

# Clad Alignment Fusion Splicer

# 45S



## *The Essential Splicer*

Faster operation  
User-friendly design  
Consistent quality

 **Fujikura**

## 45S Specifications

Item		Specification	
Fiber alignment method		Active clad alignment	
Fiber count can be spliced		Single fiber	
Applicable fiber	Fiber type	Single mode optical fiber Multi mode optical fiber	
	Cladding dia.	Approx. 125µm	
Applicable coating	Sheath clamp	Coating dia. : Max. 3000µm Cleave length : 5 to 16mm *1	
		Fiber splice performance	Splice loss *2
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			
Applicable Protection sleeve	Sleeve time *3	SM FAST mode : Avg. 6 to 8sec.	
		Sleeve type	Heat shrinkable sleeve
		Sleeve length	Max. 66mm
Sleeve heat performance	Sleeve dia.	Max. 6.0mm before shrinking	
		Heat time *4	60mm mode : Avg. 21 to 23sec. 60mm slim mode : Avg. 16 to 18sec.
Fiber tensile test force			Approx. 2.0N
Electrode life *5		Approx. 6,000 splices	
Physical description	Dimensions W	Approx. 131mm without projection	
	Dimensions D	Approx. 123mm without projection	
	Dimensions H	Approx. 121mm without projection	
	Weight	Approx. 1.4kg including battery	
Environmental condition	Temperature	Operate: -10 to 50 °C Storage: -40 to 80 °C	
		Humidity	Operate: 0 to 95%RH non-condensing Storage: 0 to 95%RH non-condensing
	Altitude		Max. 5000m
AC adaptor	Input	AC100 to 240V, 50/60Hz, Max. 1A	
Battery pack	Type	Rechargeable Lithium Ion	
	Output	Approx. DC14.4V, 3190mAh	
	Capacity *6	60mm mode: Approx. 200 splice and heat cycles	
		60mm slim mode : Approx. 230 splice and heat cycles	
	Temperature	Recharge: 0 to 40 °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	USB2.0 Mini B type	
	External LED lamp	USB2.0 A type Approx. DC5V, 500mA	
	Wireless *8	Bluetooth 5.2	
Data storage	Splice mode	100 splice modes	
	Heat mode	30 heat modes	
	Splice result	20,000 splices	
	Splice image	100 images	
Screw hole for tripod		1/4-20UNC	
Other features	Automatic functions	Fusion control Blade management and control	
	Reference guide	PDF file stored in splicer	
	Sheath clamp	Open with/without Wind Protector	
		Close with fiber setting	
		Easy sleeve positioning clamp	
Electrode	Replaceable without tool		



### Notes

- \*1 Cleave length range depending on fiber type  
5 to 16mm : 125µm cladding dia. and 250µm coating dia.  
10 to 16mm : 125µm cladding dia. and 400 or 900µm coating dia.
- \*2 Measured with a 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 appeared in LCD monitor to the estimated loss displayed. 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.
- \*6 Test condition  
(1) Splice and heat time: 1 minute cycle  
(2) Using the splicer power save settings, subject to our testing condition.  
(3) Using a not degraded battery  
(4) At room temperature  
The battery capacity changes when testing with a different conditions from the above.
- \*7 The battery capacity decreases to a half after approx. 500 discharge and recharge cycles. The battery life is shortened further when using outside of the storage temperature range, operating temperature range, if completely discharged by storing for a long time without recharging.
- \*8 Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.

## 45S Options

Item	Model	Remarks
Fiber Holder	FH-70-200	200µm coating diameter
	FH-70-250	250µm coating diameter
	FH-70-900	900µm coating diameter
	FH-FC-20	900µm in 2mm diameter cable
	FH-FC-30	900µm in 3mm diameter cable
Sheath Clamp	CLAMP-S35B	900µm loose buffer cable
Fiber holder set plate	SP-04	Fiber holder set base
Transfer Clamp	CLAMP-DC-12	Transferring drop cable on work tray
Protection sleeve	FP-03	60mm, Max. 900µm coating diameter
	FP-03(L=40)	40mm, Max. 900µm coating diameter
	FP-03M	FP-03 with magnetic material