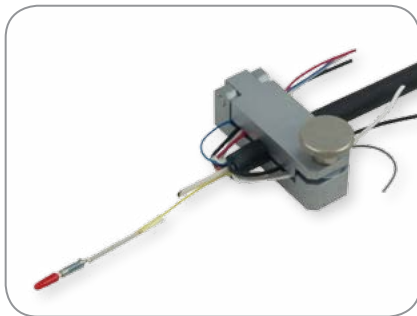
Fujikura Fusion Splicers
for Broadcast SMPTE Cable
For use with HDTV Fiber Optic Tri-Loc® Camera Connectors

To address the rapidly expanding market for field installable HDTV camera connectors, AFL and Winchester Electronics have partnered to develop a customized Winchester KINGS® brand Fujikura fusion splicing system for installation of the Fiber Optic Tri-Loc® Camera Connector for SMPTE 311 hybrid fiber optic cable and the AFL FuseConnect® field installable connectors.

Splicing of the Tri-Loc Camera Connector is performed using a special cable clamping system along with fiber holders designed to accept the Tri-Loc termini. This design allows for the use of a standard length connector housing for the connector. Both the FSM-18S fixed V-groove and FSM-60S core alignment splicer models retain standard splicing functionality while incorporating enhanced features to provide the most reliable fusion splicers in the market today. The rugged construction adds improved reliability by resisting shock, dust and rain.

Features

- Modification for splicing Fiber Optic Tri-Loc® Camera Connectors
- Special cable clamping system with fiber holders for Tri-Loc termini
- Rugged construction ideal for harsh environments
- Customization of cable lengths on site / in the field
- Green friendly – RoHS and WEEE compliant

Ordering Information

DESCRIPTION	AFL NO.
FSM-60S Fusion Splicer Kit with Winchester Tri-Loc Camera Connector Modification **Includes:** Tri-Loc modification, CT-30A 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, Cleaving Station and Transit Case with Carrying Strap	S014791
FSM-60S Fusion Splicer Kit with Battery and Winchester Tri-Loc Camera Connector Modification **Includes:** Tri-Loc modification, CT30A Cleaver, BTR-08 Battery, DCC-14 Battery Charge Cord, 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, Cleaving Station and Transit Case with Carrying Strap	S014797
FSM-18S Fusion Splicer Kit with Winchester Tri-Loc Camera Connector Modification **Includes:** 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, Cleaving Station and Transit Case with Carrying Strap	S014792
FSM-18S Fusion Splicer Kit with Battery and Winchester Tri-Loc Camera Connector Modification **Includes:** 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, Cleaving Station and Transit Case with Carrying Strap	S014798
Winchester Tri-Loc Connector Modification for the FSM-60S or FSM-18S Fusion Splicer Kits **Includes:** Modifications to customer provided FSM-60S or FSM-18S fusion splicers, cable clamp for broadcast cable, fiber holder for broadcast cable, fiber holder for Tri-Loc termini	S014796

Accessories Recommended for the FSM-60S

DESCRIPTION	AFL NO.
Cleavers	
CT-30A Cleaver	S014080
Cleaving Station for SMPTE Cable	S014843
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 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
ACC-14 AC Power Cord	S014536

DESCRIPTION	AFL NO.
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
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-S60C Sheath Clamp (16mm cleave for 900µm loose tube fiber)	S014552
CLAMP-S60D Sheath Clamp (8mm - 16mm cleave for 900µm loose tube fiber)	S014750
CC-24-60S Transit Case (fits only FSM-60S)	S014559
One Year Extended Warranty	S012996
Two Year Extended Warranty	S013000

Specifications

PARAMETER	VALUE (FSM-60S)	VALUE (FSM-18S)
Model	FSM-60S Fusion Splicer	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)	Single-mode (ITU-T G.652), multimode (ITU-T G.651), DS (ITU -T G.653), NZDS (ITU-T G.655)
Cladding Diameter	80µm to150µm	125µm
Coating Diameter	100µm to 1,000µm	100µm to 1000µm
Fiber Cleave Length	8-16mm with 250µm coating diameter, 16mm with 900µm coating diameter	8-16mm 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	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 9 seconds with standard single-mode fiber	Typical 11 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	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	100 preset and user programmable modes
Splice Loss Estimate	Based upon dual camera core alignment data	Based upon dual camera cladding axis alignment data
Storage of Splice Result	Last 2000 results to be stored in the internal memory	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	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	300X for single X or Y view, or 187X for X and Y view
Viewing Method	Dual cameras with 4.1" TFT color LCD monitor	Dual cameras with 4.1" TFT color LCD monitor with anti-reflective coating
Operating Condition	0 to 5,000m above sea level, 0 to 95%RH and -10 to 50°C respectively	0 to 3,660m above sea level, 0 to 95% RH, -10 to 50°C respectively
Mechanical Proof Test	1.96 to 2.25N	1.96 to 2.25N
Tube Heater	Built-in tube heater with 30 heating modes; auto-start function	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	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	60mm, 40mm, micro
Splice/Heat Cycles with Battery	Typical 160 cycles with power save functions activated	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-11, 13.2V DC with BTR-08 battery	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	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)	Maximum wind velocity of 15m/s. (34 mph)
Dimensions	136W x 161D x 143H (mm) / 5.3W x 6.3D x 5.6H (inches)	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	2.1 kg (4.6 lbs) with AC adapter ADC-11; 2.5kg (5.5 lbs) with BTR-08 battery

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.

FSM-60R12

Detachable Work Table

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.
FSM-60R12 Fusion Splicer (machine only) **Includes:** 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
FSM-60R12 Fusion Splicer Kit (with cleaver and stripper) **Includes:** 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 (connects ADC-13 to power source via alligator clips)	S013556
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

FSM-18R

FSM-18R Fusion Splicer

The FSM-18R fusion splicer is a 4-fiber ribbon splicer with similar versatility and robust nature of the Fujikura 12-fiber ribbon splicer. Well-suited for FTTx or LAN applications, the FSM-18R fusion splicer can splice up to 4 fibers, as well as, single fibers. The enhanced robust features provide resistance to shock, dust, and rain to minimize downtime and improve operational performance and withstands a 30" drop test.

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 with each splicer 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.

Detachable Work Table

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 and 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.
FSM-18R Fusion Splicer (machine only) **Includes:** FH-50-4 Fiber Holders (pair), ADC-13 AC Adapter, ACC-14 AC Cord, 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	S014529
FSM-18R Fusion Splicer Kit (with cleaver and stripper) **Includes:** CT-30 Cleaver, HJS-02 Hot Jacket Stripper, FH-50-4 Fiber Holders (pair), ADC-13 AC Adapter, ACC-14 AC Cord, 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	S014530
FSM-18R Fusion Splicer Kit (with cleaver, stripper, battery and cord) **Includes:** CT-30 Cleaver, HJS-02 Hot Jacket Stripper, FH-50-4 Fiber Holders (pair), BTR-08 Battery, DCC-14 Battery Charge Cord, ADC-13 AC Adapter, ACC-14 AC Cord, 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	S014561

FSM-18R Fusion Splicer

Accessories Recommended for the FSM-18R

DESCRIPTION	AFL NO.
Cleavers and Strippers	
CT-30 Cleaver	S014076
HJS-02 Hot Jacket Stripper	S010340
Fiber Holders (pairs)	
FH-50-4	S013812
FH-50-2	S013808
FH-50-250 (250µm coated single fiber)	S013800
FH-50-900 (900µm jacketed single fiber)	S013804
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 (connects ADC-13 to power source via alligator clips)	S013556
ACC-14 AC Power Cord	S014536

DESCRIPTION	AFL NO.
Miscellaneous	
ELCT2-20A Electrodes	S013532
FST-12	S014012
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
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-24-18R Transit Case (fits only FSM-18R)	S014556
One year extended warranty	S012996
Two year extended warranty	S013000

Specifications

PARAMETER	VALUE
Model	FSM-18R Fusion Splicer
Applicable Fibers	Single-mode (G.652 & G.657), Multimode (G.651), DS (G.653), NZDS (G.655)
Fiber Count	Single, 2, 4
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	90X
Viewing Method	Dual cameras with 4.1 inch TFT color LCD monitor with anti-reflective coating
Operating Condition	0 to 5,000m 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 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 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

Portable Workstation
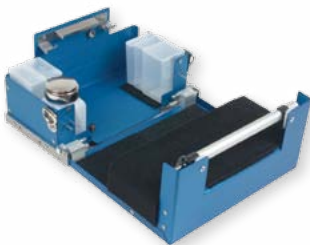

SpliceMate shown with Portable Workstation

SpliceMate™
FSM-11R Fusion Splicer

SpliceMate (FSM-11) is the world's smallest and most portable fusion splicer and is designed to meet the challenges posed by today's fiber networks. SpliceMate fits in the palm of your hand, yet it's smart and reliable enough to be used with confidence by inexperienced operators.

SpliceMate's advanced intelligence features include two-camera fiber inspection to insure the splice is right and Auto Arc Calibration...an industry first. It's easy to operate and quickly makes low loss splices with all common types of optical fibers up to 4-fiber ribbons. SpliceMate is available with a variety of powering options including a battery pack and adapters to work with AC or DC power sources.

A workstation, specifically designed for the SpliceMate, is available for simplified splicing in the field. Whether splicing on a pole, in a bucket, or in a neighborhood...SpliceMate is the friend to have along on the job!

Features

- Highly portable
- Dual camera inspection
- 3.5" dual direction monitor
- 40 second tube heater
- Auto arc calibration
- 30 mph wind protector

Specifications

PARAMETER	VALUE
Model	FSM-11R Fusion Splicer
Applicable Fibers	Single-mode (G.652 & G.657), Multimode (G.651), DS (G.653), NZDS (G.655)
Number of Fiber	Up to 4-fiber ribbon
Cladding Diameter	125µm
Typical Average Splice Loss	SMF = 0.05dB / MMF = 0.02dB
Splicing Time	20 seconds
Arc Calibration Method	Automatic and manual methods
Splicing Modes (40)	Auto SM / NZ / DS Auto MM SM, MM, NZ-DSF, DSF
Splice Loss Estimate	Based on dual camera inspection
Monitor	3.5", adjustable monitor angle (front or top selectable)
Tube Heating Time	40 seconds
Number of Splice / Heat with Battery	30
Power Supply	AC, DC, Battery
Terminals	USB
Wind Protection	30 mph
Dimensions	110W x 80D x 100H (mm) / 4.33W x 3.14D x 3.94H (inches)
Weight with Battery	0.80kg / 1.76 lbs.

SpliceMate™
HANDHELD FUSION SPLICER

SpliceMate™
FSM-11R Fusion Splicer

Ordering Information

DESCRIPTION	ITEMS INCLUDED	AFL NO.
FSM-11R Fusion Splicer Kit	- FSM-11R Fusion Splicer - FH-50-4 Fiber Holders - BTC-04 Battery Charger - BTR-07 Battery - ADC-10 Adapter (for BTC-04) - ACC-09 Power Cord (for ADC-10) - Spare Electrodes (Pair) - Operation Manual - Transit Case	S013960*
FSM-11R Fusion Splicer Kit with Cleaver	-FSM-11R Fusion Splicer -CT-30 Cleaver -FH-50-4 Fiber Holders -BTC-04 Battery Charger -BTR-07 Battery -ADC-10 Adapter (for BTC-04) -ACC-09 Power Cord (for ADC-10) -Spare Electrodes (Pair) -Operation Manual -Transit Case -HJS-03 Battery Powered Hot Jacket Stripper	S013992*

* The DCA-02 is required for AC operation and can be purchased separately.

Accessories & Supplies

DESCRIPTION	AFL NO.
Cleavers	
CT-30 Cleaver	S014076
FC-02 Fiber Collector	S014092
FDB-02 Fiber Collector Scrap Box	S014104
FDB-03 Large Fiber Collector Scrap Box	S014483
Batteries and Power Cords	
BTC-04 Battery Charger for SpliceMate (charges BTR-07)	S014000
BTR-07 Battery for SpliceMate	S014004
ACC-09 Power Cord (for ADC-10)	S014390
DCA-02 DC Adaptor for SpliceMate (needed for AC operation)	S014008
ADC-10 AC Adapter (for BTC-04)	S012548
Miscellaneous	
FH-50-250 Fiber Holders (250µm single fiber)	S013800
FH-50-900 Fiber Holders (900µm single fiber)	S013804
FH-50-4 Fiber Holders	S013812
FH-50-2 Fiber Holders	S013808
SpliceMate Portable Workstation	S014052
NID Mounting Kit	S014108
HJS-03 Battery Powered Hot Jacket Stripper	S013996
LC-01 Leather Case for SpliceMate	S014024
Electrodes: FSM-11S/R	S014028
FAT-02 Fiber Arrangement Tool	S002111
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
Data Download Software	S014415

SpliceMate™
HANDHELD FUSION SPLICER

SpliceMate™
FSM-11R D900 Fusion Splicer

The SpliceMate D900 has a unique design that is ideally suited for tactical fiber optic cable assembly (TFOCA) repair needs. The D900 is the industry-standard for simultaneously splicing two 900µm jacketed optical fibers. Its user-friendly graphical interface and automated features make it suitable for those with limited splicing experience.

Features

- Optimized for dual-fiber splicing for TFOCA cable applications
- Extremely lightweight – less than two pounds
- Small package design – four inch by three inch footprint
- Automatic arc calibration – minimizes maintenance requirements
- Dual camera inspection – minimizes splice loss
- Dual direction monitor – provides viewing versatility
- 30 mph wind protector – expands field applications

Portable Workstation

SpliceMate shown with Portable Workstation

Specifications

PARAMETER	VALUE
Model	FSM-11R D900 Fusion Splicer
Applicable Fibers	SMF, MMF, NZ-DSF, DSF
Cladding Diameter	125µm
Typical Average Splice Loss	SMF = 0.05dB / MMF = 0.02dB
Splicing Time	20 seconds
Arc Calibration Method	Automatic and manual methods
Splicing Modes	Auto / SM / MM / NZ / DS
Splice Loss Estimate	Based on dual camera inspection
Monitor	3.5" LCD, adjustable monitor angle (front or top selectable)
Tube Heating Time	40 seconds
Number of Splice / Heat with Battery	30
Power Supply	AC, DC, Battery
Terminals	USB
Wind Protection	30 mph
Dimensions	110W x 80D x 100H (mm) / 4.33W x 3.14D x 3.94H (inches)
Weight with Battery	0.80kg / 1.76 lbs.

Ordering Information

DESCRIPTION	PART NUMBER
FSM-11R D900 Fusion Splicer	S014112
FSM-11R D900 Fusion Splicer Kit	S014116

SpliceMate™
HANDHELD FUSION SPLICER

SpliceMate™
FSM-11R D900 Fusion Splicer

Ordering Information

DESCRIPTION	ITEMS INCLUDED	AFL NO.
FSM-11R D900 Fusion Splicer	- FSM-11R D900 Fusion Splicer - FH-50-D900 Fiber Holders (Dual 900µm Fiber) - BTC-04 Battery Charger - BTR-07 Battery - Spare Electrodes (Pair) - Operation Manual - Transit Case	S014112

FSM-11R D900 Fusion Splicer Kit	- FSM-11R D900 Fusion Splicer
	- FH-50-D900 Fiber Holders
	  (Dual 900µm Fiber)
	- BTC-04 Battery Charger
	- BTR-07 Battery
	- Spare Electrodes (Pair)
	- Operation Manual
	- Transit Case
	- CT-30 Cleaver
	- HJS-03-D900 Battery Powered
	  Hot Jacket Stripper
		S014116

Accessories & Supplies

DESCRIPTION	AFL NO.
Cleavers	
CT-30 Cleaver	S014076
FC-02 Fiber Collector	S014092
FDB-02 Fiber Collector Scrap Box	S014104
FDB-03 Large Fiber Collector Scrap Box	S014483
Batteries and Power Cords	
BTC-04 Battery Charger for SpliceMate (charges BTR-07)	S014000
BTR-07 Battery for SpliceMate	S014004
ACC-09 Power Cord (for ADC-10)	S014390
DCA-02 DC Adaptor for SpliceMate (needed for AC operation)	S014008
ADC-10 AC Adapter (for BTC-04)	S012548
Miscellaneous	
FH-50-D900 Fiber Holders (dual 900µm fibers)	S014321
FP-D900 (40) Dual Splice Sleeve	S014413
SpliceMate Portable Workstation	S014052
NID Mounting Kit	S014108
HJS-03-D900 Battery Powered Hot Jacket Stripper	S014427
LC-01 Leather Case for SpliceMate	S014024
Electrodes: FSM-11R	S014028

SpliceMate™
HANDHELD FUSION SPLICER

CT-10A Fiber Cleaver

The CT-10A fiber optic cleaver provides high quality cleaving at an economical price. Designed for cleaving single fibers only, this cleaver is best suited for the installation of field installable connectors and mechanical splices. The rugged yet scaled-down design offers cleave quality approaching that of more expensive high precision cleavers. The long-life, 16-position flat diamond blade is easily replaced by the end user and performs cleaving operation in one single step. An optional scrap collector can be purchased separately.

