

High-end Fusion Splicer  
**S185HS / S185PM**  
for High strength splicing      for PMF & High strength splicing



S185HS



S185PM

**Fusion Splicers for PMF and High strength splicing**

**Low splice loss**

**Compact size**

High capacity built-in battery (Optional)

LCD touch panel provides easy operation

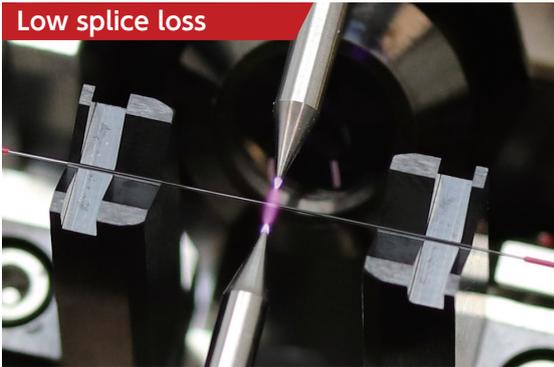
Short fiber cleave length allows to use ultra mini sleeve

Remote control by Wi-Fi communication

The FITEL S185HS / S185PM High-end Fusion Splicers are designed for splicing specialty fibers for factory, manufacturing and R&D applications. The compact but powerful design has been optimized for use in the optical component and optical sensor fields. By targeting the necessary functions in these applications, exceptional performance and a compact design are achieved with these High-end Fusion Splicers

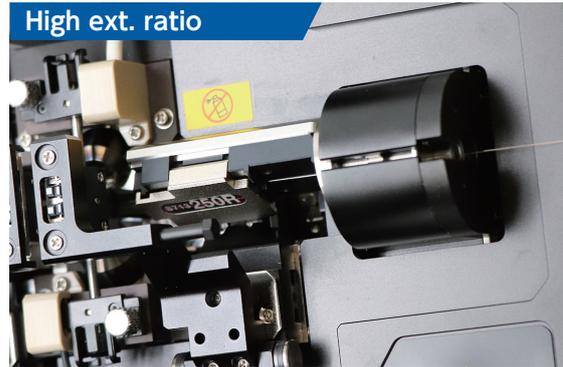
## ■ Features

### Low splice loss



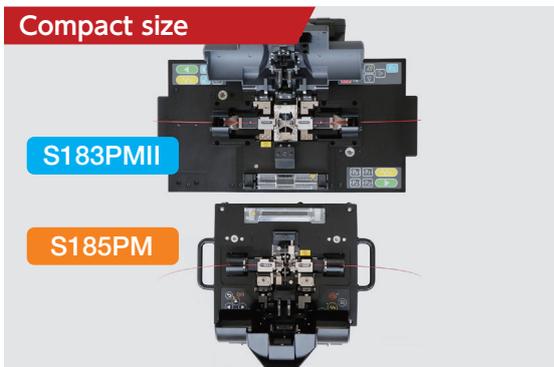
Precise alignment with resolution of  $0.03\mu\text{m}$  for fiber axis.

### High ext. ratio



Accurate 360 degree fiber rotation with a resolution of 0.1 degree

### Compact size



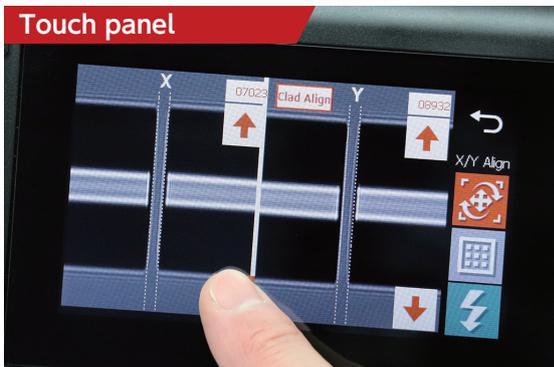
Footprint is 46% smaller than previous model.

### Built-in battery



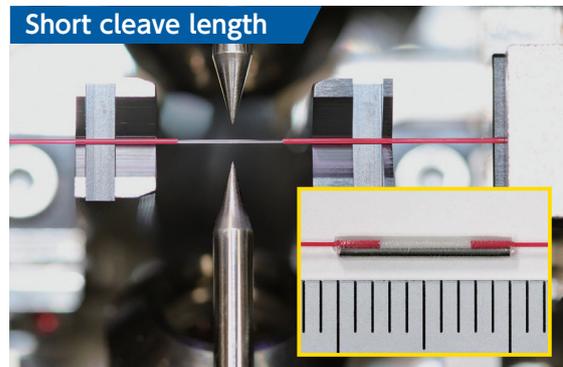
Battery operation and a compact design make transportation easy.

### Touch panel



Easy and intuitive touch panel operation and GUI.

### Short cleave length



Short cleave length allows to reinforce the exposed glass with ultra mini sleeve.

### Wi-Fi communication



Remote control is available by Wi-Fi.

### Auto-flip display



Automatically adjusts image when LCD display is flipped.

