

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)

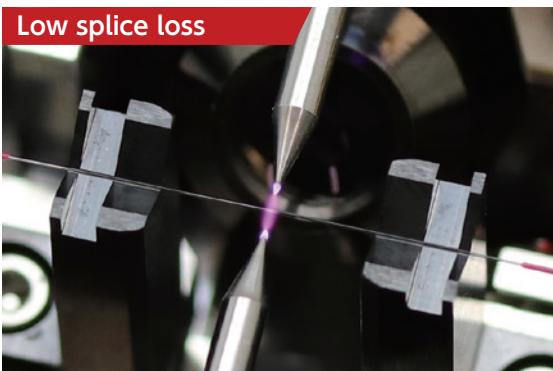
LCD touch panel provides easy operation

Short fiber cleave length allows to use ultra mini sleeve

Remote control by Wi-Fi communication

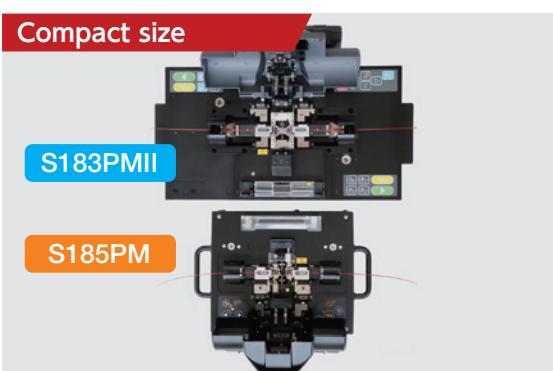
The FITEL S185HS / S185PM High-end Fusion Splicers are designed for splicing specialty fibers for factory, manufacturing and R&D applications. The compact but powerful design has been optimized for use in the optical component and optical sensor fields. By targeting the necessary functions in these applications,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



### Compact size

Footprint is 46% smaller than previous model.

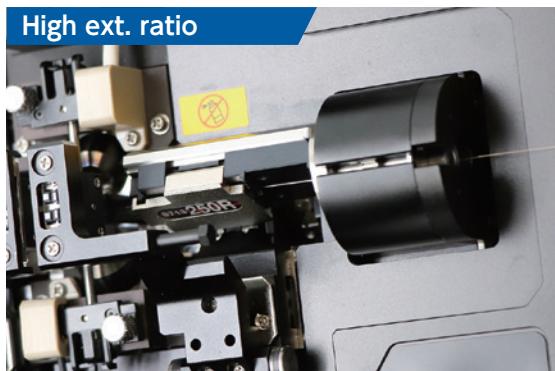


Easy and intuitive touch panel operation and GUI.



### Wi-Fi communication

Remote control is available by Wi-Fi.



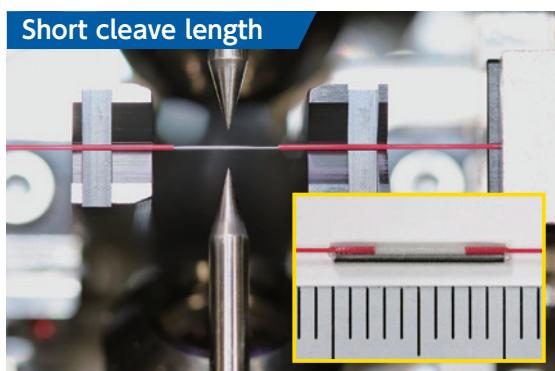
### High ext. ratio

Accurate 360 degree fiber rotation with a resolution of 0.1 degree



### Built-in battery

Battery operation and a compact design make transportation easy.



### Short cleave length

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



### Auto-flip display

Automatically adjusts image when LCD display is flipped.

## ■ Specification

Description	S185HS	S185PM
Applicable fibers* <sup>1</sup>	SM, MM, DS, NZDS, High-Index, EDF	SM, MM, DS, NZDS, High-Index, EDF, PMF
Cladding diameter		80 to 150 µm
Coating diameter	160 to 2000 µm (In Fiber holder) 160 to 900 µm (Coating clamp splice)	160 to 1300 µm (In Fiber holder) 160 to 900 µm (Coating clamp splice)
Fiber cleave length		3 to 4 mm (Coating clamp splice) 8 to 11 mm (Cladding clamp splice)
Typical splice loss* <sup>2</sup>		SM (ITU-T G652): 0.014 dB
Typical extinction ratio* <sup>2</sup>	-	PANDA: 40 dB* <sup>3</sup> (Angle offset: 0.6 degree)
Return loss		>60 dB
Typical splice time* <sup>4</sup>	15 s (SM by cladding clamp splice)	15 s (SM by cladding clamp splice) 40 s (PANDA by cladding clamp splice)
Tension strength		1.96 N (+0% to +20%)
Applicable protection sleeve length		10 to 60 mm
Typical heat time		35 s (S922:40 mm 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		104 X, 278 X or 556 X
Dimension		210 W x 180 D x 150 H mm
Weight (without Battery)	4.5 kg	4.75 kg
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)* <sup>5</sup>		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 240 V (50/60 Hz)