Features

- Dedicated for single fiber cleaving
- User replaceable flat diamond blade
- Simple and single-step operation
- Blade life up to 64,000 cleaves
- Compact and light weight
- Detachable fiber scrap collector FC-03 available as option

Specifications

PARAMETER	VALUE
Applicable Fiber	Conventional silica optical fiber
Fiber Count	Single fiber
Coating Diameter	250µm to 900µm
Cladding Diameter	125µm
Cleave Length	6 to 20 mm (with AD-10 & coating = 250µm) 8 to 20mm (with AD-10 & coating > 250µm) 10mm (with FH-50/60 fiber holders)
Cleave Angle Capability	Typically 0.5°
Dimensions (W x D x H)	71mm x 88mm x 48mm (2.8" x 3.5" x 1.9")
Weight	220g (0.48 lbs)
Blade Lifetime	64,000 fiber cleaves (4,000 x 16 positions) 48,000 fiber cleaves (4,000 x 12 positions) with FH-50/60 fiber holders

Ordering Information

DESCRIPTION	APPLICATION	FIBER HANDLING SYSTEM	CLEAVE LENGTH	AFL NO.
CT-10A	Single Fibers: 250 to 900µm coating, 125µm cladding	AD-10 Adapter Plate	250µm: 6 to 20mm 900µm: 8 to 20mm	S014784

Accessories

DESCRIPTION	AFL NO.
CB-02 Replacement Blade for CT-10A Cleaver	S014819
FC-03 Fiber Collector	S014818
CC-25 Carrying Case for CT-10A Cleaver	S014842
AD-10 Single Fiber Adapter Plate	S014817
AD-30B Adapter Plate (16mm cleave length)	S014100

CT-11A Fiber Cleaver

The CT-11A fiber optic cleaver provides high-quality, angled cleaving at an economical price. Designed for cleaving single fibers only, this cleaver is suitable for the installation of field installable connectors and mechanical splices. Rugged and durable, the CT11A provides user adjustable angled cleaving capability from zero to nine degrees. The CT11A is supplied with a factory adjustment of eight degrees, the industry standard. The angle cleaving mechanism is easy to use, simple to adjust, and consistent.

Features

- Dedicated for single fiber cleaving
- Angle cleaving capability of zero to nine degrees
- User replaceable flat diamond blade
- Blade life up to 64,000 cleaves
- Compact and light weight
- Easy operation

Specifications

PARAMETER	VALUE
Applicable Fiber	Conventional silica optical fiber
Fiber Count	Single fiber
Coating Diameter	250µm to 900µm
Cladding Diameter	125µm
Cleave Length	6 to 20 mm (with AD-10 & coating = 250µm) 8 to 20mm (with AD-10 & coating > 250µm) 10mm (with FH-50/60 fiber holders)
Cleave Angle Capability	0 to 9˚ (adjustable)
Dimensions (W x D x H)	110mm x 79mm x 49mm (4.3" x 3.1" x 1.9")
Weight	335g (0.74 lbs)
Blade Lifetime	64,000 fiber cleaves (4,000 x 16 positions)

Ordering Information

DESCRIPTION	APPLICATION	FIBER HANDLING SYSTEM	CLEAVE LENGTH	AFL NO.
CT-11A	Single Fibers: 250 to 900µm coating, 125µm cladding	AD-10 Adapter Plate	250µm: 6 to 20mm 900µm: 8 to 20mm	S014785

Accessories

DESCRIPTION	AFL NO.
CB-02 Replacement Blade for CT-11A Cleaver	S014819
CC-25 Carrying Case for CT-11A Cleaver	S014842
AD-10 Single Fiber Adapter Plate	S014817

CT-30 Series Fiber Cleaver

The CT-30 Cleaver sets the standard for portability, reliability and ease of use. Available for either single fiber or ribbon splicing (up to 12 fiber ribbons) applications, the CT-30 Cleavers are compatible with all AFL fusion splicers. The improved version offers a larger base for a more stable platform, improved visibility when placing the fiber, and three scrap collection options. Designed for excellent portability, the CT-30 is equally at home in a splicing van or in a bucket truck and is ideal for FTTx applications. The 16-position blade yields 48,000 single-fiber cleaves, or 4,000 12-fiber ribbon cleaves before requiring replacement, and the built-in scrap collector conveniently stores fiber shards until they can be safely discarded.

The CT-30 Cleaver is packaged with three scrap collection options that allow the user to tailor it to their cleaving preferences. The CT30 is delivered with the SC-01 Side Cover installed for users that prefer not to use an automated scrap collection system. For those that prefer an automated scrap collection system, the FC-02 Fiber Collector and two scrap box options are included. The FDB-02 Scrap Box is a smaller bin for users seeking a compact profile. The FDB-03 Scrap Box is a larger bin with sweeping brush and static resistant surfaces for those users seeking to maximize scrap capacity. All scrap options are easily configured by the user.

*Delivered as shown

Shown in CC-21 Carrying Case

Specifications

PARAMETER	VALUE
Applicable Fiber	Conventional silica optical fiber
Fiber Count	Single and up to 12 fiber ribbon
Coating Diameter	250um to 900um
Cladding Diameter	125um
Cleave angle capability	typically <0.5˚
Blade lifetime	48,000 fiber cleaves (4,000 12-fiber cleaves)
Dimensions (W x D x H)	69mm x 82mm x 41mm (2.7" x 3.2" x 1.6")
Weight	180g (0.4 lbs)

Ordering Information

DESCRIPTION	APPLICATION	FIBER HANDLING SYSTEM	CLEAVE LENGTH	AFL NO.
CT-30	Fiber Ribbons (up to 12 fibers)	Fiber Holders for the following: FH-XXX, FH-50-XXX or FH-60-XXX versions	10mm	S014076
CT-30A	Single Fibers: 250-900µm coating, 125µm cladding	AD-30A Adapter Plate	900µm: 10-20mm 250µm: 6-20mm	S014080

Included with Cleaver:

- AD-30A Adapter Plate (CT30A only)
- FC-02 Fiber Collector
- FDB-02 Scrap Box (small)
- FDB-03 Scrap Box (large)
- SC-01 Side Cover (installed)
- CC-21 Carrying Case
- Hex Wrench (1.5mm)
- Instruction Manual

Accessories

DESCRIPTION	AFL NO.
Replacement Blade for CT-30 Series Cleavers	S012828
FC-02 Fiber Collector	S014092
AD-30A Adapter Plate	S014096
AD-30B Adapter Plate (Fixed 16mm cleave length)	S014100
FDB-02 Fiber Collector Scrap Box	S014104
FDB-03 Large Fiber Collector Scrap Box	S014483
SC-01 Side Cover	S014353
HBA-01 Fiber Holder Base Attachment	S014388
CC-21 Carrying Case for CT-30 Series Cleaver	S014484

www.AFLglobal.com or (800) 235-3423

CT-02 Pocket Cleaver

The CT-02 Pocket Cleaver is the ideal, low cost, solution for mechanical splicing and temporary terminations that don't require the precision of a high end cleaver. The new and improved version now includes a graduated scale for measuring cleave lengths from 6 to19 mm in both 1 mm steps and 2 mm steps. The CT-02 is not recommended for cleaving single-mode fibers prior to fusion splicing.

Specifications

PARAMETER	VALUE
Fiber count	Single
Fiber type	Silica fiber
Coating diameter	200 to 1000μm
Cladding diameter	125μm
Cleaving length	6 - 19mm
Cleaving angle	Typical 1.0 degree
Blade life	1000 times
Dimensions	100mm (W) x 20mm (D) x 35mm (H)
Weight	75g

Ordering Information

DESCRIPTION	AFL NO.
CT-02 (6-19mm)	S009836

HJS-02

HJS-03

HJS-03-24 with Power Assist Tool

Hot Jacket Strippers

The HJS-02, HJS-03 and HJS-03-24 hot jacket strippers provide superior ribbon and field-ribbonized stripping performance. They conserve energy with a Power Save feature when the splicer is operated by battery power. A temperature selection switch provides easy field optimization for different fibers or operating conditions. An optional single-fiber adapter may be used to provide easy single-fiber capability for difficult-to-strip fibers. These strippers accept all Fujikura field and factory splicer designed fiber holders. The HJS-03 is a battery powered hot jacket stripper specifically designed for use with the SpliceMate fusion splicer but it can be used in other applications. The HJS-03-24 hot jacket stripper is designed for smooth and controlled stripping of 24-fiber ribbon.

Specifications

MODEL	HJS-02, HJS-03	HJS-03-24
Applicable Fiber Count	1 to 12 Fiber Ribbon	1 to 24 Fiber Ribbon
Ribbon Thickness	250µm to 400µm	250µm to 400µm
Stripping Length	35mm maximum	35mm maximum
Typical Heating Time	3 second Normal Mode 8 second Power Save Mode	3 second Normal Mode 30 second Power Save Mode
Standard Heating Temperature	100°C	100°C
Dimensions (W x D x H)	107mm x 40mm x 29mm	149mm x 58mm x 36mm
Weight	195g (0.43lb)	300g (0.66lb)
Power Supply	12VDC	12VDC
Operating Conditions	-10°C to 50°C	-10° C to 50°C
Storage Conditions	-40°C to 80°C	-40° C to 80°C

Ordering Information

DESCRIPTION	AFL NO.
HJS-02 Hot Jacket Stripper (12 fibers max.)	S010340
HJS-02-80 Hot Jacket Stripper (80µm cladding)	S013264
HJS-03 Battery Powered Hot Jacket Stripper	S013996
HJS-03-24 Hot Jacket Stripper (24 fibers max.) with Power Assist Tool	S012960
HJS-03-24PA Power Assist Tool for HJS-03-24	S012964
ADC-09 AC Adapter (for HJS-02, HJS-03 and HJS-03-24)	S014389
ACC-09 AC Power Cord (for ADC-09)	S014390
SAD-01 Single Fiber Adapter for HJS-02	S010428
DCC-11 DC Power Cord for HJS-02/HJS-03 (for FSM-17R/50R/18R/60R)	S013852
DCC-03 DC Power Cord for HJS-02/HJS-03 (for FSM-30R/40R24)	S006126

Splice Protection Sleeves

AFL offers a wide selection of fiber protection sleeves to meet any application. The FP-03 series is the industry standard for durable and lasting protection of single fiber splices in field installations, while the FP-04(T)/05 provide these same performance levels for 8/12 fiber ribbon respectively.

The FPS01 and FPS04 series are specially designed for optical components, where small packaging is a priority. These micro sleeves provide the known reliability of Fujikura sleeves in the smallest possible lengths. This easy and cost effective method is a great alternative to recoating. The FPS01 and FPS04 series offer a wide range of options to accommodate various coating sizes, and are manufactured in a variety of lengths. This gives great flexibility in designing optical modules.

Standard Sleeves: Dimensions & Applicable Fiber

FP-03 AND FP-03 (L=40) FOR SINGLE FIBERS UP TO 900 MICRONS

DESCRIPTION	SLEEVE LENGTH	FIBER CLEAVE LENGTH	SLEEVE DIAMETER AFTER SHRINK	AFL NO.
FP-03	60mm	16mm	3.1mm (max.)	S000065
FP-03(M)	60mm	16mm	3.1mm (max.)	S000066
FP-03(34)	34mm	10mm	3.1mm (max.)	S000453
FP-03(40)	40mm	10mm	3.1mm (max.)	S000206

SLEEVES DESIGNED SPECIFICALLY FOR RIBBON FIBERS

DESCRIPTION	FIBER COUNT	SLEEVE LENGTH	FIBER CLEAVE LENGTH	SLEEVE DIAMETER AFTER SHRINK	AFL NO.
FP-04(T)	Up to 8 fibers	40mm	10mm	4.1mm (max.)	S002105
FP-05	Up to 12 fibers	40mm	10mm	4.5mm (max.)	S003027
FPS04-30	Up to 4 fibers	30mm	10mm	2.4mm (max.)	S010848
FPS08-28	Up to 8 fibers	28mm	10mm	3.4mm (max.)	S013560
FPS24-40	Up to 24 fibers	40mm	10mm	8mm (max.)	S013004

Specifications

PARAMETER	DESCRIPTION	VALUE
Outer tube	FP-03 series FP-04(T) / FP-05	Poliolefin based on Polyethylene Ethylene-Vinyl Acetate (Polyolefin Copolymer)
Inner tube		Ethylene-Vinyl Acetate (Polyolefin Copolymer)
Strength member	FP-03 series FP-04(T) / FP-05	Stainless steel Quartz glass
Operation condition (after shrink)		-10 to 50 degree C, 0 to 95%RH(Non dew)
Storage condition (before shrink)		-40 to 60 degree C, Non dew

Splice Protection Sleeves

Micro Sleeves: Dimensions & Applicable Fiber

FPS01-400 SERIES FOR SINGLE FIBERS UP TO 400 MICRON FIBER

DESCRIPTION	SLEEVE LENGTH	FIBER CLEAVE LENGTH	SLEEVE DIAMETER AFTER SHRINK	AFL NO.
FPS01-400-12	12mm	4mm	1.5mm	S014088
FPS01-400-15	15mm	4mm	1.5mm	S012668
FPS01-400-20	20mm	8mm	1.5mm	S012672
FPS01-400-25	25mm	10mm	1.5mm	S012676
FPS01-400-34	34mm	15mm	1.5mm	S012680
FPS01-400-40	40mm	16mm	1.5mm	S011914

FPS01-900 SERIES FOR SINGLE FIBERS UP TO 900 MICRON FIBER

DESCRIPTION	SLEEVE LENGTH	FIBER CLEAVE LENGTH	SLEEVE DIAMETER AFTER SHRINK	AFL NO.
FPS01-900-15	15mm	4mm	2.3mm	S012684
FPS01-900-20	20mm	6mm	2.3mm	S012688
FPS01-900-25	25mm	6mm	2.3mm	S011954
FPS01-900-34	34mm	13mm	2.3mm	S012692
FPS01-900-45	45mm	16mm	2.3mm	S012696

Specifications

PARAMETER	MODEL	VALUE
Outer tube	FPS01 series / FPS04-30	Poliolefin based on Polyethylene
Inner tube		Ethylene-Vinyl Acetate (Polyolefin Copolymer)
Strength member	FPS01 series FPS04-30 / FPS08-28	Stainless steel Quartz glass
Operation condition (after shrink)		-10 to 50 degree C, 0 to 95%RH(Non dew)
Storage condition (before shrink)		-40 to 60 degree C, Non dew

FST-12 Fiber Separation Tool

The FST-12 Fiber Separation Tool is used to quickly, accurately and reliably split ribbons into sub-groups or individual fibers. The ergonomic FST-12 design enables safe and reliable, one-handed operation for use in diverse fiber deployment environments, such as aerial and remote-site applications.

