

FUJIKURA 35S FUSION SPLICER

The 35S 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 μ m coated fibers in the same pass, along with the CT-16 cleaver adapter plate which can likewise accommodate two bare fibers for cleaving. After preparation, the 35S 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 a onehanded operation.

Furthermore, the 35S 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 35S 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 35S 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 35S will now accept this mistake and reverse the fiber to correct position automatically. With a cube form factor, the 35S 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.

Backed by the best service team in the industry, the Fujikura 35S is the ideal splicer to use when portability, ruggedness, speed, and reliability are needed.

Features

- Simultaneous fiber preparation with 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.
- 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



35S



35S Standard Kit



CT-16 with AD-16A Adapter



hls telecom

Fujikura 35S Fusion Splicer

Specifications

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

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

NOTES:

- *1 Cleave length range depending on fiber type
5 – 16 mm: 125 μ m cladding dia. And 250 μ m coating dia.
10 – 16 mm: 125 μ m cladding dia. And 400 or 900 μ m 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.