

# Core Alignment Fusion Splicer **885**

Designed to keep you going



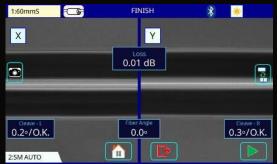


# **True Core Alignment**

#### 1. Core Alignment Technology

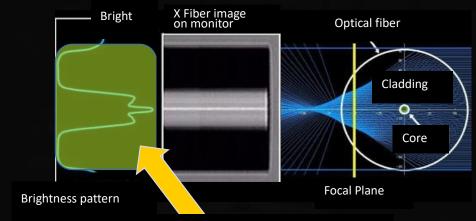
The 88S fusion splicer has high precision lenses which provide an accurate core to core alignment regardless of core-cladding concentricity error. Also, the lenses allow the splicer to discriminate between fiber types.





#### 2. Advanced Image Processing Technology

The 88S possesses advanced image processing technology which analyzes the profile of the fiber image as a brightness pattern. The 88S finds the true core position and achieves the consistent lower splice loss.



**Analyzing the Brightness pattern** 

#### 3. Fiber Discrimination Function

The 88S fusion splicer automatically identifies the optimum arc discharge parameters in accordance with the fiber type.



## **Faster Automation**

The faster automated features of the 88S fusion splicer reduce installation times. With this splicer, an operator can complete the entire splicing process from splicing to heating without touching the 88S and only moving the fiber.



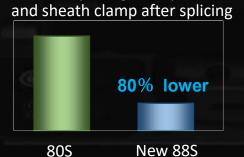






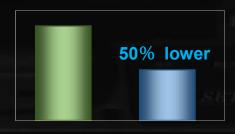
The fiber retention clamps support the automated operations. When the sheath clamps open automatically after splicing, the fiber retention clamps gently hold the spliced fiber to keep it from flying out. The retention clamps release when the fiber is lifted by the operator.





Time for opening wind protector

Time for placing fiber into heater



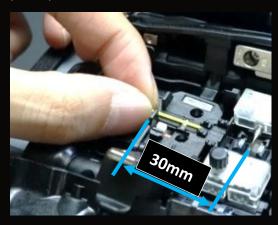
80S

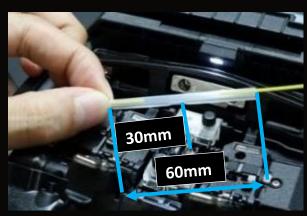
S New 88S

# **User Friendly**

#### 1. Easy Fiber Protection Sleeve Positioning

The shape of the sheath clamp is optimized for the 60mm length protection sleeve. The length from splice point to the edge of the sheath clamp is 30mm. Therefore, it is easy to center the protection sleeve over the splice by using your finger as the reference splice point.





#### 2. Carrying Case

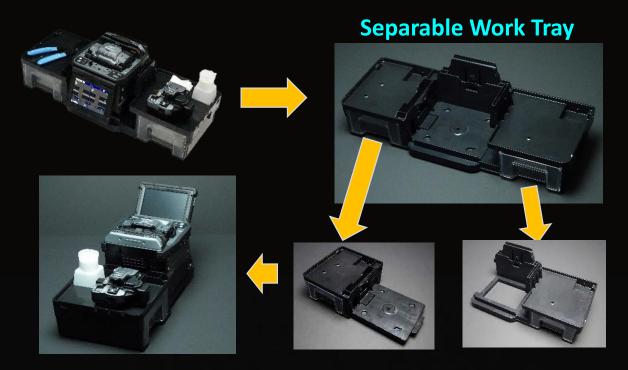
There are multiple ways to utilize the 88S carrying case. The 88S is ready to use just by opening the case, but it is also possible to use the 88S on top of the carrying case or only with the work tray depending on the work environment.



# **User Friendly**

#### 3. Work Tray

The newly designed work tray has many functions. There are two drawers for storage, and the drawers are large enough to store tools or battery packs. Also, the work tray can be divided into two, so it is configurable to fit your work space.



#### Plenty of space in carrying case



**Cleaver & Stripper** 



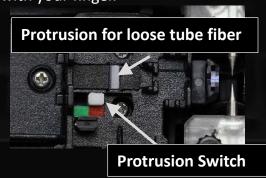
**Battery packs** 



Large storage space under work tray

#### 4. Loose Tube Compatibility

The sheath clamp of the 88S fusion splicer is compatible with loose tube fiber. The Protrusion part on of the sheath clamp for loose tube fiber engages or retracts by simply changing the switch position with your finger.