Features and Benefits

- Enables separation of groups of fibers or single fibers and is not limited to only even-numbered groupings.
- One-handed operation allows the operator's other hand to guide and control the ribbon at all times, minimizing the potential for accidental damage to the fibers or ribbon.
- Hand-held method eliminates the need to utilize valuable work surface space for operation and is the ideal solution for remote-site and aerial operations such as bucket truck or ladder-sling applications.
- Performing two overlapping separations of the ribbon allows any single fiber or any sub-group of fibers to be extracted from the ribbon, even in mid-span taut-sheath operations where minimal ribbon length is available.
- Standard tool designed for fiber counts up to 12-fiber ribbon.

Specifications

PARAMETER	VALUE
Ribbon Thickness	250 to 360 micron
Ribbon Width	3.2mm (12-fiber)
Fiber Pitch	250 micron
Fiber Coating Material	UV cured resin
Separation Ratios: 12-fiber Ribbon	1:11, 2:10, 3:9, 4:8, 5:7, 6:6
Environmental Conditions: Operating Temperature / Storage Temperature	-10° to +40°C, 0 to 95% RH (non-dew) / -40° to +80°C, 0 to 95% RH (non-dew)
Dimensions	157L x 27W x 124H (mm) / 6.18L x 1.06W x 4.88H (in.)
Weight	220g / 7.76 oz.

Ordering Information

DESCRIPTION	AFL NO.
FST-12 Fiber Separation Tool Includes: 12-fiber ribbon jaw set, instructional manual and color coded quick reference guide	S014012

Fiber Arrangement Tools

The FAT-04 features an easy-to-use fiber arrangement method utilizing linear travel. The FAT-04 includes a spare paste applicator to allow ribbon making to continue even if one of the paste applicators needs cleaning.

The FAT-02 Fiber Arrangement Tool is an industry standard tool for forming individual 250µm coated fibers into ribbons. The fiber arrangement method uses an arrangement spring. The fibers are placed into the proper position within the spring, eliminating the need to pre-sort the fibers and place them into the tool in numerical sequence.

FAT-04

FAT-02

Ordering Information

DESCRIPTION	AFL NO.
FAT-04 Fiber Arrangement Tool*[1]	S010212
FAT-02 Fiber Arrangement Tool*[2]	S002111
SP-1 Foam Pads for FAT-04 (One set = 5 sheets of 25 pads each)	S009016
Paste Applicator Blocks for FAT-04 (2 pieces)	S010952

*[1] FAT-04 includes 4 oz. FAA-03A ribbon forming adhesive, paste applicator blocks and SP-1 foam pads

*[2] FAT-02 includes 4 oz. FAA-03A ribbon forming adhesive and CL-01 clips

Ribbon Forming Adhesive

A key advantage of both fiber arrangement tools is the use of the ribbon forming adhesive. Ribbons formed with this adhesive have excellent stripability, especially compared to ribbonizing methods using tape. Unlike tape methods, the paste does not "gum-up" the stripping tool and cause broken fibers. The paste holds the stripped coating residue into a single piece of debris that is easily cleaned from the stripper. If needed, the ribbon can be easily separated into individual fibers using alcohol.

FAA-03A

Ordering Information

DESCRIPTION	AFL NO.
FAA-03A ribbon-forming adhesive (0.5 liter bottle)	S008622
FAA-03A ribbon-forming adhesive (4 oz. dispensing bottle)	S008720

Splicer V-Groove Cleaning Kit

Today's splicing equipment is fast, efficient, and requires minimal maintenance due to advances in splicing technology. However, contamination in the v-groove of the splicer is still a primary source of trouble for the splicing technician. This is especially problematic when splicing with a fixed v-groove fusion splicer. Environmental contamination, such as dust, dirt, and fiber coating debris, as well as, the silica deposits generated during the fusion process eventually find their way to the surface of the v-groove. This contamination will offset the fibers and degrade performance. To help control this problem, a disciplined cleaning regimen and specific tooling is required to ensure the splice is right the first time.

To solve cleaning needs, AFL offers the Splicer V-Groove Cleaning Kit. This product integrates eight components into an affordable and effective inspection and cleaning solution for any fusion splicer. Small and lightweight, it fits easily into the Fujikura splicer transit case or it can be carried separately in its own carrying case.

Kit Includes

- Scrubber Brush with stiff tapered nylon bristles
- Sweeper Brush with soft nylon bristles
- Eye Loupe with 3X to 12X magnification
- LED Pen Light with momentary or constant on switching
- Cleaning Fluid that is nonflammable and environmentally safe
- Lint-free Cotton Swabs
- Instruction Sheet with illustrations
- Canvas Carrying Case

Splicer V-Groove Cleaning Refill Kit

Refill Kit Includes

To replenish the consumables within the kit, AFL provides a refill kit that includes the following components:

- One can of FPF1 Cleaning Fluid
- One Scrubber Brush
- One Sweeper Brush
- Ten packs CS-1 Cotton Swabs (250 swabs)

Ordering Information

DESCRIPTION	AFL NO.
Splicer V-Groove Cleaning Kit	S014397
Splicer V-Groove Cleaning Refill Kit	S014416
CS-1 Cotton Swabs (pack of 25 swabs)	S003719

CS-1 Cotton Swabs

FuseConnect Installation Kit

FuseConnect in Fusion Splicer

Applications

- RF-overlay FTTP network connectorization
- Cable TV backbone network connectorization
- Outside plant connectorization
- Central office connector replacement
- Data center installation
- MDU optical fiber termination

FuseConnect™ Installation Kit
For Fusion Spliced Field-terminated Connectors

The FuseConnect Installation Kit is uniquely designed to extend the capability of fiber holder based fusion splicers beyond standard fiber splicing to field terminated connector splicing. The kit provides all items necessary to configure a splicer for field splicing of AFL FuseConnect field terminated connectors. The installation kits come equipped with all components necessary to handle 900µm, 2mm, and 3mm cable. FuseConnect is compatible not only with Fujikura's fusion splicers, but also with most other industry-available, fiber holder-based fusion splicing platforms.

Kit Contents

			KIT AFL NO. ->	S014492	S014516
		SPLICER COMPATIBILITY ->		18SR/60SR/50R/17R/17S-FH	11S/11R
ITEM	DESCRIPTION	AFL NO.	APPLICATION	SH-8C-23	SH-8C-43
External Tube Heater	SH-8C	S014694	For FuseConnect tube heating	Included	Included
Fiber Holder	FH-FC-3000	S014695	3mm cord clamp	Included	Included
	FH-FC-2000	S014696	2mm cord clamp	Included	Included
	FH-FC-900	S014697	0.9mm cord clamp	Included	Included
DC Power Cord	DCC-15	S014698	Connects SH-8 to splicer	Included	—
	DCC-17	S014699	Connects SH-8 to BTA-03 or DCA-02	—	Included
Hanger Plate	HP-08	S014700	Attaches SH-8C to 50R/17S-FH/17R	Included	—
	HP-10	S014701	Attaches SH-8C to 18SR/60SR	Included	—
Battery Adapter	BTA-03	S014702	Attaches SH-8C to 11S/11R	—	Included
Fiber Transfer Device	FTD-01	S014703	To transfer from splice point to tube heat device	Included	Included
Cable Clamp	CLAMP-FC-3000	S014704	For holding single 3mm cord (qty 2)	Included	Included
	CLAMP-FC-2000	S014705	For holding single 2mm cord (qty 2)	Included	Included

Notes:
1) SpliceMate requires two BTR-07 batteries for DC operation of both splicer and FuseConnect heater.
2) SpliceMate requires one DCA-02 for AC operation of both splicer and FuseConnect heater.
3) Configurations available for other splicer models, including competitor models. Please contact your AFL representative.

Ordering Information

DESCRIPTION	QUANTITY	AFL NO.
FuseConnect™ Installation Kit for: FSM-60R/60S, FSM-18R/18S, FSM-50R, FSM-17R & FSM-17S-FH	1	S014492
FuseConnect™ Installation Kit for: SpliceMate™ FSM-11S, FSM-11R	1	S014516

900µm and Fan-out Termination Only Accessories

DESCRIPTION	QUANTITY	AFL NO.
FH-FC-900	1	S014697
Fiber Clamp 250µm	1	CS004442
S014752 Clamp-60D Left side only for 900um LT, FSM-60S, FSM-18S	1	S014752

Portable Tripod Workstation Kit
(splicer & cleaver not included)

Cleaver mount assembly swings into
and out of the work space

Portable Work Tray showing the four mounting
positions of the cleaver mount assembly
(delivered as shown)

Portable Tripod Workstation

As splicing requirements have migrated from aerial to ground level locations, a sturdy splicing workstation with the ability to adjust for uneven ground surfaces has been missing from the splicing marketplace. That problem is solved with AFL's Portable Tripod Workstation – the critical missing link in splicing productivity.

The Portable Tripod Workstation offers both a sturdy work tray to support the splicer, cleaver and accessories, and a tripod to support the work tray. The two can be purchased together as a kit or separately for those users who prefer to use their own tripod or mounting mechanism.

The work tray incorporates a unique cleaver mounting system that offers flexibility and convenience for the user. The cleaver mounting arm pivots into and out of the work space, as needed, and securely captures the CT-30, CT-20 and CT-04 style cleavers. The base of the cleaver mounting assembly can be moved to any one of four positions on the tray to accommodate user preferences.

The tripod is solidly constructed but lightweight, weighing less than six pounds, and collapses to a length of only twenty-five inches. The telescoping legs offer flexible height adjustments from thirteen inches to sixty-one inches and the leg angle can be increased for unusual surfaces.

Features

- Sturdy work tray supports the splicer, cleaver and accessories
- Tripod supports a load capacity of up to eleven pounds
- Independent telescoping tripod legs support uneven work surfaces
- Leveraged handles securely lock work tray into position
- Cleaver mount assembly swings cleaver into and out of the work space
- Optional cleaver mounting positions accommodate user preferences
- Compatible with all FSM-17, FSM-18, FSM-50 and FSM-60 model splicers

Ordering Information

| DESCRIPTION	AFL NO.
Portable Tripod Workstation Kit – Includes: Tripod with pan head and quick release platform (make and model of tripod may change without notice), portable work tray with cleaver mount assembly and canvas carrying case	S014773
Portable Work Tray – Includes: Portable work tray with cleaver mount assembly and canvas carrying case	S014753
Tripod – Includes: Tripod with pan head and quick release platform (make and model of tripod may change without notice)	S014751

Pole Mount

Splicing Workstation

Aerial mounting system
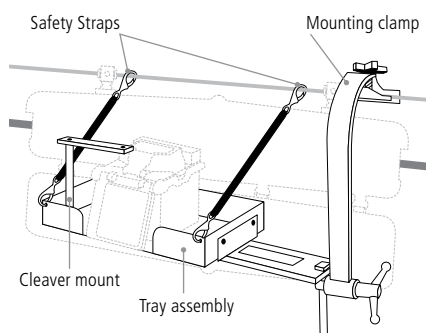
ASW-02 Splicing Workstation

The ASW-02 Splicing Workstation can be used with a fusion splicer and cleaver in aerial or terrestrial splicing applications. The ASW-02 provides a stable work surface and secure mounting of the splicer and cleaver to prevent accidental drops and equipment damage in challenging splicing locations.

The ASW-02 Splicing Workstation consists of the work tray, a convenient pivoting cleaver mounting arm, a post for attachment to bucket or ladder mounting accessories, a tripod mount, and dual safety straps. An aerial mounting system is available for direct attachment of the workstation to a telephone pole, or for suspending the workstation from an aerial cable strand. The strand mounting system is fully adjustable to provide for optimal location of the workstation when minimal slack fiber is available, such as in a taut-sheath cable access scenario.

In the aerial environment, the safety straps may be secured to the cable strand to provide security and aid with workstation position adjustment. The safety straps are also used to secure the workstation to the pole, and may be used to raise or lower the workstation.

Features

- Provides direct to pole mounting as well as direct adjustable attachment to aerial strand
- Mounting post provided for attachment to bucket and ladder mounting accessories (utilizing any popular copper splicer-head mounting rigs)
- Tripod mount allows for placement in tight FTTH splicing applications
- Includes cable tie locations to secure cables during splicing
- Optimized to simplify taut sheath splicing applications
- Cleaver mount securely captures cleaver and allows operator to rotate it in and out of the workspace as needed
- Matte finish minimizes glare

Ordering Information

DESCRIPTION	AFL NO.
ASW-02 Splicing Workstation (Full kit with aerial mounting system) Use for FSM-17S, FSM-18S, FSM-50S, FSM-60S, FSM-17R, FSM-18R, FSM-50R and FSM-60R splicers. Includes aerial mounting system to provide strand and pole mounting capability, a post for attachment to bucket or ladder mount accessories, a receptacle for tripod mounting and safety straps.	SO10532
ASW-02 Splicing Workstation (Without aerial mounting system) Use for FSM-17S, FSM-18S, FSM-50S, FSM-60S, FSM-17R, FSM-18R, FSM-50R and FSM-60R splicers. Includes a post for attachment to bucket or ladder mount accessories and a receptacle for tripod mounting.	SO13620

Safety Straps   Mounting clamp

Cleaver mount   Tray assembly

Aerial Mounting System

Illustration for reference only.

SH-7 Tube Heater

The SH-7 tube heater is a fast, light, and compact heat shrink oven for all Fujikura splice protection sleeves. A mode switch allows selection of the appropriate heat cycle for 40mm or 60mm single fiber sleeves, mass fusion splice sleeves and micro single sleeves. A heating time switch allows adjustment for ambient conditions. The SH-7 is designed to withstand tough outdoor field conditions and may be operated in temperatures of -10°C to +50°C and cross winds of more than 30mph.

Specifications

PARAMETER	VALUE
Heating time	Typical 130 sec. at FP-03 Typical 105 sec. at FP-03 (L=40), FP-04(T) and FP-05
Power Supply	AC, 100 to 240V (50/60 Hz)
Operating Temperature	-10ºC to 50ºC
Wind Protection	Up to 15 m/s (33mph)
Dimensions (W x D x H)	125W x 51D x 45H (mm) / 3.74W x 2.00D x 1.77H (inches)
Weight	0.5 kg / 1.1 lb

Ordering Information

DESCRIPTION	AFL NO.
SH-7 Tube Heater (Includes: SH-7 Tube Heater, ADC-08 AC Adapter, ACC-09 AC Cord and instruction manual)	S000086
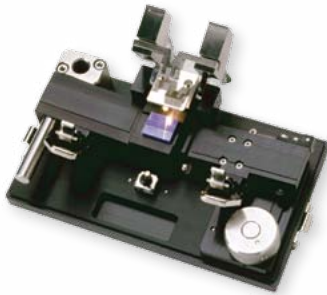
Temporary Joining Tools

The TJ-03 and TJ-24 provide a temporary fiber splice for fiber and cable connections to test equipment such as OTDRs. The TJ-03 uses a precision ceramic V-groove to align up to 12 fibers simultaneously and the TJ-24 aligns up to 24 fibers. The fibers are prepared for joining by using standard mass fusion fiber preparation tools (fiber holders, hot jacket stripper, and cleaver.) Using the TJ-03 or TJ-24 in conjunction with an OTDR equipped with an optical switch provides rapid one button optical tests of 12 or 24 fibers.

Features

- Precision ceramic V-groove alignment
- Built-in magnifier and lamp to inspect fiber placement in V-grooves

Ordering Information

DESCRIPTION	AFL NO.
TJ-03 Temporary Splice Kit Includes: Fiber Holders (1 pair) FH-50-12, CT-30 Cleaver, HJS-02 Hot Jacket Stripper, ADC-09 AC Adapter for HJS-02, and the ACC-09 Power Cord	S012772
TJ-03 Temporary Splice (without fiber preparation tools)	S010456
TJ-24 Temporary Splice Kit Includes: Fiber Holders (1 pair) FH-24, CT-20 Cleaver, HJS-03 Hot Jacket Stripper, ADC-09 AC Adapter for HJS-03, Power Assist Lever for HJS-03, and the ACC-09 Power Cord	S013080
TJ-24 Temporary Splice (without fiber preparation tools)	S011666

FSM-100M

FSM-100P

ARCMaster™

FSM-100M and FSM-100P Fusion Splicers

Whether splicing similar fiber types or double clad LDF fibers for high power lasers, the ARCMaster series splicers provide multiple solutions for diverse production needs. With State of the ARC™ technology, the ARCMaster sets the standard for fusion splicing with a multitude of new features designed to make splicing easier.

