



# **High-end Fusion Splicer**

# S185HS/S185P

for High strength splicing

for PMF & High strength splicing



# Fusion Splicers for PMF and High strength splicing

# Low splice loss

# Compact size

High capacity built-in battery (Optional)

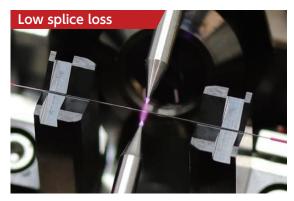
LCD touch panel provides easy operation

Short fiber cleave length allows to use ultra mini sleeve

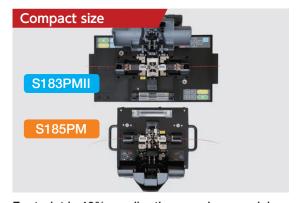
Remote control by Wi-Fi communication

The FITEL S185HS / S185PM Highend 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** 



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



Footprint is 46% smaller than previous model.



Easy and intuitive touch panel operation and GUI.



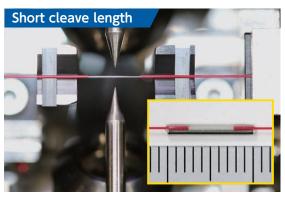
Remote control is available by Wi-Fi.



Accurate 360 degree fiber rotation with a resolution of 0.1 degree



Battery operation and a compact design make transportation easy.



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



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, ED		
Cladding diameter	80 to 150μm		
Coating diameter	160 to 2000μm (In Fiber holder) 160 to 1300μm (In Fiber holder) 160 to 900μm (Coating clamp splice) 160 to 900μm (Coating clamp		
Fiber cleave length	3 to 5mm (Coating clamp splice) 8 to 11mm (Cladding clamp splice)		
Typical splice loss*2	SM(ITU-T G652): 0.014dB		
Typical extinction ratio*2	-	PANDA: -36.8dB*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)		

<sup>\*1</sup> 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.

## Standard package

		Quantity							
Item	P/N	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





Mark	Category	Code	Remark
^	A Splicer model	HS	S185HS
A		PM	S185PM
В	Battery	0	None
Ь		1	Included
С	Hard carrying case	0	None
		1	Included



Srtandard Package (S185PM)



Hard Carrying Case

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

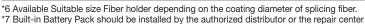
<sup>\*3</sup> Extinction ratio -36.8dB is measured in the condition that the initial extinction ratio is -40dB and there is the splice with 0.6 degree of rotation offset.

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

<sup>\*5</sup> 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.

## Optional components

Item	P/N	Quantity	
160µm Coating Fiber Holder	S713S-160	1pair	
250µm Coating Fiber Holder	S713S-250	1pair	
400µm Coating Fiber Holder	S713S-400	1pair	
650µm Coating Fiber Holder	S713S-650	1pair	
900µm Coating Fiber Holder	S713S-900	1pair	
1300µm Coating Fiber Holder	S713S-1300	1pair	
Customized Fiber Holder*6	S713S-XXX	1pair	
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

## **Related tools**

in Furukawa Électric group.

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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