\*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 40 dB is measured in the condition that the initial extinction ratio is more than 50 dB 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	1 pair	1 pair	1 pair	1 pair	1 pair	1 pair	1 pair	1 pair
Spare Electrode	ELR-03	1 pair	1 pair	1 pair	1 pair	1 pair	1 pair	1 pair	1 pair
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	1pair
250µm Coating Fiber Holder	S713S-250	1pair
300µm Coating Fiber Holder	S713S-300	1pair
400µm Coating Fiber Holder	S713S-400	1pair
550µm Coating Fiber Holder	S713S-550	1pair
650µm Coating Fiber Holder	S713S-650	1pair
900µm Coating Fiber Holder	S713S-900	1pair
1300µm Coating Fiber Holder	S713S-1300	1pair
550µm Coating BW Fiber Holder	S713B-550	1pair
Customized Fiber Holder <sup>*6</sup>	S713S-XXX	1pair
Hard Carrying Case	HCC-12	1
Built-in Battery Pack <sup>*7</sup>	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
Cleaner	NorthLab ProCleave SD	Cladding diameter 80 to 250µm
Protection sleeve	3SAE Ultrasonic Cleaner	–
Fiber end face interferometer & microscope	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



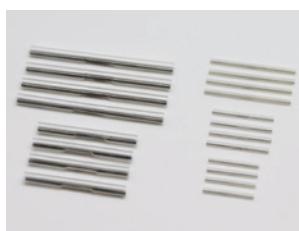
S326A



NorthLab ProCleave



3SAE Ultrasonic Cleaner



Protection sleeve



NorthLab Proview

## Contact Us :

### FURUKAWA ELECTRIC CO., LTD.

#### Head Office:

Tokiwabashi Tower,  
2-6-4, Otemachi, Chiyodaku,  
Tokyo 100-8322, Japan  
Tel: + 81-3-6281-8500  
[www.furukawa.co.jp](http://www.furukawa.co.jp)  
[fec.abr\\_opt\\_splicer@furukawaelectric.com](mailto:fec.abr_opt_splicer@furukawaelectric.com)

#### Europe:

**Furukawa Electric Europe Ltd.**  
Furukawa House,  
2 Farriers Yard,  
London, W6 8AH, UK  
Tel: + 44-(0)-20-7313-5300  
Fax: + 44-(0)-20-7313-5310  
[www.furukawa.co.uk](http://www.furukawa.co.uk)  
[splicers@furukawa.co.uk](mailto:splicers@furukawa.co.uk)

#### North & South America:

**OFS Fitel, LLC**  
2000 Northeast Expressway  
Norcross, Georgia 30071, U.S.A  
Toll free: + 1-866-452-9516  
Tel: + 1-678-783-1090  
Fax: + 1-678-783-1093  
[www.ofsoptics.com](http://www.ofsoptics.com)  
[splicers@ofsoptics.com](mailto:splicers@ofsoptics.com)

#### China:

**Furukawa Shanghai, Ltd.  
Beijing Branch**  
Room 314, Beijing Fortune Building,  
No.5, North Dongsanhuan Road,  
Beijing 100004 P.R. China  
Tel: + 86-10-8591-0608  
Fax: + 86-10-8591-0609  
[www.furukawa-sh.cn](http://www.furukawa-sh.cn)

#### South East Asia:

**Furukawa Electric Singapore Pte. Ltd.**  
60 Albert Street, #13-10 OG  
Albert Complex, Singapore  
189969  
Tel: + 65-6224-4686  
Fax: + 65-6336-2635  
[comms@furukawa.com.sg](mailto:comms@furukawa.com.sg)

\* Please understand that contents of this catalog may change without notice.

#### Export Control Regulations

The products and/or technical information presented in this publication may be subject to the application of the Foreign Exchange and Foreign Trade Act and other related laws and regulations in Japan.

In addition, the Export Administration Regulations (EAR) of the United States may be applicable.

In cases where exporting or reexporting the products and/or technical information presented in this publication, customers are requested to follow the necessary procedures at their own responsibility and cost.

Please contact the Ministry of Economy, Trade and Industry of Japan or the Department of Commerce of the United States for details about procedures.