The patent-pending "split v-groove" fiber clamping system accommodates optical fiber ranges from 60 to 2000μm for cladding or coating without changing v-grooves or fiber clamps. The "Plasma Zone" fiber positioning system incorporates multiple fiber and electrode positioning techniques to provide unprecedented versatility for splicing LDF, heat sensitive or small diameter fibers.

With a new fiber imaging technology, Interrelation Profile Alignment (IPA), alignment and splicing capabilities are possible with virtually any PM fiber type. Longer fiber tapering application is possible with Fujikura's Sweep Arc technology. Incorporating PAS (cold fiber image) and WSI (warm image) technologies, the optical analysis system provides a number of advanced features including improved loss estimation capabilities, fiber image performance with both LDF, small or heat sensitive fibers.

Users can program multi-step glass processing operations to include non-splicing operations such as generating tapers or lenses. Dual LCD monitors provide enhanced data and graphical information that is user-selectable during each stage of the splicing process. Both units are designed with the needs for production in mind and are suitable for the most popular production workstations.

Features

- Split v-groove clamping system
- "Plasma Zone" fiber positioning
- PAS and WSI
- New IPA alignment method for PM fibers
- Enhanced sweep arc technology
- Zero degree fiber handling for LDF
- Special functions for glass processing capability
- Fiber profile memory function
- New arc calibration technology
- Short cleave length capability
- Fast and accurate PANDA splice mode
- Ergonomic, production friendly design
- User selectable display on dual LCD monitors
- Internet firmware updates

Ordering Information

DESCRIPTION	AFL NO.
ARCMaster™ FSM-100M Fusion Splicer (machine only) **Includes:** FH-100-250 fiber holders (pair), FH-100-900 fiber holders (pair), spare electrodes (pair), ADC-15 AC adapter, ACC-02 AC power cord, USB cable, dust cleaning swab set, operation manual and software on CD, and transit case	S014821
ARCMaster™ FSM-100M Fusion Splicer Kit *	S014822
ARCMaster™ FSM-100P Fusion Splicer (machine only) **Includes:** FH-100-250 fiber holders (pair), FH-100-400 fiber holders (pair), FH-100-900 fiber holders (pair), spare electrodes (pair), ADC-15 AC adapter, ACC-02 AC power cord, USB cable, dust cleaning swab set, operation manual and software on CD, and transit case	S014823
ARCMaster™ FSM-100P Fusion Splicer Kit *	S014824

* Each splicer kit includes an HJS-02 Hot Jacket Stripper, a CT-32 Cleaver and a SPA-HJS-030 Spacer for HJS-02 in addition to the items listed above.

State of the ARC™

ARCMaster™

FSM-100M and FSM-100P Fusion Splicers

Specifications

PARAMETER	VALUE
Applicable Fiber	Silica based Single-mode and Multimode glass fiber: SMF (G.652), MMF (G.651), NZDSF (G.655), EDF, DCF, LDF and PMF. etc.
Fiber Dimension	Cladding diameter: 60 to 500 µm Coating diameter: 100 to 2,000 µm
Fiber Length	3, 4, 5, 8, 9, 10 mm (standard) (bare fiber length after cleaving)
Splice Loss	SMF: 0.01 to 0.03 dB MMF: 0.00 to 0.02 dB NZDSF/LDF: 0.02 to 0.05 dB PMF: 0.03 to 0.06 dB
Splicing Time	SMF/MMF: 15 to 20 sec. NZDSF/LDF: 25 to 30 sec. PMF (PANDA): 35 to 50 sec. (FSM-100P) PMF (IPA): 90 to 300 sec. (FSM-100P)
Polarization Cross-Talk	PMF (PANDA): -40 dB / 0.6 degree (FSM-100P) PMF (IPA): -32 dB / 1.4 degree (FSM-100P)
Return Loss	60dB or more
Heating Time	FP-03 (40 mm): 30 sec. FP-03 (60 mm): 35 sec. Micro sleeves: 55 sec.
Dimensions (mm)	311W x 232D x 160H
Weight (excluding AC adapter)	FSM-100M: 7.7 kg FSM-100P: 7.9 kg
Operation Temperature	0 to 40 C degrees
Humidity	0 to 95 % RH (non-dew)
Storage Temperature	-40 to 80 C degrees
Humidity	0 to 95 % RH (non-dew)
Monitor Type	Dual 4.1 inch TFT color LCD monitors
Monitor Features	Equipped with a scratch-proof transparent protector. Monitor image is automatically set to correct orientation when the monitor angle is adjusted from the front to rear monitor position. Fiber image and data information display on the monitors is user selectable for each step of the splicing process.
Magnification	125 µm: 187 to 300 X 250 µm: 93 to 150 X 400 µm: 58 to 93 X

* Splice loss depends on fiber type, wave length, clamping method and alignment method.
* Sleeve heater data at room temperature.
* Micro sleeve heating time depends on type.
* Monitor and wind protector included in dimensional data, protruding parts excluded.

Accessories for the FSM-100M and FSM-100P

DESCRIPTION	AFL NO.
High Strength Accessories	
Ultrasonic Cleaner (USC-01A)	S012732
HTS-12 High Tensile Stripper - includes 250µm blades (400µm available)	S012094
AFL PowerStrip High Tensile Stripper	S012808
AFL PowerCleave High Strength Cleaver	S009972
Strippers	
HJS-02 Hot Jacket Stripper	S010340
HJS-02-80 Hot Jacket Stripper (80µm cladding)	S013264
JS-02-900 (900µm)	S010908
Electrodes	
ELCT2-25 Spare Electrodes (pair)	S002068
Cleavers	
CT-32 Cleaver	S014348
CT-38 Cleaer (for 80µm cladding)	S014349
Fiber Holders (Pairs)	
FH-100-100 Fiber Holder (94µm - 117µm)	S014828
FH-100-125 Fiber Holder (118µm - 139µm)	S014829
FH-100-150 Fiber Holder (140 - 169µm)	S014861
FH-100-180 Fiber Holder (170µm - 199µm)	S014830
FH-100-210 Fiber Holder (200µm - 239µm)	S014831
FH-100-250 Fiber Holder (240µm - 289µm)	S014832
FH-100-300 Fiber Holder (290µm - 339µm)	S014833
FH-100-350 Fiber Holder (340µm - 389µm)	S014834
FH-100-400 Fiber Holder (390µm - 489µm)	S014835
FH-100-500 Fiber Holder (490µm - 589µm)	S014836
FH-100-600 Fiber Holder (590µm - 689µm)	S014837
FH-100-700 Fiber Holder (690µm - 789µm)	S014838
FH-100-800 Fiber Holder (790µm - 889µm)	S014839
FH-100-900 Fiber Holder (890µm - 989µm)	S014840
FH-40-LT900 Fiber Holder	S013584
Power and Cords	
ADC-15 AC Adapter (FSM-100M/P)	S014826
ACC-02 AC Power Cord	S001171
ADC-09 AC Adapter for HJS-02	S014389
ACC-09 AC Power Cord (for ADC-09)	S014390
Miscellaneous	
CC-27 Transit Case (100 M/P)	S014825
DCS-01 Dust Cleaning Swab	S014827
One year extended warranty (extends factory warranty by one year)	S012996
Two year extended warranty (extends factory warranty by two years)	S013000

ARCMaster™
FSM-100M+/FSM-100P+ Fusion Splicers

FSM-100P+

NEW

Available June 2011

The FSM-100M+ and FSM-100P+ specialty fusion splicers provide advanced capabilities suitable for fiber lasers, sensors, research and development and the medical field. New capabilities include an innovative "end-view" fiber observation system, XLDF (Extra Large Diameter Fiber) splicing capability using "Plasma Zone Path Modulation", enhanced sweep arc technology and other features for glass processing and fiber tapering, and patented split v-groove clamping system. With State of the ARC™ technology, the ARCMaster series of fusion splicers sets a new standard for fusion splicing, providing the ultimate in performance and flexibility.

Features: FSM-100M+/FSM-100P+

- End-view observation system for alignment of non-circular, "holey" and other exotic fibers
- XLDF (Extra Large Diameter Fiber) splicing capability up to 1200 µm diameter fiber
- Patented "split v-groove" clamping system covers a range from 60 to 2000 µm
- Advanced "Plasma-Zone" control methods to optimize heating for specific fiber types
  - Motorized electrodes to change electrode gap to optimize Plasma Zone shape
  - Adjustable vertical height to position fiber within Plasma Zone
  - Electrode oscillation produces "Plasma Zone Path Modulation" for XLDF splicing
- Enhanced ability for fiber shaping, glass processing, tapering, etc.
  - Custom multi-step "Special Functions" programmability
  - Long-travel sweep arc technology (fiber sweep motion up to +/- 18 mm)
  - Long-travel left/right Z-drive mechanisms
- Three selectable arc calibration methods
  - Conventional calibration method for standard fibers
  - New melt-back method with new parameters for special fibers including XLDF
  - Real-time calibration by arc brightness observation (with fiber brightness learning function)
- Dual 4.1 inch monitors with user-selectable information display
- Extensive PC connectivity functions (software upload, data upload/download, PC control)

Features: FSM-100P+

- Three alignment methods for PM fibers
  - Fast PANDA mode alignment by PAS system
  - New IPA mode for aligning all kinds of PM fibers (with learning function for expandable PM fiber auto-recognition database)
  - End-view PM fiber alignment including ability to align PM fiber core
- Theta rotation for non-PM LMA fibers
  - Provides best alignment of both LMA core and pump guide (inner clad)

Ordering Information

DESCRIPTION	AFL NO.
ARCMaster™ FSM-100M+ Fusion Splicer (machine only) Includes: FH-100-250 fiber holders (pair), FH-100-250-EV fiber holders (pair), FH-100-900, spare electrodes (pair), ELCT3-25-LDF Spare electrode for LDF, ADC-15 AC adapter, ACC-XX AC power cord, USB cable, dust cleaning swab set, EC-01 Electrode Cleaner, operation manual and software on CD, and transit case	S014813
ARCMASTER™ FSM-100M+ FUSION SPLICER KIT *	S014975
ARCMaster™ FSM-100P+ Fusion Splicer (machine only) Includes: FH-100-250 fiber holders (pair), FH-100-400 fiber holders (pair), FH-100-250-EV fiber holders (pair), FH-100-400-EV fiber holders (pair), FH-100-900, ELCT3-25-LDF Spare electrode for LDF, FH-100-900 fiber holders (pair), spare electrodes (pair), ADC-15 AC adapter, ACC-XX AC power cord, USB cable, dust cleaning swab set, EC-01 Electrode Cleaner, operation manual and software on CD, and Transit case	S014815
ARCMaster™ FSM-100P+ Fusion Splicer Kit *	S014976

* Each splicer kit includes an HJS-02 Hot Jacket Stripper, a CT-32 Cleaver and a SPA-HJS-030 Spacer for HJS-02 in addition to the items list above.

State of the ARC™

ARCMaster

FSM-100M+/FSM-100P+ Fusion Splicers

Accessories

DESCRIPTION	AFL NO.
High Strength Accessories	
Ultrasonic Cleaner (USC-01A)	S012732
HTS-12 High Tensile Stripper - includes 250µm blades (400µm available)	S012094
AFL PowerStrip High Tensile Stripper	S012808
AFL PowerCleave High Strength Cleaver	S009972
Strippers	
HJS-02 Hot Jacket Stripper	S010340
HJS-02-80 Hot Jacket Stripper (for 80µm cladding)	S013264
JS-02-900 (900µm)	S010908
Electrodes	
ELCT3-25-LDF Spare Electrodes (pair)	S015015
Cleavers	
CT-32 Cleaver	S014348
CT-38 Cleaver (for 80 µm cladding)	S014349

Fiber Holders (Pairs)

Description	AFL NO.	Description	AFL NO.
FH-100-60 Fiber Holder (55 - 71µm)	S014977	FH-100-60-EV Fiber Holder (55-71µm)	S014989
FH-100-100 Fiber Holder (94 - 117µm)	S014828	FH-100-100-EV Fiber Holder (94 - 117µm)	S014990
FH-100-125 Fiber Holder (118 - 139µm)	S014829	FH-100-125-EV Fiber Holder (118 - 139µm)	S014991
FH-100-150 Fiber Holder (140 - 169µm)	S014861	FH-100-150-EV Fiber Holder (140 - 169µm)	S014992
FH-100-180 Fiber Holder (170 - 199µm)	S014830	FH-100-180-EV Fiber Holder (170 - 199µm)	S014993
FH-100-210 Fiber Holder (200 - 239µm)	S014831	FH-100-210-EV Fiber Holder (200 - 239µm)	S014994
FH-100-250 Fiber Holder (240 - 289µm)	S014832	FH-100-250-EV Fiber Holder (240 - 289µm)	S014995
FH-100-300 Fiber Holder (290 - 339µm)	S014833	FH-100-300-EV Fiber Holder (290 - 339µm)	S014996
FH-100-350 Fiber Holder (340 - 389µm)	S014834	FH-100-350-EV Fiber Holder (340 - 389µm)	S014997
FH-100-400 Fiber Holder (390 - 489µm)	S014835	FH-100-400-EV Fiber Holder (390 - 489µm)	S014998
FH-100-500 Fiber Holder (490 - 589µm)	S014836	FH-100-500-EV Fiber Holder (490 - 589µm)	S014999
FH-100-600 Fiber Holder (590 - 689µm)	S014837	FH-100-600-EV Fiber Holder (590 - 689µm)	S015000
FH-100-700 Fiber Holder (690 - 789µm)	S014838	FH-100-700-EV Fiber Holder (690 - 789µm)	S015001
FH-100-800 Fiber Holder (790 - 889µm)	S014839	FH-100-800-EV Fiber Holder (790 - 889µm)	S015002
FH-100-900 Fiber Holder (890 - 1000µm)	S014840	FH-100-900-EV Fiber Holder (890 - 1000µm)	S015003
FH-100-1000 Fiber Holder (990 - 1089µm)	S014978	FH-100-1000-EV Fiber Holder (990 - 1089µm)	S015004
FH-100-1100 Fiber Holder (1090 - 1189µm)	S014979	FH-100-1100-EV Fiber Holder (1090 - 1189µm)	S015005
FH-100-1200 Fiber Holder (1190 - 1289µm)	S014980	FH-100-1200-EV Fiber Holder (1190 - 1289µm)	S015006
FH-100-1300 Fiber Holder (1290 - 1389µm)	S014981	FH-100-1300-EV Fiber Holder (1290- - 1389µm)	S015007
FH-100-1400 Fiber Holder (1390 - 1489µm)	S014982	FH-100-1400-EV Fiber Holder (1390 - 1489µm)	S015008
FH-100-1500 Fiber Holder (1490 - 1589µm)	S014983	FH-100-1500-EV Fiber Holder (1490 - 1589µm)	S015009
FH-100-1600 Fiber Holder (1590 - 1689µm)	S014984	FH-100-1600-EV Fiber Holder (1590 - 1689µm)	S015010
FH-100-1700 Fiber Holder (1690 - 1789µm)	S014985	FH-100-1700-EV Fiber Holder (1690 - 1789µm)	S015011
FH-100-1800 Fiber Holder (1790 - 1889µm)	S014986	FH-100-1800-EV Fiber Holder (1790 - 1889µm)	S015012
FH-100-1900 Fiber Holder (1890 - 1989µm)	S014987	FH-100-1900-EV Fiber Holder (1890 - 1989µm)	S015013
FH-100-2000 Fiber Holder (1990 - 3200µm)	S014988	FH-100-2000-EV Fiber Holder (1990 - 3200µm)	S015014
FH-40-LT900 Fiber Holder	S013584		