# **Active Blade Management Technology**

#### 1. Automatic Blade Rotation

The 88S fusion splicer and CT50 fiber cleaver are enabled with wireless data connectivity. This capability allows automatic cleaver blade rotation when the splicer judges the blade is worn. Also, the 88S fusion splicer can connect to two CT50s simultaneously.



#### 2. Blade Life Management

The 88S fusion splicer displays the remaining blade life and informs the user when a blade height change, position change, or new blade is required.



# **Standard Package**

### **88S Standard Package**



Description	Model No.	Qty
(1) Core Alignment Fusion Splicer	88S	1pc
(2) Battery Pack*	BTR-15	1pc
(3) AC Adapter	ADC-20	1pc
(4) AC Power Cord	ACC-14, 15, 16 or 17	1pc
(5) USB Cable	USB-01	1pc
(6) Fusion Splicer Strap	ST-02	1pc
(7) Electrodes (spare)	ELCT2-16B	1pair
(8) Fiber Holder Set Plate	SP-03	1pair
(9) Carrying Case	CC-39	1pc
(10) Work Tray Left	WT-09L	1pc
(11) Work Tray Right	WT-09R	1pc
(12) Work Tray J-Plate	JP-09	1pc
(13) Tripod Screw	TS-03	2pcs
(14) Carrying Case Strap	ST-03	1pc
(15) Alcohol Dispenser	AP-02	1pc
(16) Quick Reference Guide	QRG-02-E, C or J	1pc
(17) Single Fiber Stripper	SS03 or SS01	1pc
(18) Optical Fiber Cleaver	CT50	1pc
(19) Fiber Scrap Collector	FDB-05	1pc
(20) Fiber Setting Plate	AD-10-M24	1pc
(21) Case (for Cleaver)	CC-37	1pc
(22) Hexagonal Wrench	HEX-01	1pc

