



Product Name: AFL CT-50 Single & Ribbon Fiber Cleaver

Manufacturer Part Number: S017030

Click here for more details on the AFL CT-50 Single & Ribbon Fiber Cleaver

Fujikura 45S Fusion Splicer

The 45S cladding alignment fusion splicer is changing the way people splice fiber in small to mid-fiber count applications. This Fujikura splicer debuts a landmark improvement to the fusion splicing process with the ability to prepare and load both fibers simultaneously. The hand-held fiber coating stripper, the SS-05, is capable of stripping two 250 µm coated fibers in the same pass, along with the CT-16A cleaver adapter plate which can likewise accommodate two bare fibers for cleaving. After preparation, the 45S patented sheath clamps enable loading both fibers simultaneously into the splicer with one fiber in each hand. The user can press down on the sheath clamp base to close it while positioning the fiber in the V-grooves. This enables one-handed operation.

Furthermore, the 45S sheath clamps are mechanically linked to the wind protector, so after splicing is finished, opening the wind protector also opens both sheath clamps for quick sleeve positioning and transfer to the tube heater. The 45S tube heater shrinks sleeves much faster than its predecessor with a nominal ~20 second heat time for 60 mm sleeves down from ~26 seconds. The simultaneous fiber preparation capability, automated sheath clamp opening, and a faster tube heater, combine to lower the overall fusion splicing cycle time by ~30% or more.

The 45S continues to benefit the user experience with improvements to fiber placement, battery access, and machine ergonomics. Previously, when using sheath clamps, if the cleaved fiber was accidentally set past the electrode centerline, the machine would send an error and require manual intervention. The 45S will now accept this mistake and reverse the fiber to correct position automatically. With a cube form factor, the 45S is easily transported and operated in space-constrained environments. The adjustable screen can alleviate glare from the sun and adjust with abnormal splicer positions confronted in challenging splice locations.



455



45S Standard Kit



45S on Tripod

Features

- Simultaneous fiber preparation with newly patented sheath clamp design
- Sheath clamps automatically opened with the wind protector
- Automatic fiber placement correction
- Active Fusion Control for arc optimization with every splice
- Active Blade Management for cleave quality monitoring and correction
- Easy-access battery, screen position adjustments, and ergonomic adaptations
- Fully ruggedized for shock, moisture and dust resistance

Applications

- 5G Small Cell Site
- FTTx drops and terminations
- MDF/IDF splices and terminations
- Rural fiber deployments and restorations

Contact the professionals at Fiber Optic Center for a quote or to get more details.

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Features





Sleeve Positioning



Work Tray with Neck Strap







Ordering Information

DESCRIPTION	AFL NO.
Fujikura 455 Standard Kit includes: CT-50 cleaver, SS-05 single fiber stripper, 1 pair each FH-70-250 and FH-70-900 fiber holders, FH-FC-900 (900 μm cable), SP-04 set plates, ELCT2-16B Spare Electrodes (Pair), ADC-21 AC Adapter, BTR-17 Battery Pack (installed), ACC-09 Power Cord, USB-01 USB Cable, AP-02 Alcohol Container, WT-10 work tray, ST-03 carrying case strap, TS-03 tripod screw, CC-45 Transit Case, 1-year factory warranty, and instruction manual downloaded from splicer	S018318
Fujikura 455 Kit without Cleaver includes: SS-05 single fiber stripper, 1 pair each FH-70-250 and FH-70-900 fiber holders, SP-04 set plates, ELCT2-16B Spare Electrodes (Pair), ADC-21 AC Adapter, BTR-17 Battery Pack (installed), ACC-09 Power Cord, USB-01 USB Cable, AP-02 Alcohol Container, WT-10 work tray, ST-03 carrying case strap, TS-03 tripod screw, CC-45 Transit Case, 1-year factory warranty, and instruction manual downloaded from splicer	S018319

Recommended Accessories

AFL NO.	DESCRIPTION	AFL NO.
	Power Supply Options	
S017030	BTR-17 Battery Pack	S018324
S018330	ADC-21 AC Adapter	S018168
	ACC-09 Power Cord	S014390
S018333	Miscellaneous	
S017111	ELCT2-16B Electrodes	S017103
S017113	Splicer V-Groove Cleaning Kit	S014397
	S017030 S018330 S018333 S018333 S017111	Power Supply Options S017030 BTR-17 Battery Pack S018330 ADC-21 AC Adapter ACC-09 Power Cord ACC-09 Tore S018333 Miscellaneous S017111 ELCT2-16B Electrodes S017113 Splicer V-Groove Cleaning Kit