ARCMaster™

FSM-100M+/FSM-100P+ Fusion Splicers

Accessories

DESCRIPTION	AFL NO.
Power and Cords	
ADC-15 AC Adapter (FSM-100M/P)	S014826
ACC-02 AC Power Cord	S001171
ADC-09 AC Adapter for HJS-02	S014389
ACC-09 AC Power Cord (for ADC-09)	S014390
Miscellaneous	
CC-27 Transit Case (100 M/P)	S014825
DCS-01 Dust Cleaning Swab	S014827
One year extended warranty (extends factory warranty by one year)	S012996
Two year extended warranty (extends factory warranty by two years)	S013000
EC-01 Electrode Cleaner	S015016
USB-01 USB Cable	S014777

Specifications

PARAMETER	VALUE
Applicable Fiber	Silica based Single-mode and Multimode glass fiber: SMF (G.652), MMF (G.651), NZDSF (G.655), EDF, DCF, LDF and PMF. etc.
Fiber Dimension	Cladding dia.: 60 to 1,200 µm; Coating dia.: 60 to 2,000 µm
Fiber Length	3.0 to 21.5 mm (distance between fiber end and v-groove edge)
Splice Loss	SMF: 0.01 to 0.03 dB; MMF: 0.00 to 0.02 dB; NZDSF/LDF: 0.02 to 0.05 dB; PMF: 0.02 to 0.06 dB
Splicing Time	SMF/MMF: 15 to 20 seconds; NZDSF/LDF: 25 to 30 seconds; PMF (PANDA): 35 to 50 seconds (FSM-100P+); PMF (IPA): 70 to 300 seconds (FSM-100P+)
Polarization Cross-Talk	PMF (PANDA): -40 dB / 0.6 degree (FSM-100P+); PMF (IPA): -40 dB / 0.6 degree (FSM-100P+)
Return Loss	60dB or more
Heating Time	FP-03 (40 mm): 30 seconds; FP-03 (60 mm): 35 seconds; Micro sleeves: 55 seconds
Dimensions	470 mm (W) x 232 mm (D) x 160 mm (H)
Weight	8.0 kg (FSM-100M+) / 8.4 kg (FSM-100P+) excluding AC adapter.
Operation Temp.	0 to 40°C at 0 to 95 % RH (non-dew)
Storage Temp.	- 40 to 80°C at 0 to 95 % RH (non-dew)
Monitor Type	4.1 inch TFT color LCD monitor x 2 pcs.
Monitor Features	Scratch-proof transparent protector equipped. Monitor image turns up side down depending on monitor angle.
Magnification	125 µm: 187 to 300 X, 250 µm: 93 to 150 X, 400 µm: 58 to 93 X, 1000 µm: 3.5 to 7.0 X

* Splice loss depends on fiber type, wave length, clamping method and alignment method.
* Sleeve heater data at room temperature.
* Micro sleeve heating time depends on type.
* Monitor and wind protector included in dimensional data, protruding parts excluded.

FSR-02 Fiber Recoater

To meet the small package requirements of OEMs, AFL offers the FSR-02 fiber recoater. The FSR-02 eliminates the need for splice protection sleeves by automatically recoating a colored or non-colored fiber back to the original coating diameter after a splice is complete. Programmable for recoating lengths from 4 to 50mm and proof testing from 4 to 20 Newtons, this unit stores data for 100 cycles which are easily downloadable to a PC. For splices that may fail the proof test, the breaking load is displayed. A compact and low profile design makes for comfortable bench top operation in the factory environment. New, Chrome Spattering technology improves the long-term durability of the mold surface.

Features

- Automatic, easy operation
- Colored and non-colored fiber recoating capability
- Compact and low profile design for bench-top operation
- Programmable proof test capability with breaking load display function
- Programmable resin injection quantity
- PC interface with RS-232C
- Data storage for the last 100 cycles
- Easy-to-exchange molds for all common coating sizes (165μm, 250μm, 400μm and 900μm)
- Compatible with special recoating compound to provide higher stiffness recoating of 900μm jacketed fibers
- Complete set of LabVIEW® drivers for simplified automated production-line control & integration

Specifications

PARAMETER	VALUE
Dimensions (W x D x H)	255mm x 150mm x 130mm
Weight	3.8kg
Power supply	AC 100 to 240V, 50 to 60 Hz
Recoating time	Injection 15 sec / Curing 15 sec
Proof test	4 to 20N (0.4 to 2kgf), 0 to 60 seconds, programmable
Data storage	100 recoat cycles, PC downloadable
Fiber coating diameter	165μm, 250μm, 400μm and 900μm
Recoat diameter	195μm, 280μm, 450μm, and 1000μm
Recoat length	4 to 50mm
UV curable material capacity	53cc
Recoat and proof modes	30 programmable modes
Operating conditions	10° to 30°C, 0 to 90% humidity, non-condensing
Storage conditions	-40° to 60°C, 0 to 90% humidity, non-condensing

Ordering Information

DESCRIPTION	AFL NO.
FSR-02 Fiber Recoater The FSR-02 Fiber Recoater comes with ADC-10 AC Adapter, AC Cord, fiber protection cover and operation manual (mold sold separately).	S012728

Accessories

DESCRIPTION	AFL NO.
FSR-02-MOLD-195 Mold for recoating 165μm coated fiber	S013272
FSR-02-MOLD-280 Mold for recoating 250μm coated fiber	S012972
FSR-02-MOLD-450 Mold for recoating 400μm coated fiber	S012976
FSR-02-MOLD-1000 Mold for recoating 900μm jacketed fiber	S013212
Force gauge for calibrating proof tester	S013092
Force gauge mounting table (required with gauge)	S013088
Spare UV lamp	S013012

AutoCoater

Designed for high strength applications, the AutoCoater protects splices of acrylate-coated optical fibers. With high productivity and low cost advantages, the AutoCoater is fully automatic, allowing for operator independence in factory environments.

The AutoCoater automatically centers fibers when inserted into the mold. The mold can be exchanged in seconds with no realignment required. Available in different sizes to cover a range of coating diameters, molds can be customized and used more than 50 times (25 times per injection point).

The AutoCoater consists of a custom-designed, adjustable halogen lamp which scans the portion of the fiber to be cured. A 6mm length will be cured in about 10 to 20 seconds depending on the properties of the resin. The acrylate is cured through the walls of the transparent mold with a typical curing time of 15 to 60 seconds depending on the resin properties and the length of the recoated part.

The automatic tensile strength tester supports forces up to 20N with presets for the level of strength, pulling rate and time at maximum force. Linear clamps are carefully designed so that the primary coating is not flattened. Two adjustable clamping forces are available and the strongest force is only applied during the tensile strength test. The standard clamp is designed for coating diameters of 250 to 900µm. When changing the recoating diameter, adjustments are not needed within this range for the clamps or the AutoCoater. The clamps contain an insert that can be exchanged in seconds if a different coating diameter is required.

Features

- Fully automatic, handling a range of fiber diameters
- High recoating quality
- Easy mold replacement
- Automatic tensile strength tester
- Includes ten 250µm molds, power supply and owners manual

Specifications

PARAMETER	VALUE
Mold Length	34mm
Curing Time	15 - 120 sec
Curing Wavelength	>360 nm
Total Cycle Time	Typical 35 sec
Injection Quantity	0.1-35 ul/recoat
Hold Time	0-60 sec
Tensile Test	1 - 20N
Resolution	0.1N
Pulling Speed	10-200mm/min
Power Supply	External 12V DC
Dimensions	320mm(W) x 200mm(D) x 120mm(H)
Weight	3.5kg
Compressed Air Supply	External compressor (not included), 5-7 bar, 4mm instant push-in fitting

Ordering Information

DESCRIPTION	AFL NO.
AutoCoater w/ Power Supply and Cord, 250µm Molds (10 pieces), Spare Lamp (Includes: 250µm Molds (10), Linear clamp insert (250-400µm), Standard Mold Clamp, manual and tools)	40000000-US

Accessories

DESCRIPTION	AFL NO.
Mold Options	
Mold, AutoC, 250µm, 34mm (10 pieces)	40250034
Mold, AutoC, 300µm, 34mm (10 pieces)	40300034
Mold, AutoC, 400µm, 34mm (10 pieces)	40400034
Mold (T), AutoC, 900µm, 34mm (10 pieces)	40900034
Miscellaneous	
Linear Clamp Insert, AutoC, 900µm	40900100
Linear Clamp Insert 160µm, AutCoater (does not center fiber in 250µm mold)	40010160
Mold Clamp, Standard, AutoCoater	40000100
Mold Clamp, T-type, AutoCoat	40000200
Power Cord, US	11000001
Power Supply, 90-240V 100W	11090240
UV-Lamp, 12V 75W	21012075

Recoater 1

The Recoater 1 restores the primary coating on spliced optical fibers with acrylate coatings. Fiber is automatically centered when it is inserted into the mold. Due to the mold design, the restored part of the coating retains almost the same diameter as the original coating.

The mold can be exchanged in seconds with no alignment required after exchange. Molds for various sizes of coating diameters are available and can also be customized. The mold can typically be used for more than 30 to 80 recoatings depending on the type of acrylate and handling.

The mold holder keeps the mold in line with primary capstans, or if mounted, the linear clamps to the left and right of the mold. To facilitate the insertion of the fiber and resin, the mold can be opened with the aid of a lever. The resin is cured through the walls of the transparent mold with a typical curing time of 15 to 60 seconds depending on the type of resin and the length of the recoated part.

The automatic tensile strength tester can be used for forces up to 50N. The level of strength, pulling rate and time at the maximum force can be preset. If only short fibers are available, the linear clamps are used. Tensile strength tests up to 10N can be made with the clamps.

Features

- High recoating quality
- High strength
- Handles most diameters
- Easy mold replacement
- Tensile strength tester up to 50N
- Includes ten 250µm molds, power supply and users manual

Specifications

PARAMETER	VALUE
Mold Length	34mm
Curing Time	15 - 120 sec
Curing Wavelength	>360 nm
Tensile Test	2 - 50N
Hold Time	0-60 sec
Resolution	0.1N
Pulling Speed	10-100 mm/min
Power Supply	External 12V DC
Dimensions	280mm(W) x 200mm(D) x 120mm(H)
Weight	3.5kg

Ordering Information

DESCRIPTION	AFL NO.
Recoater 1 with Power Supply & Cord, 250µm Molds (10 pieces), Spare Lamp (Includes: 250µm Molds (10), manual and tools)	20000000-US

Accessories

DESCRIPTION	AFL NO.
Mold Options	
Mold, Recoater 1, MiniC, 245µm, 34mm (10 pieces)	10245034
Mold, Recoater 1, MiniC, 250µm, 20mm (10 pieces)	10250020
Mold, Recoater 1, MiniC, 250µm, 34mm (10 pieces)	10250034
Mold, Recoater 1, MiniC, 260µm, 34mm (10 pieces)	10260034
Mold, Recoater 1, MiniC, 310µm, 34mm (10 pieces)	10310034
Mold, Recoater 1, MiniC, 400µm, 34mm (10 pieces)	10400034
Mold, Recoater 1, MiniC, 900µm, 34mm (10 pieces)	10900034
Clamp Options	
Linear Clamp, Rec. 1, 250-400µm	20000100
Linear Clamp, Rec. 1, 900µm	20000200
Miscellaneous	
Power Cord, US	11000001
Power Supply, 90-240V 100W	11090240
UV-Lamp, 12V 75W	21012075

NYFORS™

MiniCoater

The MiniCoater restores the primary coating on spliced optical fibers with acrylate coatings. The fiber is automatically centered when it is inserted into the mold. Due to the mold design, the restored part of the coating retains almost the same diameter as the original coating.

To facilitate the insertion of the fiber and the recoating resin, the mold can be opened with the aid of a lever. The resin is cured through the walls of the transparent mold. The typical curing time is 15 to 60 seconds depending on the type of resin and the length of the recoated part. Molds for various sizes of coating diameters are available with custom sizes manufactured on request. Typically used for 30 to 80 recoatings (depending on the type of acrylate used and handling), the MiniCoater's mold can be exhanged in seconds with no need for realignment.

The MiniCoater also comes standard with a manual tensile strength tester used for forces up to 10N. The fiber is placed around the capstans and pulled by the operator until the LED is switched off.

Features

- High recoating quality
- Compact design
- Handles most diameters
- Easy mold replacement
- Manual tensile strength tester up to 10N
- Includes ten 250μm molds, power supply and users manual

Specifications

PARAMETER	VALUE
Mold Length	34mm
Curing Time	5 - 120 sec
Curing Wavelength	>360 nm
Tensile Test	0-10 N
Power Supply	12V DC
Dimensions	200mm (W) x 90mm (D) x 130mm (H)
Weight	1.2kg

Ordering Information

DESCRIPTION	AFL NO.
MiniCoater with Power Supply and Cord, 250μm Molds (10 pieces) (Includes: 250μm Molds (10), Linear Clamps (250-400 μm), manual and tools)	10000000-US

Accessories

DESCRIPTION	AFL NO.
Mold Options	
Mold, Recoater 1, MiniC, 245μm, 34mm (10 pieces)	10245034
Mold, Recoater 1, MiniC, 250μm, 20mm (10 pieces)	10250020
Mold, Recoater 1, MiniC, 250μm, 34mm (10 pieces)	10250034
Mold, Recoater 1, MiniC, 260μm, 34mm (10 pieces)	10260034
Mold, Recoater 1, MiniC, 310μm, 34mm (10 pieces)	10310034
Mold, Recoater 1, MiniC, 400μm, 34mm (10 pieces)	10400034
Mold, Recoater 1, MiniC, 900μm, 34mm (10 pieces)	10900034
Miscellaneous	
Power Cord, US	11000001
Power Supply, 90-240V 100W	11090240
Linear Clamp, MiniC, 900μm	10000100

Splice Protection Sleeves

AFL offers a wide selection of fiber protection sleeves to meet any application. The FP-03 series is the industry standard for durable and lasting protection of single fiber splices in field installations, while the FP-04(T)/05 provide these same performance levels for 8/12 fiber ribbon respectively.

The FPS01 and FPS04 series are specially designed for optical components, where small packaging is a priority. These micro sleeves provide the known reliability of Fujikura sleeves in the smallest possible lengths. This easy and cost effective method is a great alternative to recoating. The FPS01 and FPS04 series offer a wide range of options to accommodate various coating sizes, and are manufactured in a variety of lengths. This gives great flexibility in designing optical modules.