\* Please follow IATA regulation when shipping the battery by air



# **Specifications**

#### **88S Specifications**

Item		Specification	
Fiber alignment method		Active core alignment	
Fiber count can be spliced		Single fiber	
		Single mode optical fiber	
Applicable fiber	Fiber type	Multi mode optical fiber	
	Cladding dia.	80 to 150µm	
Applicable coating	Sheath clamp	Coating dia. : Max. 3,000µm	
Applicable coating	Sileatii Gamp	Cleave length : 5 to 16mm *1	
		ITU-T G.652 : Avg. 0.02dB	
Fiber splice performance		ITU-T G.651 : Avg. 0.01dB	
	Splice loss *2	ITU-T G.653 : Avg. 0.04dB	
	·	ITU-T G.655 : Avg. 0.04dB	
		ITU-T G.657 : Avg. 0.02dB	
	Splice time *3	SM FAST mode : Avg. 7 to 9sec.	
		AUTO mode : Avg. 14 to 16sec.	
Applicable	Sleeve type	Heat shrinkable sleeve	
protection	Sleeve length	Max. 66mm	
sleeve	Sleeve dia.	Max. 6.0mm before shrinking	
Sleeve heat		60mm slim mode : Avg. 9 to 10sec.	
performance	Heat time *4	60mm mode : Avg. 13 to 15sec.	
Fiber tensile test force		Approx. 2.0N	
Electrode life *5		Approx. 5,000 splices	
	Dimensions W	Approx.170mm without projection	
Physical	Dimensions D	Approx.173mm without projection	
description	Dimensions H	Approx.150mm without projection	
	Weight	Approx. 2.8kg including battery	
	i i	Operate : -10 to 50 degreeC	
	Temperature	Storage : -40 to 80 degreeC	
Environmental condition	Llumidity	Operate: 0 to 95%RH non-condensing	
	Humidity	Storage: 0 to 95%RH non-condensing	
	Altitude	Max. 5,000m	
AC adaptor	Input	AC100 to 240V, 50/60Hz, Max. 1.5A	
Battery pack	Туре	Rechargeable Lithium Ion	
	Output	Approx. DC14.4V / 6,380mAh	
	Capacity *6	Approx. 300 splice and heat cycles	
		Recharge : 0 to 40 degreeC	
	Temperature	Storage: -20 to 30 degreeC	
	Battery life *7	Approx. 500 recharge cycles	
Display	LCD monitor	TFT 5 inches with touch screen	
Display	Magnification	200 to 320x	
Illumination	V-grooves	LED lamp	
	PC	USB2.0 Mini B type	
	PC External	USB2.0 Mini B type USB2.0 A type	
Interface		USB2.0 Mini B type USB2.0 A type Approx. DC5V. 500mA	
Interface	External LED lamp	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin	
Interface	External LED lamp Ribbon Stripper	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A	
Interface	External LED lamp Ribbon Stripper Wireless *8	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE	
	External LED lamp Ribbon Stripper Wireless *8 Splice mode	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes	
Interface  Data storage	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes	
	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices	
Data storage	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images	
	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 1/4-20UNC	
Data storage	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 114-20UNC Splice mode select	
Data storage	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 1/4-20UNC Splice mode select by fiber type analysis	
Data storage	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result Splice image	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 1/4-20UNC Splice mode select by fiber type analysis Discharge power calibration	
Data storage  Screw hole for tripod	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result Splice image	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 1/4-20UNC Splice mode select by fiber type analysis Discharge power calibration Wind protector : open/close	
Data storage  Screw hole for tripod  Other	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result Splice image	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 1/4-20UNC Splice mode select by fiber type analysis Discharge power calibration Wind protector : open/close Sheath clamp : open	
Data storage  Screw hole for tripod	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result Splice image	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 1100 images 11/4-20UNC Splice mode select by fiber type analysis Discharge power calibration Wind protector: open/close Sheath clamp: open Heater lid: open/close	
Data storage  Screw hole for tripod  Other	External LED lamp  Ribbon Stripper  Wireless *8 Splice mode Heat mode Splice result Splice image  Automatic functions	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 1/4-20UNC Splice mode select by fiber type analysis Discharge power calibration Wind protector: open/close Sheath clamp: open Heater lid: open/close Heater clamp: open/close	
Data storage  Screw hole for tripod  Other	External LED lamp Ribbon Stripper Wireless *8 Splice mode Heat mode Splice result Splice image  Automatic functions  Reference guide	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 1/4-20UNC Splice mode select by fiber type analysis Discharge power calibration Wind protector : open/close Sheath clamp : open Heater lid : open/close Heater clamp : open/close Video and PDF file stored in splicer	
Data storage  Screw hole for tripod  Other	External LED lamp  Ribbon Stripper  Wireless *8 Splice mode Heat mode Splice result Splice image  Automatic functions	USB2.0 Mini B type USB2.0 A type Approx. DC5V, 500mA Mini DIN 6pin DC12V, Max. 1A Bluetooth 4.1 LE 100 splice modes 30 heat modes 20,000 splices 100 images 1/4-20UNC Splice mode select by fiber type analysis Discharge power calibration Wind protector: open/close Sheath clamp: open Heater lid: open/close Heater clamp: open/close	

#### **88S Options**

Item	Model	Remark	
Battery pack*8	BTR-15	Battery pack for replacement	
Electrodes	ELCT2-16B	Electrodes for replacement	
	FH-70-250	250µm coating diameter	
Fiber holder	FH-70-900	900µm coating diameter	
	FH-FC-20	900µm in 2mm diameter cable	
	FH-FC-30	900µm in 3mm diameter cable	
DC Adapter	DCA-03	Connect AC adapter not through battery	
	DCC-20	Car cigar socket to BTR-15/DCA-03	
DC power cord	DCC-21	Car battery to BTR-15/DCA-03	
Transfer Clamp	CLAMP-DC-12	Transferring drop cable on work tray	
J-Plate	JP-10	Attaching to splicer, not to work tray	
	JP-10-FC	JP-10 with fiber clamps	
	FP-03	60mm Max. 900µm coating diameter	
Protection sleeve	FP-03(L=40) 40mm Max. 900µm coating diameter		
	FP-03M	FP-03 with non-magnetic material	

#### Notes

\*1: Cleave length range depending on fiber type

5 to 16mm : 125μm cladding dia. / 250μm coating dia.

10 to 16mm : 125µm cladding dia. / 400 or 900µm coating dia.

5 to 10mm : 80μm cladding dia. / 160μm 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.
- \*5: The electrode life changes depending on the environmental conditions, fiber type and splice modes.
- \*6: Test condition
  - (1) Splice and heat time: 2 minutes cycle
  - (2) Using the splicer power save settings
  - (3) Using a not degraded battery
  - (4) At room temperature

The battery capacity changes when testing with 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.
- \*9: Please follow IATA regulation when shipping the battery by air.