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PARAMETER		VALUE
Fiber alignment method		Active cladding alignment
Fiber count can be spliced		Single fiber
·	Fiber tune	Single-mode optical fiber
Applicable fiber	Fiber type	Multimode optical fiber
	Cladding dia.	Approx. 125 µm
Applicable coating	Sheath Clamp	Coating diameter: Max. 3,000 µm
	Sheath clamp	Cleave length: 5 to 16 mm *1
	Fiber Holder	Coating diameter: 160 μ m – 3,000 μ m based on available fiber holder option
		Cleave length: Approx. 10 mm
		ITU-T G.652: Avg. 0.03dB ITU-T G.651: Avg. 0.01dB
	Splice loss *2	ITU-T G.653: Avg. 0.05dB
Fiber splice performance	splice loss	ITU-T G.655: Avg. 0.05dB
Tibel splice performance		ITU-T G.657: Avg. 0.03dB
		SM FAST mode: Avg. 6 to 7 sec.
	Splicing time *3	SM AUTO mode: Avg. 8 to 10 sec.
	Sleeve type	Heat shrinkable sleeve
Applicable protection sleeve	Sleeve length	Max. 66 mm
Applicable protection sleeve	Sleeve dia.	Max. 6.0 mm before shrinking
	11	60 mm mode: Avg. 15 to 22 sec.
Sleeve heat performance	Heat time *4	60 mm slim mode: Avg. 15 to 17sec.
Fiber tensile test force		Approx. 2.0 N
Electrode life *5		Approx. 6,000 splices
	Dimensions W	Approx.131 mm without projection
Physical description	Dimensions D	Approx.123 mm without projection
rnysical description	Dimensions H	Approx.121 mm without projection
	Weight	Approx. 1.4 kg including battery
	Temperature	Operate : -10 to 50°C
	remperature	Storage : -40 to 80°C
Environmental condition	Humidity	Operate : 0 to 95% non-condensing
	,	Storage : 0 to 95% non-condensing
	Altitude	Max. 5,000 m
AC adaptor	Input Output	AC100 to 240V, 50/60Hz, Max. 1A Approx. DC 19V, Max. 2.1A
	Туре	Rechargeable Lithium Ion
	Output	Approx. DC14.4V / 3,190mAh
		60 mm heat mode: Approx. 200 splice & heat cycles
Battery pack	Capacity *6	60 mm slim heat mode: Approx. 230 splice & heat cycles
		Operate: -10 to 50°C
	_	Recharge : 0 to 40°C
	Temperature	Short term storage of 30 days: -20 to 50°C
		Long term storage: -20 to 30°C
	Battery life *7	Approx. 500 recharge cycles
Dicplay	LCD monitor	TFT 4.95 inches with touch screen
Display	Magnification	Approx. 132 to 300X
Illumination	V-grooves	LED lamp
	PC	USB2.0 MINI B type
Interface	External LED lamp	USB 2.0 A type
menace		Approx. DC5V, 500mA

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Wireless *8

Bluetooth® 5.2

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Specifications

PARAMETER		VALUE
Data storage	Splice mode	100 splice modes
	Heat mode	30 heat modes
	Splice result	20,000 splices
	Fiber image	100 images
Screw hole for tripod		1/4-20UNC
		Fusion control
	Automatic functions	Blade management and control
	Automatic functions	Splice start
		Heater start
	Reference guide	PDF file stored on splicer
Other features	Sheath clamp	Open with/without wind protector
		Close when setting fiber
		Easy sleeve positioning design
	Electrode	Tool-less replacement
	PC Software	Splicer firmware update via internet
		Parameter Upload and download

*1 Cleave length range depending on fiber type

5-16 mm: 125 μm cladding dia. And 250 μm coating dia.

10-16 mm: 125 μm cladding dia. And 400 or 900 μm coating dia.

- *2 Measured with cut-back method relevant to ITU-T and IEC standard after splicing Fujikura identical fibers. The average splice loss changes depending on the environmental condition and fiber characteristics.
- *3 Measured at room temperature. The definition of splice time is from the fiber image appearing on the LCD monitor to the estimated splice loss. The average splice time changes depending on the environmental conditions, fiber type, and fiber characteristics.
- *4 Measured at room temperature with the AC adapter. The heat time is defined from the start beep sound to the finish beep sound. The average heat time changes depending on the environmental conditions, sleeve type, and battery pack condition. In addition, since the heating operation is constantly optimized, the average heating time changes depending on the usage conditions of the fusion splicer.
- *5 The electrode life changes depending on the environmental conditions, fiber type, and splice modes used.

*6 Test Conditions

Splice and heat time: 1 minute cycle

Using the splicer power save settings, subject to our testing condition

Using a new battery

Room temperature

The battery capacity changes when testing in different conditions than above

*7 The battery capacity decreases to half after approx. 500 discharge and recharge cycles. The battery life is shortened further when using outside of the storage and operating temperature ranges, or if completely discharged when stored for an extended period without recharging.

*8 Bluetooth mark and logos are registered trademarks of Bluetooth SIG, Inc.

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