Standard Sleeves: Dimensions & Applicable Fiber

FP-03 AND FP-03 (L=40) FOR SINGLE FIBERS UP TO 900 MICRONS

DESCRIPTION	SLEEVE LENGTH	FIBER CLEAVE LENGTH	SLEEVE DIAMETER AFTER SHRINK	AFL NO.
FP-03	60mm	16mm	3.1mm (max.)	S000065
FP-03(M)	60mm	16mm	3.1mm (max.)	S000066
FP-03(34)	34mm	10mm	3.1mm (max.)	S000453
FP-03(40)	40mm	10mm	3.1mm (max.)	S000206

SLEEVES DESIGNED SPECIFICALLY FOR RIBBON FIBERS

DESCRIPTION	FIBER COUNT	SLEEVE LENGTH	FIBER CLEAVE LENGTH	SLEEVE DIAMETER AFTER SHRINK	AFL NO.
FP-04(T)	Up to 8 fibers	40mm	10mm	4.1mm (max.)	S002105
FP-05	Up to 12 fibers	40mm	10mm	4.5mm (max.)	S003027
FPS04-30	Up to 4 fibers	30mm	10mm	2.4mm (max.)	S010848
FPS08-28	Up to 8 fibers	28mm	10mm	3.4mm (max.)	S013560
FPS24-40	Up to 24 fibers	40mm	10mm	8mm (max.)	S013004

Specifications

PARAMETER	DESCRIPTION	VALUE
Outer tube	FP-03 series FP-04(T) / FP-05	Poliolefin based on Polyethylene Ethylene-Vinyl Acetate (Polyolefin Copolymer)
Inner tube		Ethylene-Vinyl Acetate (Polyolefin Copolymer)
Strength member	FP-03 series FP-04(T) / FP-05	Stainless steel Quartz glass
Operation condition (after shrink)		-10 to 50 degree C, 0 to 95%RH(Non dew)
Storage condition (before shrink)		-40 to 60 degree C, Non dew

Splice Protection Sleeves

Micro Sleeves: Dimensions & Applicable Fiber

FPS01-400 SERIES FOR SINGLE FIBERS UP TO 400 MICRON FIBER

DESCRIPTION	SLEEVE LENGTH	FIBER CLEAVE LENGTH	SLEEVE DIAMETER AFTER SHRINK	AFL NO.
FPS01-400-12	12mm	4mm	1.5mm	S014088
FPS01-400-15	15mm	4mm	1.5mm	S012668
FPS01-400-20	20mm	8mm	1.5mm	S012672
FPS01-400-25	25mm	10mm	1.5mm	S012676
FPS01-400-34	34mm	15mm	1.5mm	S012680
FPS01-400-40	40mm	16mm	1.5mm	S011914

FPS01-900 SERIES FOR SINGLE FIBERS UP TO 900 MICRON FIBER

DESCRIPTION	SLEEVE LENGTH	FIBER CLEAVE LENGTH	SLEEVE DIAMETER AFTER SHRINK	AFL NO.
FPS01-900-15	15mm	4mm	2.3mm	S012684
FPS01-900-20	20mm	6mm	2.3mm	S012688
FPS01-900-25	25mm	6mm	2.3mm	S011954
FPS01-900-34	34mm	13mm	2.3mm	S012692
FPS01-900-45	45mm	16mm	2.3mm	S012696

Specifications

PARAMETER	MODEL	VALUE
Outer tube	FPS01 series / FPS04-30	Poliolefin based on Polyethylene
Inner tube		Ethylene-Vinyl Acetate (Polyolefin Copolymer)
Strength member	FPS01 series FPS04-30 / FPS08-28	Stainless steel Quartz glass
Operation condition (after shrink)		-10 to 50 degree C, 0 to 95%RH(Non dew)
Storage condition (before shrink)		-40 to 60 degree C, Non dew

CT-32 Precision Fiber Cleaver

The CT-32 is a modified version of our standard cleaver model CT-30. The modifications allow use of a spacer system that provides for the full range of acceptable cleave lengths for use with our factory fusion splicer models FSM-45F & 45PM. The CT-32 also allows for a reduced cleave length of 8mm on 900µm jacketed fibers and as short as 3mm on 250µm and 400µm coated fibers. Included with the CT-32 is a 1mm spacer that allows for the recommended cleave lengths for use with our factory fusion splicer models. An optional 2mm spacer can be purchased to expand cleave length options.

Specifications

PARAMETER	VALUE
Dimensions (W x D x H)	69mm x 82mm x 41mm (2.7" x 3.2" x 1.6")
Weight	180g (0.4 lbs)
Blade lifetime	48,000 cleaves (1,000 x 3 heights x 16 positions)
Cleave angle capability	typically <0.5˚
Fiber count	Single
Fiber type	Silica Optical Fiber
Cladding diameter	125 µm
Coating diameter	0.25mm to 0.9mm depending on fiber holder (FH-40 series)

Ordering Information

DESCRIPTION	APPLICATION	AFL NO.
CT-32 Includes: CT-32 cleaver, SPA-40-CT-040 cleaver spacer, hex wrench, carrying case and instruction manual	Single Fibers: 250µm to 900µm coating, 125µm cladding	S014348

Accessories

DESCRIPTION	AFL NO.
SPA-40-CT-050 Spacer (2mm)	S014351
Replacement Blade for CT-30 Series Cleavers	S012828
FC-02 Fiber Collector	S014092
FDB-02 Fiber Collector Scrap Box	S014104
CC-18 Carrying Case for CT-30 Series Cleaver	S014292

Application

CLEAVE LENGTH (mm)	REQUIRED CLEAVER SPACER		NOTE
	PROVIDED	OPTIONAL	
10	—	SPA-40-CT-050	—
9	SPA-40-CT-040	—	—
8	—	—	—
5	—	SPA-40-CT-050	Short cleave length of 3mm to 5mm available by stripping with HJS-02 and SPA-040-HJS-030. (sold separately)
4	SPA-40-CT-040	—	
3	—	—	

CT-38 Precision Fiber Cleaver

The CT-38 cleaver is designed for cleaving silica fibers with 80µm cladding. Utilizing the same one step design of our popular CT-30 cleaver, the CT-38 is quick, easy, and dependable. The 16 position blade yields 48,000 cleaves by providing for blade height and position adjustments. The cleaver can be used with either the FSM-45F & 45PM fiber holder system or with the optional AD-30A adapter plate for other applications.

Application

DESCRIPTION	FIBER PLACING	CLEAVE LENGTH (MM)	REQUIRED CLEAVER SPACER		NOTE
			PROVIDED	OPTIONAL	
CT-38	Fiber Holder	10	—	SPA-40-CT-050	—
		9	SPA-40-CT-040	—	—
		8	—	—	—
		5	—	SPA-40-CT-050	Short cleave length of 3mm to 5mm available by stripping with HJS-02 and SPA-040-HJS-030. (sold separately)
		4	SPA-40-CT-040	—	
		3	—	—	
CT-38A	Fiber Plate	6 to 20	SPA-40-CT-050	—	Requires purchase of CT-38 and optional AD-30A.

Specifications

PARAMETER	VALUE
Dimensions (W x D x H)	69mm x 82mm x 41mm (2.7" x 3.2" x 1.6")
Weight	180g (0.4 lbs)
Blade lifetime	48,000 cleaves (1,000 x 3 heights x 16 positions)
Cleave angle capability	typically <0.5°
Fiber count	Single
Fiber type	Silica Optical Fiber
Cladding diameter	80µm

Ordering Information

DESCRIPTION	APPLICATION	AFL NO.
CT-38 (fiber holder) Includes: CT-38 cleaver, SPA-40-CT-040 cleaver spacer, hex wrench, carrying case and instruction manual	Single Fibers: 165µm coating, 80µm cladding	S014349

Accessories

DESCRIPTION	AFL NO.
Replacement Blade for CT-30 Series Cleavers	S012828
CC-18 Carrying Case for CT-30 Series Cleaver	S014292
AD-30A Adapter Plate	S014096
SPA-40-CT-050 Spacer	S014351

FAFL

NEW

Available June 2011

CT-100 Fiber Cleaver

Precise cleaving is required for photonic splicing applications as the types of optical fiber become more diversified to meet new applications. In addition, angled cleaving is often required for low back-reflection fiber end preparation. The CT-100 has been developed to offer adjustability and versatility for these various fiber types and applications while offering superior cleaving performance beyond conventional cleavers that utilize a circular blade. The CT-100 is equipped with a motorized diamond blade that touches the fiber after tension has been applied providing high-strength cleaving capability.

Features

- Diamond blade with long blade life
- Large diameter fiber cleaving capability (fiber diameter range 80 to 250 μm)
- Angle cleaving capability (0 to 15 degrees)
- Cleave counter
- Adjustable cleave length
- Dual power sources (4 "AA" batteries or AC adapter)

Specifications

PARAMETER	VALUE
Applicable Fiber	Conventional silica optical fiber
Cleaving Performance	Typical 0.5 degrees
Cladding Diameter	80 to 250 μm
Coating Diameter	160 to 2000 μm
Cleave Angle Capability	0 to 15 degrees (adjustable)
Cleave Length	0 to 40 with Fiber Holder, FH-100 series or FH-40 series
Dimensions	140 mm (W) x 110 mm (D) x 95 mm (H)
Weight	900g or less (excluding batteries)
Blade Lifetime	20,000 fibers (1,000 fibers x 20 positions)
DC Power Supply	4 "AA" size batteries (approx. 2000 cleaves)
AC Power Supply	100 to 240 VAC / 50 to 60 Hz using ADC-16
Operating Conditions	Temperature: 0 to 40deg.C, Humidity: 0 to 95% RH (Non-condensing)
Storage Conditions	Temperature: -40 to 80deg.C, Humidity: 0 to 95% RH (Non-condensing)

Ordering Information

DESCRIPTION	AFL NO.
CT-100 Advance Optical Fiber Cleaver	S014972

Accessories

DESCRIPTION	AFL NO.
ADC-16 AC Adapter	S015017
ACC-09 AC Power Cord	S014390

www.AFLglobal.com or (800) 235-3423

PowerCleave®

To complement the line of world class splicing systems, AFL's PowerCleave combines the precision of an ultrasonic cleaver with the ease and improved fiber management of the Fujikura fiber holder system. PowerCleave's tensile cleaving method includes a tension clamping system and a diamond-tipped ultrasonic blade, allowing for consistently flat ends even at cleave lengths as short as 3mm. Specially designed for the FSM-45F/PM fiber holders, this advanced cleaving system allows for more reliability and greater splicing consistency with less dependence on operator technique.

Features

- Tensile cleaving with ultrasonic blade
- Consistent, low-angle cleaves of short cleave-length fibers
- Fiber holder system reduces fiber handling
- Clean, reliable quality

Specifications

PARAMETER	VALUE
Fibers Cleaved	80µm - 200µm (cladding diameter)
Minimum Cleave Length	3mm
Cleave Angle	<0.6 typical (95% of cleaves)
Blade	Diamond with an estimated life of over 20,000 cleaves
Clamping System	Compatible with Fujikura 40F/PM fiber holders
Case	ABS impact resistant with non-slip feet and a 6.25mm (.24 inch) BSW thread tripod mount for hard mounting to a workstation
Battery	9V alkaline (MN 1604), battery life approximately 10,000 cleaves
Dimensions (L x W x D)	75mm x 153mm x 150mm (3.0 x 6.0 x 5.9 inches)
Weight	1.1kg (2.4 lbs)
Operating Temperature	0 to 45°C (32 to 113°F)
Storage Temperature	-20 to 60°C (-4 to 140°F)
CE Conformity	Fully complies with all EC equipment guidelines according to the CE declaration of conformity

Ordering Information

DESCRIPTION	AFL NO.
PowerCleave® Kit Includes: PowerCleave, Instruction manual, 2.5mm x 60mm screwdriver, 2mm Allen wrench	S009972

AutoCleaver

The AutoCleaver is a fully automatic, ultra high precision fiber cleaver with a typical cleave angle of less than 0.3°. Designed for industrial applications where high accuracy, reliability and production yield are required, the AutoCleaver has a built-in microprocessor which controls all vital parameters and settings such as fiber positioning, clamping, fiber tension and the exact position and speed of the diamond blade. The cleaver can be connected to an external PC from which all programmable parameters and settings can be accessed.

The AutoCleaver has a diamond blade with an extensive life, generating typically more than 26,000 cleaves per blade. With interchangeable adapters to fit all commercially available fiber holders, the AutoCleaver's adapter is easily adjustable for desired cleave lengths and the automatic fiber waste disposal system removes any hazardous fiber scraps.

The AutoCleaver comes in a small bench top design, workbench-mountable or ready to be integrated into different subsystems.

Features

- Fully automatic
- Low cleave angles of < 0.3°
- Very flat end faces
- Designed for production environment
- Waste fiber deposition
- Long diamond life of > 26,000
- PC controllable

Specifications

PARAMETER	VALUE
Fiber Cladding	80-230 µm*
Fiber Coating	160 - 900µm*
Cleave Angle	Typical < 0.3°
Cycle Time	Typical <12 sec
# of Cleaves/Blade	>30,000
Fiber Waste	Typical < 20mm
Power Supply	External 12V DC
Compressed Air	External Compressor**, 6 bar, 4mm instant push-in fitting
PC Connection	RS-232
Dimensions	175mm (W) x 138mm (D) x 104mm (H)
Weight	1.4kg

* Fiber specific handling kits required
** Not included in delivery

Ordering Information

DESCRIPTION	AFL NO.
AutoCleaver with Power Supply and Cord (Includes: V-Groove and Height Adjuster for 125µm fiber, PC software, RS-232 cable, manual and tools)	50000000-US

Accessories

DESCRIPTION	AFL NO.
Adaptor Plate FJK, AC STD	50000020
V-Groove, STD, Cla 80µm (Blue)	51030010
V-Groove, STD, Cla 125-199µm (Yellow)	51030020
V-Groove, STD, Cla 200-349µm (Orange)	51030030
Height Adjuster STD, Cla 80µm (Blue)	51040010
Height Adjuster STD, Cla 125-159µm (Yellow)	51040020
Height Adjuster STD, Cla 160-199µm (Blank/Grey)	51040030
Height Adjuster STD, Cla 200-349µm (Orange)	51040040
Diamond blade	50000010
Cleaver Blade Replacement Tool	50000050
Power Supply, 100-240V, 1.25A	50100240
Adapter for Power Supply, US	50100241

AutoCleaver LDF

The AutoCleaver LDF is a high precision fiber cleaver, designed for cleaving of Large Diameter Fibers. It provides outstanding cleaving performance for large diameter fibers from 250µm up to 1200µm in diameter. It also supports cleaving of fibers as small as 125µm. The unique and patent-pending cleaving process generates typical cleave angles of less than 0.5 degrees with LDF fibers.

The AutoCleaver LDF can be configured for use with the Fujikura FSM-45 series of fusion splicers and therefore supports splicing operations with large diameter fibers. The cleaved fiber is transferred from the cleaver to the Fujikura splicer using a standard Fujikura fiber holder. The built in Microprocessor controls all vital parameters and settings, such as fiber alignment, clamping, tension and the exact position and speed of the diamond blade. This control of sensitive parameters guarantees a high cleaving repeatability and accuracy. During cleaving, the fiber coating is clamped by a touch-operated tension clamp. The clamp is quickly interchangeable based on the fiber coating diameter. A v-groove clamping block and a fiber height adjuster are selected based upon the diameter of the fiber cladding. The fiber coating tension clamp as well as the V-groove clamp block and height adjuster work together as a fiber handling kit to ensure optimum cleaving performance for a particular fiber. These parts may be selected at the time of cleaver purchase from the selection guide matrix. Other sets are easily exchanged by the operator to set the cleaver up for another fiber size. The AutoCleaver LDF also accepts the use of Nyfors fiber holders in place of the tension clamps normally used for coating clamping. This provides versatile use of the cleaver for operations when splicing is not required. The cleaver is designed to generate minimum amounts of fiber waste, typically less than 20mm. An automatic waste disposal system removes any hazardous fiber scraps. The cleaver can be connected to an external PC that gives access to all programmable parameters and settings.

The AutoCleaver LDF comes in a small bench top design. It has been designed to easily permit recessed mounting for ergonomic workbench operations in a production environment and is therefore ready to be integrated into different subsystems.

Features

- Fully automatic
- Low cleave angles: < 0.50°
- Very flat end faces
- Operator independent
- Designed for production and laboratory environments
- Automatic scrap fiber collection
- Long diamond life
- PC controllable
- Adaptable for fiber holders of the Fujikura FSM-45F-LDF and FSM-45PM-LDF fusion splicer

Specifications

PARAMETER	VALUE
Fiber Cladding	250 - 1000µm*
Fiber Coating	300 - 1500µm*
Cycle Time	Typical < 14 seconds
Cleave Angle	Typical < 0.5°
Cladding Diameter	230 - 1000 µm
Coating Diamter	250 - 1500 µm
Fiber Waste	Typical < 20mm
Power Supply	External 12V DC
Compressed Air	External Compressor**, 6 bar 4mm instant push-in fitting
PC Connection	RS-232
Dimensions	175mm (W) x 138mm (D) x 104mm (H)
Weight	2.5kg

* Fiber specific handling kits required
** Not included in delivery

AutoCleaver LDF

Ordering Information

DESCRIPTION	LABEL	AFL NO.
AutoCleaver LDF with Power Supply and Cord (Includes: Adaptor Plate FJK, PC software, RS-232 cable, manual and tools)	–	50100000-US

* See Fiber Handling matrix below for additional required items.