## Specification

Description	S185HS	S185PM
Applicable fibers*1	SM, MM, DS, NZDS, High-Index, EDF	SM, MM, DS, NZDS, High-Index, EDF, PMF
Cladding diameter	80 to 150µm	
Coating diameter	160 to 2000µm (In Fiber holder) 160 to 900µm (Coating clamp splice)	160 to 1300µm (In Fiber holder) 160 to 900µm (Coating clamp splice)
Fiber cleave length	3 to 4mm (Coating clamp splice) 8 to 11mm (Cladding clamp splice)	
Typical splice loss*2	SM(ITU-T G652): 0.014dB	
Typical extinction ratio*2	-	PANDA: 40dB*3 (Angle offset: 0.6degree)
Return loss	>60dB	
Typical splice time*4	15s (SM by cladding clamp splice)	15s (SM by cladding clamp splice) 40s (PANDA by cladding clamp splice)
Tension strength	1.96 (+0% to +20%)	
Applicable protection sleeve length	10 to 60mm	
Typical heat time	35s (S922:40mm sleeve)	
Splice programs	Max.200	
Heater programs	Max.100	
Splice data storage	Max. 1000 including 4 images before and after splice	
Fiber image magnification on LCD	104X, 278X or 556X	
Dimension	210W x 180D x 150H mm	
Weight (without Battery)	4.5kg	4.75kg
Monitor	4.3" wide color LCD with touch panel	
Data output	USB ver. 2.0 type A: 1 port USB ver. 2.0 mini B: 1 port	
Battery capacity (Optional)*5	Typical 60 splice / heat cycles	
Operating temperature	0 to 40°C	
Storage temperature	-40 to 60°C	
Humidity	0 to 90% (Non-condensing)	
Power source	AC input 100 to 240V (50/60Hz)	

\*1 Fibers should be applied to ITU-T standard. In case of other fibers, depending on the type of fiber, the optimization of splice program may be needed or the splice result may not be satisfied.

\*2 These are references. Depending on the environment and condition, the number vary.

\*3 Extinction ratio 40dB is measured in the condition that the initial extinction ratio is more than 50dB and there is the splice with 0.6 degree of rotation offset.

\*4 This value is references. Depending on the type of fiber and condition of fiber on splicer, the number can vary.

\*5 This value can produce using fully charged brand new battery at room temperature 20 degree C. Depending on the condition of the battery and operation environment, the number can vary.

## Standard package

Item	P/N	Quantity							
		S185HS				S185PM			
		-00	-01	-10	-11	-00	-01	-10	-11
S185HS Main body	S185HS-X-A-0001	1	1	1	1	-	-	-	-
S185PM Main body	S185PM-X-A-0001	-	-	-	-	1	1	1	1
Hard Carrying Case	HCC-12	-	1	-	1	-	1	-	1
Built-in Battery Pack	S947B	-	-	1	1	-	-	1	1
AC Adapter	S981A	1	1	1	1	1	1	1	1
AC Cable Cord	-	1	1	1	1	1	1	1	1
Z Stage Lock	ZL-01	1pair	1pair	1pair	1pair	1pair	1pair	1pair	1pair
Spare Electrode	ELR-03	1pair	1pair	1pair	1pair	1pair	1pair	1pair	1pair
Electrode Sharpener	D5111	1	1	1	1	1	1	1	1
Cleaning Brush	VGC-01	1	1	1	1	1	1	1	1
User Manual	-	1	1	1	1	1	1	1	1



Standard Package (S185PM)



Hard Carrying Case

## Ordering number form

S185 A - B C

Mark	Category	Code	Remark
A	Splicer model	HS	S185HS
		PM	S185PM
B	Battery	0	None
		1	Included
C	Hard carrying case	0	None
		1	Included

## Optional components

Item	P/N	Quantity
160µm Coating Fiber Holder	S713S-160	1 pair
250µm Coating Fiber Holder	S713S-250	1 pair
300µm Coating Fiber Holder	S713S-300	1 pair
400µm Coating Fiber Holder	S713S-400	1 pair
550µm Coating Fiber Holder	S713S-550	1 pair
650µm Coating Fiber Holder	S713S-650	1 pair
900µm Coating Fiber Holder	S713S-900	1 pair
1300µm Coating Fiber Holder	S713S-1300	1 pair
550µm Coating BW Fiber Holder	S713B-550	1 pair
Customized Fiber Holder*6	S713S-XXX	1 pair
Hard Carrying Case	HCC-12	1
Built-in Battery Pack*7	S947B	1
USB Cable	USB-01	1
Wi-Fi Dongle	WFD-01	1



Fiber Holder

\*6 Available Suitable size Fiber holder depending on the coating diameter of splicing fiber.

\*7 Built-in Battery Pack should be installed by the authorized distributor or the repair center in Furukawa Electric group.

## Related tools

Item	Part Number	Specification
Stripper	S218R-Plus	Cladding diameter 125µm only
	3SAE Thermal Stripper	Cladding diameter 80 to 1000µm
Cleaver	S326S80	Cladding diameter 80µm only
	S326A	Cladding diameter 125µm only
	NorthLab ProCleave SD	Cladding diameter 80 to 250µm
Cleaner	3SAE Ultrasonic Cleaner	-
Protection sleeve	S921/S922	Coating diameter 900µm or less
	S928A-20/25/35	Coating diameter 400µm or less
Fiber end face interferometer & microscope	NorthLab Proview	Cladding diameter 125 to 720µm



S218R-Plus



3SAE Thermal Stripper



S326S80



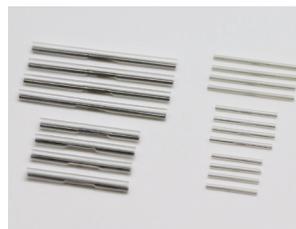
S326A



NorthLab ProCleave



3SAE Ultrasonic Cleaner



Protection sleeve



NorthLab Proview

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