Selection Guide Matrix for Determining Fiber Handling Kit

DESCRIPTION	LABEL	AFL NO.
V-Groove (Used with all splicer brands) Select size based on fiber cladding diameter		
V-Groove, LD, Cla 200-349μm	Orange	51030030
V-Groove, LD, Cla 350-699μm	Green	51030040
V-Groove, LD, Cla 700-1000μm	Red	51030050
Height Adjuster (Used with all splicer brands) Select size based on fiber cladding diameter		
Height Adj. LD, Cla 200-349μm	Orange	51040040
Height Adj. LD, Cla 350-529μm	White	51040050
Height Adj. LD, Cla 530-699μm	Black	51040060
Height Adj. LD, Cla 700-1000μm	Red	51040070
Linear Insert (Used only with Fujikura splicers) Select size based on fiber coating diameter		
Linear Insert, Coa 210-699μm	210-699	51050010
Linear Insert, Coa 700-1000μm	700-1000	51050020
Fiber Holder LDF (Used with all splicer brands, except Fujikura) Select size based on fiber coating diameter		
Holder, LD, Coa 200-299μm	250μm	51010010
Holder, LD, Coa 300-399μm	350μm	51010020
Holder, LD, Coa 400-499μm	450μm	51010030
Holder, LD, Coa 500-599μm	550μm	51010040
Holder, LD, Coa 600-699μm	650μm	51010050
Holder, LD, Coa 700-799μm	750μm	51010060
Holder, LD, Coa 800-899μm	850μm	51010070
Holder, LD, Coa 900-999μm	950μm	51010080
Holder, LD, Coa 1000-1099μm	1050μm	51010090
Holder, LD, Coa 1100-1199μm	1150μm	51010100
Holder, LD, Coa 1200-1299μm	1250μm	51010110
Holder, LD, Coa 1300-1399μm	1350μm	51010120
Holder, LD, Coa 1400-1499μm	1450μm	51010130
Distance Plate (Used with all splicer brands, except Fujikura) Select size based on fiber coating diameter		
Distance Pl. LD Cla 200-349μm	Orange	51020010
Distance Pl. LD Cla 350-699μm	Green	51020020
Distance Pl. LD Cla 700-1000μm	Red	51020030

Misc. Accessories

DESCRIPTION	AFL NO.
Diamond blade	50000010
Cleaver Blade Replacement Tool	50000050
Fiber Holder Adapter, LD, FJK	51060010
Power Supply, 100-240V, 1.25A	50100240
Adapter for Power Supply, US	50100241
Universal Stage NFF FH Base	S014770

NYFORS™

Features

- Variable angle cleaving, 0 to >15 degrees
- Semi automatic
- Easy handling
- Operator independent
- Designed for production and laboratory environments
- Automatic fiber waste collection
- Long-lasting diamond
- PC controllable

AutoCleaver LDA

The AutoCleaver LDA is a high precision fiber cleaver, designed for angle cleaving of large diameter fibers (LDF). It is a special version of the wellknown AutoCleaver LDF™ which provide outstanding cleaving performance for fibers from 230 um up to 1000 um in diameter. The unique and patent pending cleaving process generates typical cleave angles of less than 0.5 degrees. The AutoCleaver LDA is capable of cleaving fibers with a coating diameter up to 1000 um, achieving cleave angles from 0 up to more than 15 degrees with very consistent ±0.5 degrees cleave angles. The cleave angle is set using a micrometer screw positioner allowing the operator to quickly setup the cleaver for different fiber sizes or cleave angles.

The v-groove clamp block and the fiber height adjuster are selected to match the diameter of the fiber cladding. The v-groove clamp block and the height adjuster work together as a fiber handling kit to ensure optimum cleaving performance for a particular fiber range. These parts have to be be selected from the Selection Guide Matrix when you purchase the cleaver. The parts are easily exchanged by the operator to set the cleaver up for a different fiber size.

The built-in microprocessor controls all parameters and settings, such as clamping, tension and the exact position and speed of the diamond blade. This control of sensitive parameters guarantees a high cleaving repeatability and accuracy.

The cleaver is designed to generate a minimum amount of fiber waste, typically less than 20 mm. An automatic waste disposal system removes any hazardous fiber scraps. The cleaver can be connected to a PC that gives access to all programmable parameters and settings. The AutoCleaver LDA comes in a small bench top design.

Specifications

PARAMETER	VALUE
Cycle time	Typical < 18 seconds
Cladding diameter	230-800+ µm*
Coating diameter	250-1000 µm
Cleave angle	0 to >15 degrees
Fiber waste length	Typical < 20 mm, automatic disposal
Power supply**	External 12 V DC, 15W
Compressed air supply	External compressor**, 6-8 bar, 4 mm instant push-in fitting
PC Interface	RS-232
Dimensions	175 mm (W) x 138 mm (D) x 104 mm (H)
Weight	2.5 kg

* Fiber specific handling parts required. See the Selection Guide Matrix for more information.
** Not included in delivery.

AutoCleaver LDA

Ordering Information

DESCRIPTION	AFL NO.
AutoCleaver LDA with Power Supply and Cord	50400000

Included in delivery: AutoCleaver LDA unit for angle cleaving, PC software, RS-232 cable, Manual and Tools.
* See Fiber Handling matrix below for additional required items.

Selection Guide Matrix for Determining Fiber Handling Kit

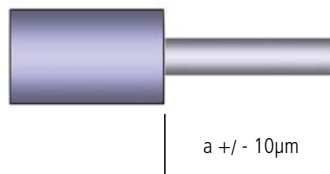| DESCRIPTION	LABEL	AFL NO.
V-Groove (Used with all splicer brands) Select size based on fiber cladding diameter		
V-Groove, LD, Cla 200-349µm	Orange	51030030
V-Groove, LD, Cla 350-699µm	Green	51030040
V-Groove, LD, Cla 700-1000µm	Red	51030050
Height Adjuster (Used with all splicer brands) Select size based on fiber cladding diameter		
Height Adj. LD, Cla 200-349µm	Orange	51040040
Height Adj. LD, Cla 350-529µm	White	51040050
Height Adj. LD, Cla 530-699µm	Black	51040060
Height Adj. LD, Cla 700-1000µm	Red	51040070
Fiber Holder LDF (Used with all splicer brands, except Fujikura) Select size based on fiber coating diameter		
Holder, LD, Coa 200-299µm	250µm	51010010
Holder, LD, Coa 300-399µm	350µm	51010020
Holder, LD, Coa 400-499µm	450µm	51010030
Holder, LD, Coa 500-599µm	550µm	51010040
Holder, LD, Coa 600-699µm	650µm	51010050
Holder, LD, Coa 700-799µm	750µm	51010060
Holder, LD, Coa 800-899µm	850µm	51010070
Holder, LD, Coa 900-999µm	950µm	51010080
Holder, LD, Coa 1000-1099µm	1050µm	51010090
Holder, LD, Coa 1100-1199µm	1150µm	51010100
Holder, LD, Coa 1200-1299µm	1250µm	51010110
Holder, LD, Coa 1300-1399µm	1350µm	51010120
Holder, LD, Coa 1400-1499µm	1450µm	51010130

Misc. Accessories

DESCRIPTION	AFL NO.
Diamond blade	50000010
Cleaver Blade Replacement Tool	50000050
Fiber Holder Adapter, LD, FJK	51060010
Power Supply, 100-240V, 1.25A	50100240
Adapter for Power Supply, US	50100241

AutoCleaver S1-80μm / S1-125μm

When a specific and accurate bare fiber length is required, the AutoCleaver S1 provides the perfect cleave every time. Sensing the edge of the coating and adjusting the bare fiber length according to the customers' specifications, the AutoCleaver S1 cleaves 80μm and 125μm fibers automatically. Cleave angles are typically under 0.3° with excellent end face quality.

A built-in microprocessor controls all the vital parameters and settings such as fiber positioning, clamping, fiber tension and the exact position and speed of the diamond blade. The cleaver can be connected to an external PC, enabling access to all programmable parameters and settings.

The AutoCleaver S1 is available in a small bench top design, workbench-mountable or ready to be integrated into different sub-systems. At the time of order, the desired cleave length must be specified. The minimum cleave length possible is 3mm and the maximum is 6.5mm. The bare fiber length can be fine-tuned by software between 0 and 500μm.

Features

- Fully automatic
- Low cleave angles of < 0.3°
- Very flat end faces
- Designed for production environment
- Waste fiber deposition
- Long diamond life
- Available for 80 or 125μm fibers
- PC controllable

a +/- 10μm

Specifications

PARAMETER	VALUE
Fiber Cladding	80 - 125μm*
Fiber Coating	160 - 400μm*
Cleave Angle	Typical < 0.3°
Cycle Time	Typical < 14 seconds
Cladding diameter	80 and 125um
# of Cleaves/Blade	> 30,000
Fiber Waste	Typical < 20mm
Power Supply	External 12V DC
Compressed Air	External Compressor**, 6 bar 4mm instant push-in fitting
PC connection	RS-232
Dimensions	175mm (W) x 138mm (D) x 104mm (H)
Weight	1.4kg

* Fiber specific handling kits required
** Not included in delivery

Ordering Information

DESCRIPTION	AFL NO.
AutoCleaver S1-80μm with Power Supply and Cord (Includes: V-Groove & Height Adjuster, Adaptor Plate, PC software, manual and tools)	50200080
AutoCleaver S1-125μm with Power Supply and Cord (Includes: V-Groove & Height Adjuster, Adaptor Plate, PC software, manual and tools)	50200125

Accessories

DESCRIPTION	AFL NO.
Adaptor Plate FJK, AC STD	50000020
Adaptor Plate NYF/ECA, AC STD	50000030
V-Groove, STD, Cla. 80μm	51030010
V-Groove, STD, Cla. 125-199μm	51030020
Height Adj. STD, Cla. 80μm	51040010
Height Adj. STD Cla. 125-159μm	51040020
Diamond blade	50000010
Cleaver Blade Replacement Tool	50000050
Power Supply, 100-240V, 1.25A	50100240
Adapter for Power Supply, US	50100241

NYFORS™

AutoCleaver S2

The AutoCleaver S2 contains special fiber clamps with air pressure-controlled clamping forces, designed for cleaving air-clad fiber. Coupled with modified software, these features enable the AutoCleaver S2 to handle otherwise difficult-to-cleave fibers. The clamping force of the fiber clamps is set individually by changing the air pressure.

Features

- Fully automatic
- Low cleave angles of < 0.5°
- Very flat end faces
- Waste fiber deposition
- PC controllable

Specifications
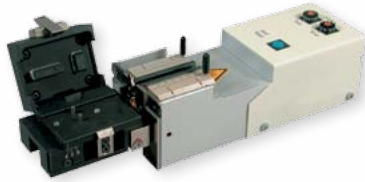
PARAMETER	VALUE
Fiber Cladding	125 - 1000µm*
Fiber Coating	250 - 1500µm*
Cycle Time	Typical < 14 seconds
Cleave Angle	Typical < 0.5°
Fiber Waste	Typical < 20mm
Power Supply	External 12V DC
Compressed Air	4mm instant push-in fitting
PC Connection	RS-232
Dimensions	175mm(W) x 138mm(D) x 104mm(H)
Weight	2.5kg

* Fiber specific handling kits required

Ordering Information

DESCRIPTION	LABEL	AFL NO.
AutoCleaver S2 with Power Supply and Cord (Includes: PC software, RS-232 cable, manual and tools)	—	50300000-US

Accessories

DESCRIPTION	LABEL	AFL NO.
V-Groove, STD, Cla 125-199µm	Yellow	51030020
V-Groove, LD, Cla 200-349µm	Orange	51030030
V-Groove, LD, Cla 350-699µm	Green	51030040
V-Groove, LD, Cla 700-1000µm	Red	51030050
Height Adjuster LD, Cla 200-349µm	Orange	51040040
Height Adjuster LD, Cla 350-529µm	White	51040050
Height Adjuster LD, Cla 530-699µm	Black	51040060
Height Adjuster LD, Cla 700-1000µm	Red	51040070
Holder, LD, Coa 200-299µm	250µm	51010010
Holder, LD, Coa 300-399µm	350µm	51010020
Holder, LD, Coa 400-499µm	450µm	51010030
Holder, LD, Coa 500-599µm	550µm	51010040
Holder, LD, Coa 600-699µm	650µm	51010050
Holder, LD, Coa 700-799µm	750µm	51010060
Holder, LD, Coa 800-899µm	850µm	51010070
Holder, LD, Coa 900-999µm	950µm	51010080
Holder, LD, Coa 1000-1099µm	1050µm	51010090
Holder, LD, Coa 1100-1199µm	1150µm	51010100
Holder, LD, Coa 1200-1299µm	1250µm	51010110
Holder, LD, Coa 1300-1399µm	1350µm	51010120
Holder, LD, Coa 1400-1499µm	1450µm	51010130
Distance Plate LD Cla 200-349µm	Orange	51020010
Distance Plate LD Cla 350-699µm	Green	51020020
Distance Plate LD Cla 700-1000µm	Red	51020030
Diamond blade	—	50000010
Cleaver Blade Replacement Tool	—	50000050
Power Supply, 100-240V, 1.25A	—	50100240
Adapter for Power Supply, US	—	50100241

AFL PowerStrip™

AFL PowerStrip is a thermal stripper used in high strength splicing. Using the proven blade and centering design of the Schleuniger FiberStrip 7030 in addition to the fiber holder system, the AFL PowerStrip automatically centers the fiber, heats the buffer or coating, and strips the buffer at a controlled rate with perfect alignment. The fiber holder system reduces fiber handling, making this tool ideal for any production environment.

- Features
- 250µm and 900µm fiber capability
- Short cycle time
- Lightweight and portable

Specifications

PARAMETER	VALUE
Fibers Stripped - Single buffered fiber	Cladding diameter: 125µm standard, 80µm optional Coating diameter: 250µm and 900µm standard, 160µm and 400µm optional
Clamping System	Fujikura fiber holder clamp; compatible with FSM-45F/PM and100 series fiber holders
Stripping Length	Up to 35mm
Heater Temperature Range	110°C to 150°C (230°F to 302°F)
Heating Time	1.5 to 13 seconds
Cycle Time	Approximately 5 seconds/cycle (after heating)
Power Supply	Input: 100 to 240 VAC, 50/60 ± 3Hz; Output: 12 VDC, 12W, 1A
Dimensions (L x W x D)	209mm x 57mm x 45mm (8.25 x 2.25 x 1.8 inches)
Weight	0.7kg (1.5 lbs)
CE Conformity	Complies with all CE equipment guidelines

Ordering Information

DESCRIPTION	AFL NO.
AFL PowerStrip™ Kit Carrying case, fiber holder clamping system, blades and centralizers for 125/250µm and 125/900µm fiber, power supply 230 VAC or 100/120 VAC, power cord 2m (6.5 feet), cleaning brush and tool set (hex keys, adjustment screwdriver)	S012808
Coating Blades	
80/160µm	S012656
125/250µm	S012596
125/400µm	S012628
125/900µm	S012604
250/400µm	S014400
Centralizers	
160µm	S012652
250µm	S012600
400µm	S012624
900µm	S012608

* Custom blades and centralizers available on request.

High Tensile Stripper

The Fujikura high tensile stripper HTS-12 provides excellent strength performance when removing 250µm and 400µm buffer from optical fibers. Heating temperature and duration are fully adjustable for a variety of buffer materials. Self centering blades eliminate the need for an external guide and make replacement quick and easy. Designed for use with the FSM-40F/PM fiber holder system, the HTS-12 is an ideal solution for stripping when high strength fusion splices are a must.

Specifications

PARAMETER	VALUE
Applicable Fiber:	
Cladding Diameter	125µm
Coating Diameter	250µm / 400µm (optional)
Stripping Length	35mm max
Temperature Settings	120º, 140º, 160º, or 180º C (adjustable)
Heating Time	3 seconds approximate
Power Supply	100 to 240 VAC (50 to 60Hz)
Dimensions	140W x 60D x 60H (mm) / 5.51W x 2.36D x 2.36H (inches)
Weight	600g / 1.3 lb
Operating Conditions	0ºC to 40ºC, 10% to 85% RH (non-condensing)

Ordering Information

DESCRIPTION	AFL NO.
HTS-12 High Tensile Stripper w/ 250µm Blades	S012094
400um Blade for HTS-12	S011946

NEW

Available June 2011

PCS-100 Polyimide Coating Stripper

Polyimide coated optical fiber are now widely used in the oil and gas and medical industries. The polyimide coating has superior heat and chemical resistance to conventional UV curable coating material, but the coating requires additional care to remove. Dangerous chemical stripping using hot sulfuric acid or burning the coating off are common methods to strip the fiber due to the thin coating and strong coating adhesion to the fiber cladding. AFL's PCS-100 Polyimide Fiber Coating Stripper is the first tool that uses a mechanical stripping method, providing a safe, consistent and quick stripping solution.

Features

- **Quick stripping** – A razor blade is applied to the fiber with specific tension and the coating is precisely planed along the fiber automatically. The process requires less time than the conventional methods of acid or heat. For a 125 µm fiber, 4 stripping passes at 90º rotational positions are typically required, and complete stripping is accomplished within 25 seconds. Larger fiber sizes require more stripping passes (at smaller rotational angle increments).

- **Safe, high quality stripping** – Because hot acid is not used, the operation is much safer. In addition, the fiber quality degradation is kept at a minimum as the glass surface is not damaged by oxidization of the coating during burning or arcing.

- **Flexible** – Many parameters, such as the razor blade position and stroke, and fiber rotation angle are all adjustable for various fiber sizes and coating materials.

Specifications

STRIPPING PERFORMANCE	
Applicable Fiber	Silica based Single-mode and Multimode glass fiber
Applicable coating	Polyimide coating and UV curable resin coating
Cladding Diameter Range	60 to 1200 µm
Coating Diameter Range	60 to 1,500 µm
Fiber Clamping	Adaptable to range of fiber/coating sizes by selection of applicable pair of FH-100-XXX series fiber holders
Strip Length	1 to 35 mm
Stripping Time	4 stripping passes: 25 seconds (typical for 125 µm fiber)
	8 stripping passes: 50 seconds
	12 stripping passes: 75 seconds
Blade Life	500 fibers / blade (In the case of 4 strips per fiber)
Stripping Modes	80 user-programmable modes
PROOF TEST FUNCTION	
Maximum Proof Test Force	2kgf
Typical Proof Test Cycle Time	3 seconds
DIMENSIONAL DATA	
Dimensions	230mm (W) x 214mm (D) x 151mm (H)
Weight	4.5kg excluding AC adapter.
POWER SOURCE	
Power Input	AC100 to 240 V (50 Hz to 60 Hz)
OPERATION AND STORAGE CONDITIONS	
Operating Conditions	Temperature: 0 to 40deg.C, Humidity: 0 to 95% RH (Non-condensing)
Storage Conditions	Temperature: -40 to 80deg.C, Humidity: 0 to 95% RH (Non-condensing)

Ordering Information

DESCRIPTION	AFL NO.
PCS-100 Polyimide Coating Stripper (Includes: FH-100-150, ADC-15 AC Adapter, ACC-02, Instruction manual and PCB-01 replacement blades.)	S014973

Accessories

DESCRIPTION	AFL NO.
FH-100-150	S014861
ADC-15	S014826
ACC-02	S001171
PCB-01	S015018

APM-100 Automatic Preparation Machine

The new APM-100 performs all the steps required to prepare optical fibers before splicing – automatically and with high consistency. This includes stripping the fiber without degrading fiber quality, cleaning fiber with alcohol to remove coating residue, and cleaving consistently at a right angle to the fiber axis. The entire process is complete in as little as 18 seconds.

Features

- **Automatic cleaning** – Main components in the machine are automatically cleaned allowing a continuous sequence of 100 fiber preparation operations.
- **Automatic residue collector** – Coating residue and glass scraps are collected in separate containers. At least 100 fiber preparation operations may be performed without emptying the scrap collectors.
- **Alcohol circulation system** – Alcohol for cleaning is circulated in a closed system enabling a lengthy refill-free operation.
- **Diamond blade** – A diamond blade is used for cleaving in the tension method cleaving process and provides consistent cleave quality.
- **Reliable stripping method** – Contact of the stripping blade to the fiber is prevented using guides in conjunction with the blade. This minimizes damage to fiber during the stripping process.
- **Production-friendly design** – The operating height is the same as the FSM-100 series splicers providing ergonomic, smooth and simple operation

Specifications

PARAMETER	VALUE
Applicable fiber	Silica based Single-mode and Multimode glass fiber
Applicable cladding diameter	125 µm
Applicable coating	UV curable resin coating
Applicable coating diameter	250 µm
Fiber clamping	FH-100-XXX series or FH-40-XXX fiber holder
Cleave length	3 to 9 mm
Cleave angle	Typical 0.5 degrees
Operating time	Typical 18 seconds (in the case of 125 µm diameter fiber with 250 µm coating)
Daily maintenance	Typically every 150 cycles
Operation action	1 step (Press start button only)
Air pressure	4 bar
Operating Condition	0 to 40 deg C at 0 to 95% RH (non-dew)
Storage condition	-40 to 80 deg C at 0 to 95% RH (non-dew)
Dimensions	170W x 260D x 120 H (MM)
Weight	5.0kg

Ordering Information

DESCRIPTION	AFL NO.
APM-100 Automatic Preparation Machine	S014974

Accessories

DESCRIPTION	AFL NO.
ADC-15 AC Adapter	S014826
ACC-02 AC Cord	S001172

USC-01A Ultrasonic Cleaner

The Fujikura ultrasonic cleaner model USC-01A provides a simple and cost effective method for cleaning optical fibers when high strength fusion splices are required. This ultrasonic cleaner readily accepts the fiber holders used with the FSM-45F and FSM-45PM.

The high frequency ultrasonic action cleans debris and coating residue without damaging the exposed cladding and a built-in timer assures that the required cleaning time is consistently used for all fibers processed. This cleaner, when used in conjunction with high strength stripping and cleaving accessories, produces outstanding results for the most demanding high strength applications.

Features

- Built-in timer assures correct cleaning time
- High intensity vibratory cleaning action
- Adjustment knob allows fine-tuning of fiber submersion depth
- Readily accepts fiber holders for the FSM-45F and FSM-45PM
- Alcohol bath lid prevents cleaning fluid evaporation when machine is idle
- Ergonomic design matches working height of FSM-45F and FSM-45PM

Specifications

PARAMETER	VALUE
Maximum Fiber Length Cleaned	54mm
Cleaning Liquid	Ethyl Alcohol
Cleaning Tank capacity	24cc to 34cc
Vibration Unit	50kHz Langevin Type
Output Power	6W
Timer Range	0 to 99 seconds
Power Requirement	AC 100 to 240V / 50 to 60Hz
Operating Environment	0 to 40°C, 0 to 95% RH, non-condensing
Storage Environment	-20 to 60°C, non-condensing humidity
Dimensions	95W x 173D x 157H (mm) / 3.74W x 6.81D x 6.18H (inches)
Weight	1 kg / 2.2 lbs

Ordering Information

DESCRIPTION	AFL NO.
USC-01A	S012732
Universal Fiber Holder Adapter for USC-01A	S013568
ADC-10 Power Adapter	S012548
ACC-09 Power Cord	S014390

ProofTester

The ProofTester is a compact and lightweight instrument ideal for strength testing of optical fibers up to 30 N. The ProofTester is developed to meet all types of applications where a strength test has to be performed. The ProofTester is designed with the user in mind. The fibers are easily placed in the correct position by guided linear clamps, and with a "One Touch" go button, the testing starts automatically. The built-in microprocessor controls all the important parameters such as pulling force, pull speed and hold time. This allows for a completely controlled test every time. The ProofTester can be connected to an external PC, which enables access to all programmable parameters and settings. The ProofTester is adapted for stand alone use or to be integrated in different subsystems.
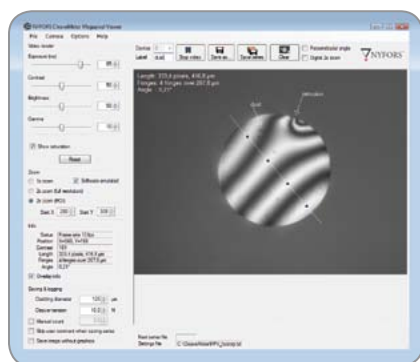
Features

- Fully automatic
- High pulling force
- Easy to operate
- Compact size
- PC controlled
- Logging of test data

Specifications

PARAMETER	VALUE
Fiber Buffers	160 - 900µm
Tensile Test	1 - 30N
Resolution	0.1N
Pulling Speed	20 - 100 mm/min
Hold Time	0 - 10 sec
Power Supply	External 12V DC
Compressed Air	External Compressor*, 5-7 bar, 4mm tube instant push-in fitting
Dimensions	210mm (W) x 138mm (D) x 110mm (H)
Weight	2.3kg

* Not included in delivery

Ordering Information

DESCRIPTION	AFL NO.
ProofTester (Includes: PC software, RS-232 cable, manual and tools)	60000000
Power Supply	50100240
Power Adapter	50100241

CleaveMeter MP1™

The CleaveMeter MP1™ is a non-contact interferometer, which is used for examining the end face of optical fibers with a cladding diameter of 125 to 1200 µm. The CleaveMeter MP1™ gives immediate information on the end face properties such as flatness, perpendicularity, hackles and dust, thus making this cleave meter the ideal instrument for cleaver inspection and optimization. Sampling tests as well as continuous documentation can be carried out both easily and quickly.

By means of the host application the user can view the live camera image, adjust camera settings, save and load images to/from file, and log all information in a specific text-based log file. In addition, the system includes several other new features such as automatic cleave angle measurement, user defined markers at points of interest, pseudo-color mode for better contrast and inpicture measurement results.

The optical system is based on a high-end camera with 1.3 megapixel (1280 × 1024) true resolution and very high sensitivity, yielding excellent image quality at high frame rates and high magnification. The switching between low and high magnification is software-controlled. The high-precision optics guarantees sharp and clear pictures with very little aberration.

The mechanical design is compatible with all NYFORS automatic fiber cleavers and accepts the fiber holders used with those machines. For other types of holders, custom-made adaptor plates are available upon request.

The CleaveMeter MP1™ comes in a small bench top design and connects to the USB port of a PC running the host application.

Features

- Angle analyzing and measurement tool
- Fast and easy to operate
- In-picture measurement results
- User defined and storable markers at points of interest

Specifications

PARAMETER	VALUE
Fiber Cladding	125–1200 µm*
Fiber Coating	250–1500 µm
Camera Resolution:	1280 × 1024 pixels
Image Scale:	1.25 µm per pixel
Absolute Accuracy	0.15 degrees
Relative Accuracy	(125-199 µm) 20 %
Relative Accuracy	(200-529 µm) 10 %
Relative Accuracy	(530-1200 µm) 5 %
Image File Format:	8-bit JPEG, PNG, TIFF, BMP
PC Connection:	USB 2.0 port
Power Supply:	Through USB port
Dimensions	97 mm (W) × 179 mm (D) × 142 mm (H)
Weight	1.6kg

* Fiber specific adaptor plates required

Ordering Information

DESCRIPTION	AFL NO.
CleaveMeter MPI/Excluding Adapter Plate (Includes: PC software, USB cable, manual and tools)	30000015
Adapter Plate, FJK, 200-259µm	30010010
Adapter Plate, NYFORS, Generic	30020010

Splice Master™
Splicing Management System

Splicing in a production environment can be challenging, especially when multiple fiber types need to be spliced together during construction of a larger optical module. Product quality and manufacturing efficiency are dependent upon splicing the correct fibers in the correct sequence using the correct splicing formula. Since manufacturing data is often as important as the product itself, a system to monitor and record this information is critical to maintaining a robust quality system.

AFL's Splice Master is a PC based splicing management system that enhances the splicing process by processing data the way splicing is actually done on the factory floor. The system operates with AFL's Fujikura splicing platforms (FSM-40F/PM and FSM-45F/PM splicers and the FSR-02 Recoater) and a standard computer equipped with a recent version of Microsoft Windows.

Features

- Programmable splicing sequences
- Large existing and customizable database of fiber combinations
- Enhances the splicing process by processing data the way splicing is actually done on the factory floor
- Inclusion of splicer and recoater
- Tab-delimited data output enables networking and analysis by existing factory software information systems
- Customizable features for different operator languages
- Programmable work instructions and graphic interfaces that guide the operator through the splicing and recoating processes

Ordering Information

DESCRIPTION	AFL NO.
Splice Master™ Splicing Mangement System	S013484
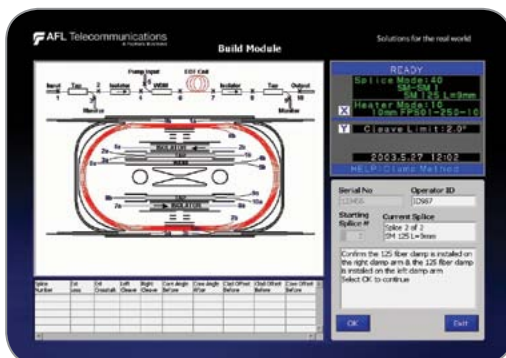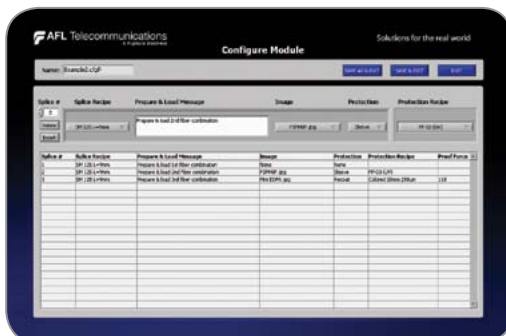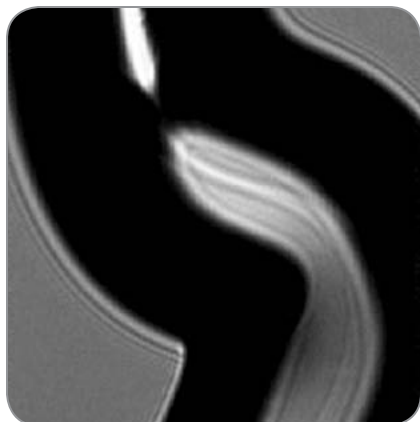
EndLight™ Low Back Reflection Termination

AFL's EndLight™ Low Back Reflection Termination minimizes back reflections in Fiber-to-the-Home (FTTH) networks, optical measurement and transmission equipment, and fiber optic sensors.

Back reflections are known to degrade the performance of many types of fiber optic systems, including analog video, high speed digital, and sensor systems. The EndLight™ termination effectively eliminates back reflections to undetectable levels on most measurement equipment. It is ideal for inclusion in back-reflection sensitive equipment such as splitter-based PON (passive optical network) systems. It can also be used in optical test and transmission equipment and various types of sensor systems.

The termination is available as a refillable software option for use with the FSM-40F or FSM-40PM fusion splicer. The product and manufacturing method are patent-pending.

Features

- Very small footprint enables placement in multiple device types
- Can terminate different fiber types
- Manufactured in seconds
- Manufactured using PC based software connected to the splicer
- Refillable in various quantities

Specifications

PARAMETER	VALUE
Reflected Power	Typical: -75 dB, using standard single-mode fiber

Ordering Information

DESCRIPTION	AFL NO.
EndLight™ Termination (sold as a software refill)	S013284

Please contact AFL for further information on specifications and ordering.

Optimization Services

With the constant introduction of new fiber types as well as the mixing of fiber types in opto-electronic devices such as optical amplifiers and sensors, splicer optimization is essential in minimizing splice loss and keeping splices physically robust. AFL provides an optimization service to determine the optimal settings for any combination of fiber types in any of our splicers.

This process involves changing over 50 splicer machine parameters, ranging from splicer arc power to fiber movement rate. These parameters change significantly with fiber characteristics such as fiber diameter, refractive index profile, and dopant composition.

In the FSM-45F and FSM-45PM fusion splicers, optimization plays an important role in maximizing the benefits of sweep arc technology, which minimizes the effects of differences in mode field diameters in a pair of fibers, thereby minimizing splice loss.

Splicers also include loss estimation functions, a separate loss estimation optimization is performed to maximize the accuracy of the loss estimation function on the machine to provide the most accurate splice loss readings. All of the parameters can be easily downloaded into a fusion splicer once complete.

Please contact AFL for further information on specifications and ordering.